



**Asia-Pacific
Economic Cooperation**

Advancing Free Trade
for Asia-Pacific **Prosperity**

Public-Private Dialogue on Understanding Non-Tariff Measures on Agriculture, Forestry and Fisheries Sectors

APEC Committee on Trade and Investment

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APEC Project: CTI 08 2019A – Public-Private Dialogue (PPD) on Understanding Non-Tariff Measures on Agriculture, Forestry and Fisheries Sectors to Enhance Trade to Improve Rural Development and Poverty Alleviation in the Asia-Pacific Region

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I. Introduction of the Project

The two-days Public-Private Dialogue (PPD) was held in a hybrid mode due to Covid-19 pandemic on 1-2 October 2020. This PPD discussed three main points : (1) overviewing both of NTMs and unwarranted NTMs challenges on agriculture, forestry and fisheries sectors in the APEC region; (2) discussing proper NTMs and its best practices for policy makers on the eventual realization of the FTAAP; and (3) improving market access through a better understanding of NTMs on these sectors. This PPD also invited participants from other relevant APEC fora (e.g. MAG, OFWG, EGILAT, and PPFS) and speakers from UNCTAD, UNESCAP, ERIA, APEC PSU, CSIS, Bogor Agricultural University, and private representatives from PT. Great Giant Pinnacles and PT Nudira Sumber Daya Indonesia.

II. Objectives of the Meetings

The main objective for this PPD is to provide a better understanding on various aspects of NTMs in the Agriculture, Forestry and Fisheries Sectors through an interactive and interesting Public-Private Dialogue session. However, due to Covid-19 situation, the committee are unable to held physical meetings and convert to a hybrid meeting instead.

The meeting was held in a hybrid mode for 2-days through Microsoft teams and Zoom Virtual Meetings platform. Speakers and participants were gathered in that platform with two sessions of dialogue each in a day. The meeting was held successfully. Participants have been actively involved in dialogue and questions answers sessions with the speakers.

For a better understanding of NTMs, we managed to put together several speakers from various background in this PPD. We also measure the comprehension of the participants using ex ante and post ante short test, which deliberately designed using several questions from the presentation material. The results of the test will be elaborated below.

III. Briefings of the Presentations in the PPD

The speakers came from different backgrounds of expertise from Government representatives, Academician, and Business Representatives. This two-days dialogue was opened by Mr Antonius Yudi Triantoro as the Acting Director of APEC and International Organizations Negotiations, Directorate General International Trade Negotiation, Ministry of Trade of Indonesia. Then, it was followed by a keynote speech from Mr Iman Pambagyo, Director General of International Trade Negotiations, Ministry of Trade, Republic of Indonesia. There were 4 sessions of presentation and discussion from the speakers.

- **Opening remarks**

In the opening remarks, Mr Imam Pambagyo, Director General of International Trade Negotiations, Ministry of Trade, Republic of Indonesia, said that discussions on post-Covid-19 economic recovery in our region cannot be separated from the fact that some economies in APEC region have raised their tariffs toward the others, and introduced non-tariff measures or NTMs in the name of salvaging domestic economies in time of pandemic. While tariffs are clear in their intent, the role of NTMs is less straightforward. We witness these days the introduction of new standards and SPS measures. The available literature provides contrasting findings where some view “standards as catalysts,” while others see “standards as barriers.” To the extent that NTMs can adversely affect trade, understanding the prevailing effects, and the motivations behind the NTMs adopted by governments, is a pressing issue in the current global trade environment.

Most traded goods are subject to NTMs. The majority of NTMs are regulatory in nature, while traditional trade measures such as quotas and non-automatic licensing are less common.

As of December 2019, a total of 5,772 measures have been in force. Of these, 78.7% or 4,541 measures are found to be measures adversely affecting trade, while the remaining 1,231 measures favoring trade. Among the most common types of NTMs implemented within the APEC region are financial grants, anti-dumping and trade finance, which correspond to 14.0%, 11.6% and 11.5% of NTMs in force in APEC, respectively.

NTMs could not be categorized as good or bad, but it does not mean that we can just relax about it, since the consequences of an NTM—intended or unintended—could have adverse impacts on traders and producers along the supply chain.

Recognizing the potential impacts of NTMs while mindful that APEC members are so diverse, member economies endorsed “the APEC Cross-Cutting Principles on NTMs” in 2018. It was agreed that the prevailing principles in the adoption of NTMs should be transparent, consultative, timely, and resulting in a predictable, coherent, and non-discriminatory application.

At the end of opening remarks, Mr Imam hope we can able to understand clearly the strategic importance of managing NTMs to our common goal of promoting rural development and have a better understanding on how to formulate the right NTMs which will facilitate rather than disrupt trade along the supply chains in the APEC region.

- **Session 1:**

- **Overview on the Use of Non-Tariff Measures**

- **Moderator: Mr Amzul Rifin - Lecturer at Department of Agribusiness, Faculty of Economics and Management, IPB University**

- In the first session, the moderator introduces the speakers who will present in the session. In general, the first session aims to provide an overview of the NTMs and its implication to global trade within the world and the Asia Pacific region in particular.

- **Presentation by Ms Ha Thi Thanh Doan - Economist of Economic Research Institute for ASEAN and East Asia (ERIA)**

- Focused on the pattern of NTMs usage at the global level focusing on agriculture, forestry and fisheries sector.
 - Emphasizing that NTMs as a policy instrument have the potential economic effect on international trade in goods, changing quantities traded, or prices.
 - Classification of NTMs which is divided based on the import (technical measure, non-technical measures) and export activity.
 - There are pro’s and con’s regarding the implementation of NTMs. NTMs gave positive benefits since the objectives are to protect consumer’s health and safety; ensure consumer’s rights; protect plants and animals from diseases; and protect the environment. On the other hand, the implementation of NTMs could also very costly so they can impede trade itself. Based on the research that has been conducted by ERIA researchers, the result shows that the ASEAN-average effective rate of protection has doubled when NTMs are included.

- NTMs, globally, are heavily regulated in agriculture, fisheries, and forestry sectors. An early survey conducted by ITC from 2010 to 2013, which shows that 65% of NTMs on agriculture are considered burdensome for exporters because of procedural obstacles. Next, she elaborated on how to address the burden NTMs, especially in APEC economies. The key principles of Good Regulatory Practice are transparency and simplicity; non-discrimination; based on international standards or scientific evidence; least trade-restrictive measures; right to respond; and dialogue and cooperation. Although, she explained that many economies still face challenges in implementing Good Regulatory Practice since there is a lack of transparency (notification and availability and accessibility of data), assessment-economy-level analysis (regulations, measures vs procedure and complexity), and regulatory divergence (coverage ratios, the stringency of measures, and implementations).
- Highlighting the importance of alignment, coordination, and collaboration between government, private sector, and academia to push greater transparency, harmonization of standards, and reducing regulatory burden.

Presentation by Mr Carlos Kuriyama - Senior Analyst of APEC Policy Support Unit (PSU)

- Import tariff has gone down in recent years, however, there is an increase of NTMS in the world. There is a growing number of accumulated unresolved SPS Specific Trade Concern (STC) in APEC economies in the last 10 years. Based on the WTO i-TIP database, about 148 SPS STC measures have not been reported by the end of 2019. Mr Kuriyama further explicated that APEC economies who implemented the STC measures are economies with the largest trading in agricultural, forestry, and fisheries products.
- The most affected chapters related to SPS STC in APEC regions are meat and edible meat offal; edible fruit and nuts, peel of citrus fruit or melons; live animals; dairy produce, birds' eggs, natural honey, edible products of animal origin, not elsewhere specified or included; and edible vegetables and certain roots and tubers.

- Five sectors that are mostly affected by NTMs, namely mollusks live, fresh or chilled; crustaceans, live, fresh or chilled; live animals; vegetables; and cereals. Most likely, in mollusks, live animals, vegetables, and cereals sectors, bailout/state aid is commonly found affecting those sectors. Then, in the crustaceans' sector, the export incentive is the highest type of NTMs affecting.
- Imposing NTMs could create a substitution effect and a decline in import and export activity. The impact of NTMs imposed by economies won't be too harmful if the alternative policy is set with less restrictive policy.

Presentation by Mr Tony Irawan - Senior Researcher, International Trade Analysis and Policy Studies (ITAPS)

- Focused on research about mapping NTMs in Asia Pacific economies on agriculture, forestry, and fisheries sectors.
- The UNESCAP's finding in 2019 shows the economic cost of SPS and TBT measures were estimated to be up to 1,6% of global gross domestic product, which were US\$ 1,4 trillion. APEC also has been working on some trade and investment activities to advance the vision for the realization of the Free Trade Area of the Asia Pacific (FTAAP). One of the challenges is the increasing trend in the implementation of NTMs particularly sanitary and phytosanitary (SPS) and technical barriers to trade (TBT).
- Developed economies apply more NTMs than developing economies in the APEC region. In terms of SPS, three sectors that are analyzed in the study have both frequency index and coverage ratio relatively higher. On the other hand, in terms of TBT, wood has a relatively low-frequency index and coverage ratio, but agriculture products are still significantly more restrictive.
- Regulatory dissimilarity in agriculture, forestry, and fisheries sectors. Most economies tends to have similarities in NTMs regulation. Those similarities came up because of copycat action between APEC economies, and it could also because of the regulatory convergence. Only two APEC economies show dissimilarity patterns regarding the NTMs imposition (The United States and the

Republic of Korea). The dissimilarity pattern appears to be higher for the forestry sector, while agriculture and fishery are relatively lower.

- **Session 2:**

- **Non-Tariff Measures in Agriculture, Forestry, and Fisheries Sectors**

- **Moderator: Mr Amzul Rifin - Lecturer at Department of Agribusiness, Faculty of Economics and Management, IPB University**

This session aims to explain the impact of SPS and TBT measures affecting the three sectors and the cost of compliance with SPS and TBT standards. Speakers are representatives from private sectors who shared their experiences and best practices.

- **Presentation by Mr Nursyamsu Mahyuddin – President Director of PT. Nudira Sumber Daya Indonesia**

- The biggest Indonesia's exports is palm oil (HS 1511), but the data is included in the processing industry export group. Indonesia's agricultural product exports are still small compared to its actual potential. The contribution of horticultural products also (fruit, vegetable, medicinal plants, and ornamental plants) is still very small. NTMs is one of the main obstacles for exporters in Indonesia, he suggested that the need for stronger trade diplomacy and capacity building for farmers are required to boost export activities.
- The main constraints are the market usually depends on the buyer and not the seller; product sources are not centralized; low sensitivity to quality; mostly not standard yet; traditional trading system (long supply chain) from the farmer to the market; infrastructure problem; and low incentives for exporters.
- TBT measures are usually related to labeling of the composition or quality of food; beverages, and medicines quality requirements for fresh food; volume, shape, and appearance of packaging; packaging and labeling of hazardous chemicals and toxic substances, pesticides and fertilizers; and regulations for ships and ship equipment.

- **Presentation by Mr Welly Soegiono – Director of PT. Great Giant Pineapples**

- The contribution of Great Giant Pineapples that have been established in 1979 and how the company became the largest private label manufacturer of canned pineapples in the world and a prominent source of premium pineapples.
- The challenges faced in the subject to increasing export:
 - Extensification e.g: Additional land acquisition (for the farming sector). It is categorized as a long-term plan;
 - Intensification e.g: technology, an increase in production and quality. Medium-term plan; and
 - Political will (short-term/instant). e.g: bilateral agreement (Import duties, market access) and Business and legal protection. The importance of political will in economies to enhance export activities. The political will included a vast dimension, which on them are fiscal policy; market development; infrastructure, non-tariff barriers; export-import bank support; and legal aid & business protection.
- Different treatments in applied duty among exporting economies could harm exporters. The huge duty difference imposed by developed economies perturbed exporters to compete with other economies who have received preferential tariffs.

- **Day 2 Opening:**

**Mr Reza Pahlevi Chairul – Director of International Trade Cooperation Policy,
Ministry of Trade, Republic of Indonesia**

- **Session 3:**

Non-Tariff Measures in Agriculture, Forestry, and Fisheries Sectors

Moderator: Ms Syarifah Amaliah – Researcher, International Trade Analysis and Policy Studies (ITAPS).

A brief implication of NTMs in the policy side, especially in rural development and poverty alleviation agenda from the point of views of researcher and government.

Presentation by Ms Widyastutik – Lecturer at Department of Economics, Faculty of Economics and Management, IPB University

- APEC and EU have become a major markets for Indonesian CPO. However, the share declined in EU and APEC markets. Several policies also hindered the entry of CPO into the EU. As a result, EU will ban the use of CPO as a raw material for biofuels in 2021.
- A study conducted to calculate the impacts of Tariff and NTMs on Trade and Macroeconomic Performance (Gravity Model GTAP); and Impacts of Tariff and NTMs on Poverty (Computable General Equilibrium (CGE), revealed that there are three types of mostly implemented NTMs throughout APEC are the A630 (Food and feed processing) and A310 (labeling requirements) and A420 (Hygienic practices during production) types.
- The impacts of the imposition of APEC and EU tariff and non-tariff barriers. It is expected that the imports ban will reduce:
 - Welfare and the real GDP of the Indonesian economy and causes a trade balance deficit;
 - International prices which transmitted in a decline in domestic prices so that domestic prices for palm oil and its derivatives experience a decline;
 - Riil GDP in the major oil palm producing provinces;
 - Absorption of labor in the classification of farm laborers, farmers as well as technicians and managers. The largest decline is in the palm oil sector;
 - Lowering household real income. The highest impact occurred in rural1, followed by rural2 causing poverty in rural areas.
- Several mitigation strategies are needed to help minimize the impacts of the imports ban. In general, two major strategies were needed. The first is capacity building program of farmers to aid them on implementing the Indonesia Sustainable Palm Oil in an accountable manner. Second, reduction in tariff and non-tariff barriers in the APEC economy is necessary because CPO contributes to inclusive and sustainable growth through rural development and poverty alleviation. The APEC economy is expected to be supportive because the impact of the imposition of tariffs and non-tariffs will reduce the welfare and real GDP of the APEC economy.

Presentation by Ms Konny Sagala – Director of System of Standard Application and Conformity Assessment, National Standardization Agency of Indonesia

- NTMs were also served as tool to protect customer and environment; safety and quality requirements; and ultimately, NTMs might help economies to achieve the UN SDGs. NTMs applied by objective are commonly related to protection of human health or sanitary measure.
- Indonesia has domestic standard that is called Standard Nasional Indonesia (SNI). There are two ways to comply with SNI's standards in general. It is either mandatory, or voluntary. In lights with the NTM on Technical Barriers to Trade, Indonesia has 22 TBT measures related to Agriculture, 8 measures Fishery, and 7 measures for Forestry product.
- Technical Regulations in APEC Economy accounted for 11 measures in Agriculture; 33 measures on Fisheries; and 17 measures on Forestry. Technical regulation applied by APEC economy were also different among member.
- Implementation of NTMs in Indonesia have inevitably face some challenges for the compliances from producer's point of view. The compliances challenges for forestry product were usually related to certification of private standard such on sustainability forest and forestry product.

Presentation by Mr Fajar B. Hirawan – Economist at Central for Strategic and International Studies (CSIS)

- General overview of NTMs coming from several resources. NTMs may also have a corrective role, by reducing asymmetric information in the marketplace (Technical Barriers to Trade, TBTs), mitigating risks in consumption, improving the sustainability of eco-systems (Sanitary and Phytosanitary Standards, SPSs), and influencing the competition and the decision to import or export (non- technical NTMs).
- NTMs in the agriculture sector gave positive performance during crisis and the contribution of agriculture sector is not only significant from the GDP point of view, but also from employment perspective. Indonesia's agricultural exports are observed with regards to its ability on facing challenges in complying to NTMs

imposed by importing economies, mostly related to SPS (A) and TBT (B) measures, with SPS became the most common NTM type that cover over 60% to the total NTMs faced by Indonesian agricultural products. Other dominant NTM policies are TBT and Price-control Measures that reach 24% and 8% respectively.

- NTMs also affect trade competitiveness and diversification. NTMs may increase trade-related costs, including cost of compliance with technical regulations and bureaucratic procedures for application of permits and licenses. Such costs would also increase in the absence of information technology platform to facilitate submissions and approval of import-related licenses. These high trade-related costs would eventually impact rural development and poverty alleviation agenda. In turn, poorly designed NTMs can also affect poverty. NTMs will increase the cost of food staples and basic commodities for the poorest.

- **Session 4:**

Way Forward on Reducing the Cost of NTMs on Agriculture, Forestry, and Fisheries Sectors

Moderator: Ms Syarifah Amaliah – Researcher, International Trade Analysis and Policy Studies (ITAPS).

This session will provide way forwards on how to comply NTMs procedure on those three sectors.

Presentation by Ms Chi Le Ngo – Trade Analyst, Trade Analysis Branch, UNCTAD

- Getting NTMs data are quite troublesome since one measures can come from several agencies, such as SPS can be produced by Ministry of Agriculture, Standardization Agency, Ministry of Health, Custom agency etc. Hence, it is important to have one single data source that is easy to assess and free and can be comparable between sectors and economies.
- In order to reduce the NTMs, government collaboration is imperative. The transparency, particularly its ability to access and update comprehensive data for all private sectors and government is needed to improve coherence in our collaboration. Some economies may also need capacity building and technical

support to make effective design and enable the implementation of policies. UNCTAD as an organization who puts a special attention on NTMs, is now developing on NTM Cost Effectiveness Toolkit. This tools will help economies to design, implement, and comply NTMs by giving assessment in its value chain, identifying stakeholders, identifying issues and challenges, as well as generating policy options for economies.

Presentation by Ms Mia Mikic – Director of Trade, Investment and Innovation Division, UNESCAP

- Economies should be very selective in terms of how NTMs are applied, especially regarding its quantity. The average trade costs of NTMs in the Asia-Pacific region are 15.3%, higher than in US and EU (even though EU and US have more measures applied on average). Evidence suggests that it is because of poor implementation of NTMs. In another case such as the agricultural and automotive sectors, the combined costs of NTMs are up to 20% of its import value.
- It is important to try standardizing, harmonizing and removing the regulatory distances between economies since it has become the most problematic area.
- In the context of COVID-19. The NTMs in many economies are applied and these measures are sometimes very important, if scientifically justified, and actually protect public health and safety. Economies need to be concern that the protectionist tried to give a favor to protect domestic sectors without actually giving spillover effect to protect public health.
- Trade facilitation is becoming the key to reducing the cost of NTMs. For example, digitalization of NTM-related procedures, such as issuing and exchanging certificates of origin electronically may help to simplify the whole shindig. Hence, the implementation of trade facilitation itself should be inclusive by increasing the availability of qualified infrastructure, use mutual recognition of standards and accreditation.
- The proliferation of Regional Trade Agreements may also increase the number of NTMs imposed. Thus, it is mandatory for RTAs to help reduce protectionism and

compliance costs while facilitating transparency and adoption of international standards.

- **Closing Remarks**

Mr Moga Simatupang - Secretary of Directorate General International Trade Negotiation, Ministry of Trade of Indonesia

IV. Briefings on Discussions at the PPD

In this session, participants are actively participating in the discussion.

Q&A / Discussion

- **Session 1**

- a. The question was given by the participant asking on the scope of Mr Tony's study. The question asked for more clarification if it is only defined by SPS and TBT as NTMs, or whether the study also included subsidies and other measures.
 - Mr Tony responded that the research he conducted also include subsidies in the calculation.
- b. A participant asked about the reason on developed economies imposed more NTMs compared to developing economies according to the conducted study.
 - Mr Tony responded that it derives from the coverage ratio and frequency index. Based on those indexes, the top economies are always on the top list. That means the developed economies applied more NTMs than developing economies. The reason is, most developing economies are the main player in agriculture exports and imports.
 - Developed economies impose NTMs particularly for agriculture products to protect their economies. Imposing such regulation could guarantees that they could get a higher quality product.
- c. The next question was given to Ms Doan. The participant asked about the similarity regulation in the graph that has been put between economies and whether there is any indication of how does the same regulation affects the value of trade.

- Ms Doan responded if two economies impose the same NTMs on the same product for example milk, so we put the similarity product is 1. Hence, if two economies apply totally different sets of NTMS on the product, the similarity index will be zero. Usually, some economies would be in between, as they may have the same NTMs on the product and some different.
 - Regarding on how it would affect trade flows, the consistent findings that the larger the distance between economies, so the few overlapping NTMs the more negative impact they would have on the trade flows. So if the firm exports to economies having a similar set of NTMs, they would incur a smaller cost compare to export to an economy that has a totally different set of NTMs.
- d. A question was given to Mr Kuriyama about the impact of lowering NTMs level to the economy in terms of their trade and overall condition.
- Mr Kuriyama responded the fact of NTMs is higher than the high tariff on trade. The cost of NTMs is quite high and can shut down trade entirely. On the other hand, tariff cannot do that. Thus, the implementation of NTMs is not proportional to their risk and not proportional to their policy objective.
 - The situation can be the tariff is already very low, but there is no trade at all. The policymaker now needs to put a lot of emphasis on NTMs.
- e. The next question was given to Mr Tony. The participant asked what is the best scenario for all APEC economies to face NTMs in general and the impact of lowering NTMs level to the economy in terms of their trade and overall condition.
- Mr Tony responded that in his opinion it would be really hard to have a win-win solution even when economies try to reduce NTMs, or assume to decrease it. Economies need to make NTMs more flexible. There must be one economy who will be benefited and became the winner, and harmed economies became the loser. So, he stated that he needed to combine several scenarios.
 - Further, Mr Tony explained it is quite complex to predict because there must be interaction among sectors, not only among economies. It also depends on the data and our assumption on the scenario. If some particular variables are

relaxed, then the result could be different. But Mr Tony explained further that it should have a strong justification behind the reason for relaxing a particular variable.

- **Session 2**

A question was raised to Mr Nursyamsu and Mr Soegiono. The question asked on both opinions regarding NTMs that could also become an opportunity when one economy can fulfill the requirements while others not, that economy will get the advantage and increase the trade.

- Mr Nursyamsu answered that Indonesia has big potential in agriculture sectors, including fruits. The problem is NTMs still exist in the market, and we cannot enter the market because NTMs and tariff barriers still exist in the market. Government and exporter need to give particular training and meetings to educate farmers. Thus, will increase production skill and improve the quality of the product. We also need more trade diplomacy based on the G2G scheme is subject to penetrate the partner's market.
- Mr Soegiono answered the problem by enlightening the audience that it is not only NTMs that harms trade activities but also discriminatory practices in the tariff among economies. Exporters hope that government could strengthen bilateral, regional, or multilateral diplomacy negotiation, not only based on the reciprocal approach but also came up with the solution.
- Mr Soegiono also mentioned the need for a collaborative action from the government and exporters to identify the exact problem faced in global trade. How to increase export instantly is based on negotiation on tariff barriers and NTMs. He was optimistic that economies still have time to solve the main problem to enter the whole market, and how to increase exports in the APEC region especially.

- **Session 3**

- a. A question was raised about the use of CGE methodology and its comparison with another general equilibrium-based methodology like CGE, Wayang, or GAMs.

- Ms Widyastutik answered that she agreed that harmonization is important in the next agendas in APEC economies. She explained about the branch of the development-related CGE model for Indonesia. The first is static model of CGE and the second is the recursive dynamic model. The first model only focuses on the percentage of change variable as a result of policy shock. While in the recursive dynamic model, variable is assumed to grow from year to year.
 - The result can differ if another modeler runs another basis scenario depending on the equation used in the model and the behavior parameter such as demand elasticity.
- b. Another question was raised about NTM political economy motive and the speaker's opinion about it and relation on the whole economic system.
- Ms Konny answered that every economy actually has the responsibility to protect their local product and industry. However, as long as their regulation does not prohibit or violate international rules, imposing NTMs could be one strategy to improve the economies' competitiveness. As long as technical regulation complies with the WTO provision, I think it is the economy's authority to make such regulation.
 - Mr Fajar added whether the NTMs are based on the hidden agenda to put it as a barrier in the multilateralism or in the APEC economies because it is not about the statistic. The highlight is in the future of multilateralism, which is going to rely on each other especially in the APEC economy. The rise of global value chain and the global production network became the new mantra. There is a dependency on each other through trade activities. Trade connection enhances the welfare of the APEC economies.
 - Mr Fajar also responded to the CGE model, considering the factors about the pandemic, covid-19 factors and also the technology factor. CSIS previously make a study to see the role of technology to GDP using simple regression.
- c. A participant asked to Mr Fajar about the growth of NTMs and how it has grown during the years especially in developed economies in terms of sophistication. The question

was raised especially regarding on how the developed economies construct and structurally put protection to their product.

- Mr Fajar answered that any regulation implemented by any economy in the world it will be better if it is flexible. In the future, we don't know what will happen, but the regulation must be adaptive and flexible. If there is some issue like extraordinary event such as pandemic, then all the authority have to be adaptive in responding to the current situation.

d. Another question was raised to Ms Widyastutik regarding on how would developing economy will be able to cope with all of these NTMs and how NTMs will bring benefit. Success stories were being demanded to give an example that farmers will be able to succeed on their own after the capacity building program.

- Ms Widyastutik responded that the example is the ESPO program. Besides capacity building, the government also have a role to increase the capacity of companies and farmers by giving some incentives.

- **Session 4**

a. A participant asked about the existing condition of NTMs in the forestry sectors, particularly in timber products. The participants asked the speakers to elaborate on the NTMs that are widely used in forestry sectors and their phenomena.

- Ms Chi Le responded responded that the TRAIN database covers a large number of NTMs on forestry products ranging from various HS chapters. One example is products from chapter 44 (HS code): wood and article of woods.
- There are around 2500 measures in chapter 44 from 71 economies and many of them are APEC economies. Most of them are SPS measures in the forms of export restriction as well as licenses for CITES products. This is very understandable because many economies try to protect their own rain forest from illegal timbering and endangered fauna and flora from illegal trade. More detailed data can be seen in the website database, and there would be detailed measures for each of these products.

- b. One of the participants asked Ms Mikic's opinion about the assumption that technical regulation is the "good" NTMs and the non-technical regulation is the "bad" one.
- Ms Mikic responded that we are more familiar with technical regulation because we have more data on that and we have access to regulation. But when it comes to the non-technical regulation, we don't have a proper definition for some of those. For example, she stated that rules of origin exist but we don't understand how they actually played the role, whether they are NTMs or not. She explained that we tend to declare that non-technical regulations are bad only because we don't understand the idea behind its implementation and don't have the accurate data to explain them.
 - Ms Mikic suggested applying more research and dialogues in order to have a proper understanding, thus better actions could be implemented to analyze the impact of non-technical regulations. She stated that thorough research should be conducted to boost trade activities, especially in developing economies.
- c. A question was raised regarding Ms Chi Le's presentation. The data from Africa are perceived to be very costly and difficult to obtain, there is a question on who should provide such big data.
- Ms Chi Le responded that actually there's data from African economies that she did not show in the presentation due to limited time. She elaborated that she worked together very closely with the African economies in AfCFTA area.
 - UNCTAD have conducted capacity building to train government officials to collect and calculate data of NTMs. Many exercises are conducted to calculate the impact of NTMs applied to certain economies and their trading partners to the product they wanted to export.
 - They have also conducted several capacity building on e-commerce initiatives since people in Africa use cellphones a lot. So, having that kind of capacity building very pleased them because it will create new businesses and they have the understandings to deal with all NTMs requirements.

- d. The next question asked about the regulatory distance and regulatory convergence that put an economy in a major distance to facilitate the regulation. The question was given to Ms Chi Le Ngo, regarding the data showed in her presentation of NTMs in forestry sectors and its impact on regulatory convergence, especially in Peru.
- Ms Chi Le responded by confirming Peru's data related to import measures. She added that Ms Carmila could privately message her to share the data regarding regulatory distance. She elaborated that it would be easier to discuss Peru's regulatory distance with the exact data because the showing map on her presentation doesn't illustrate the whole data.
- e. A participant asked about the TRAIN database, whether it is included the type of non-tariff measures such as export restriction and subsidies or only SPS and TBT measures.
- Ms Chi Le explained that TRAINS database has a lot of NTMs measures, about 20 different kinds of NTMs from its classification such as SPS, TBT, export restriction, subsidies, etc.
- f. Another question was raised to Ms Mia Mikic on her statement that mentioned 42% NTMs positively affect SDGs goals. The participant asked about the elaboration on the 58% of other measures and its plan on harmonizing those NTMs.
- Ms Mikic responded that it does not mean 58% of others are useless. It is just that SDGs has limitation and how the target is formulated and they don't cover the universe in all aspect. It depends also on the quality of SDG, how they are defined and how to map some of the NTMs. It requires a bit more understanding of the NTMs are about and what is the objective.
 - While SDGs are comprehensive, they do not cover some of the ideas from the public policy perspective that is entailed in the NTMs. And this can make them fully justifiable and reasonable and actually comply with international rules. It should be undertaken with that understanding.

V. Summary of the PPD

Several key findings that could be summarized from the PPD:

- a. There are three types of NTMs that are most widely implemented economies in the APEC region are the A630 (Food and feed processing) and A310 (labeling requirements) and A420 (Hygienic practices during production).
- b. It is crucial for economies to have an accessible and dependable source of NTMs data. Without the availability of data, the government will not be able to formulate a proper policy regarding on trade and NTMs. These data should be free to access and able to be compared across sectors and regions.
- c. Streamlining of NTMs is inevitable and can only be done by Government collaboration among economies. Regulatory distance is proven to be the most problematic area in the NTM's issue. Thus, policy harmonizing and regulatory standards are imperative and should be taken on the government level.
- d. In light to the pandemic and its relations with NTMs, these measures are sometimes deemed necessary for the government in the spirit of public health protections. Reduction of NTMs is a mandatory, yet selecting which NTMs that should be reduced and streamlined are delicate matters. Thus government should consider health issues and the spill-over effect of protectionism itself.
- e. Trade facilitation is key to reduce the cost of NTMs. The proper implementation of trade facilitation may boost NTMs compliance. However, one must emphasize on inclusivity aspect of trade facilitation by increasing the availability of qualified infrastructure, use mutual recognition of standards and accreditation among economies.
- f. As the proliferation of Regional Trade Agreements (RTAs) keep increasing over the years, economies must aware that such RTAs are aspired to open more market access rather than as a justification of imposing another layer of NTMs. RTAs should be the front liner of giving transparency and providing equal international standards in promoting fair and open trade for all.

VI. Pre-Test and Post-Test Evaluation

Pre- and post-tests consisting of 10 matched true/false and multiple-choice questions were designed to test similar areas of knowledge with each pre-/post-question set. The participants were asked to complete and turn in the pre-test before any instruction began. The post-test was collected at the PPD conclusion along with the PPD evaluation survey. For the final indicator, a test were used utilized as comparative data to measure the level of knowledge of the participants before and after the PPD. The targeted level increase of this PPD is 30%. The participants were recommended by the committee to take the pre-test prior to the event began and to take another post-test upon the completion of the event. A total of 271 participants attended the PPD, with a total of 267 valid or 98.52%, matching pre-/post-comparisons available for analysis. The data for each question was entered and calculated in Microsoft Excel. Data was analyzed in two ways. First method was to calculate the “correct” answer given by participant. Second method two considered whether the pasrticipant indeed understand the material issue or participants are not familiar with it by the choose the “I do not know the answer”.

Results in Table 1 show the percentage of participants with correct answers and participants choosing “I do not know the answer”. The post-test results showed a correct response of 94.06%. Thus, the knowledge gain for participants in the workshop was 37.8%. Another factor that can be evaluated with the second method is the number of participants that was not familiar with the material of PPD. The number of participants chosing “do not know” option decreased form 16.97% to 4.8%.

Table 1. Percentage of Correct Results

Question	Pre-Test		Post-Test	
	% Correct	% "don't know"	% Correct	% "don't know"
Q1	78.7	1.2	97.1	0.6
Q2	74.7	6.2	97.6	2.5
Q3	74.7	7.4	95.4	2.5
Q4	74.2	11.1	94.9	4.3
Q5	10.1	5	78.9	1
Q6	60.3	24.1	96.7	5.6

Question	Pre-Test		Post-Test	
	% Correct	% "don't know"	% Correct	% "don't know"
Q7	58.9	19.1	98.7	3.7
Q8	52.5	14.2	96.5	4.9
Q9	48.1	40.7	95.4	9.9
Q10	30.2	40.7	89.4	13
Average	56.24	16.97	94.06	4.8

VII. Recommendation

From the dialogue we have concluded several recommendations from the speakers and the discussions, such as:

- a. The importance of alignment, coordination, and collaboration between government, private sector, and academia to push greater transparency, harmonization of standards, and reducing NTMs. Regulatory distance is proven to be the most problematic area in the NTM's issue. Thus, policy harmonizing and regulatory standards are imperative and should be taken on the government level.
- b. The impact of NTMs imposed by economies won't be too harmful if the alternative policy is set with less restrictive policy
- c. Several mitigation strategies are needed to help minimize the impacts of the imports ban. The APEC economy is expected to be supportive because the impact of the imposition of tariffs and non-tariffs will reduce the welfare and real GDP of the APEC economy.
- d. The proliferation of Regional Trade Agreements may also increase the number of NTMs imposed. Thus, it is mandatory for RTAs to help reduce protectionism and compliance costs while facilitating transparency and adoption of international standards.
- e. It is crucial for economies to have an accessible and dependable source of NTMs data. Without the availability of data, the government will not be able to formulate a proper policy regarding on trade and NTMs. These data should be free to access and able to be compared across sectors and regions.
- f. In light to the pandemic and its relations with NTMs, these measures are sometimes deemed necessary for the government in the spirit of public health protections. Reduction of NTMs is

a mandatory, yet selecting which NTMs that should be reduced and streamlined are delicate matters. Thus government should consider health issues and the spill-over effect of protectionism itself.

- g. Trade facilitation is key to reduce the cost of NTMs. The proper implementation of trade facilitation may boost NTMs compliance. However, one must emphasize on inclusivity aspect of trade facilitation by increasing the availability of qualified infrastructure, use mutual recognition of standards and accreditation among economies.