

PERSPECTIVE

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Enhancing Regulatory Cooperation for Agricultural Trade in the Greater Mekong Subregion

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This aerial photograph shows terraced rice fields in northern Vietnam's Mu Cang Chai district on 18 September 2020. Manan VATSYAYANA/AFP.

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EXECUTIVE SUMMARY

- The intra-regional trade in agricultural products among six countries in the Greater Mekong Subregion (GMS), namely China, Cambodia, Laos, Myanmar, Thailand and Vietnam, recorded a robust growth of 10.3 percent per annum before the pandemic and 9.2 percent during the pandemic in 2020. Thailand is the largest exporter, and China is the largest importer in the GMS agricultural markets.
- However, deepening the intra-GMS trade further has been impeded by the long regulatory distance regarding non-tariff measures (NTMs) due largely to the different structures of NTMs between China and other GMS countries. Producers and traders have to comply with the large number of NTMs on the import of agricultural products such as vegetables, ranging from 8 in Laos and Thailand to 11 in Vietnam and 24 in China.
- Simulation results for reducing regulatory distance in the GMS reveal that a partial harmonization of NTMs would see an increase in the intensive margin (volume of existing products) of agricultural trade by 10.62-17.45 percent, while boosting the extensive margin (variety of products) by 5.05-8.16 percent. Such a reform would however only benefit trading pairs between China and other GMS countries.
- In a more ambitious scenario of full harmonization of NTMs, the agricultural trade gains would be expanded to all trading pairs in the GMS and see an increase in the intensive margin of agricultural trade by 36.31-77.57 percent, while boosting its extensive margin by 16.32-32.34 percent.
- Gaining increased agricultural trade integration, coupled with the potential benefits of NTM harmonization, highlight the importance of regulatory cooperation in the GMS. This could be strengthened under the Regional Comprehensive Economic Partnership which contains key regulatory cooperation instruments such as the promotion of transparency, the adoption of international standards and the mutual recognition of conformity assessment.

INTRODUCTION

Despite progress in tariff liberalization over the past decade, agricultural producers and traders in the Greater Mekong Subregion (GMS) – including Cambodia, Laos, Myanmar, Thailand, Vietnam, and China (especially Yunnan Province and Guangxi Zhuang Autonomous Region) – still face deeply-rooted regulatory obstacles to achieve their full potential as beneficiaries of road transport corridors (see Annex 1). Two case studies of road projects—the East–West Corridor linking Laos and Vietnam and the Phnom Penh–Ho Chi Minh City Highway linking Cambodia and Vietnam—show that travel times after project completions are lower than those before project completion by more than 50 percent (Hettige, 2008, p. 29).¹

While improved road connectivity has shortened travel times between the GMS countries, different market access conditions remain a key trade barrier between them. Govindaraju *et al.* (2021)² have calculated the regulatory distance and the differences in non-tariff measures (NTMs) imposed on imports in ASEAN+5 countries, i.e. the 10 ASEAN countries and Australia, China, India, Japan and New Zealand. They find that the NTMs imposed on imports by China are substantially different from those in ASEAN countries, and that the regulatory differences between them hampers trade. On average, a 10 percent increase in the regulatory distance between China and ASEAN countries reduces the intensive margin (reducing exports of existing products) by 2.38 percent and the extensive margin (reducing the variety of products in the export basket) by 0.65 percent.

The present study focuses on NTMs in the agricultural sector to present a subset of ASEAN+5 countries represented by the GMS countries. It explores the possibilities for enhancing regulatory cooperation for agricultural trade in the GMS, analyzing three indicators of trade integration, namely intra-GMS trade share and trade balance, incidence of NTMs on agricultural imports and exports, and simulation of agricultural trade gains under the partial and full harmonization in the GMS.

The GMS can be a good case study for NTM cooperation in agricultural trade. A large proportion of the labour force in the subregion is employed in the agriculture sector, ranging from 25 percent in China to 37 percent in Vietnam and 61 percent in Laos.³ Reducing the diversity in NTMs saves costs and increases profits for producers and traders, while reducing prices and expanding choices of products for consumers. This should complement the role of road transport corridors in facilitating agricultural trade in the subregion.

REGIONALIZATION OF AGRICULTURAL TRADE

The intra-GMS trade (i.e. import plus export) in agricultural products among six countries, namely Cambodia, China, Laos, Myanmar, Thailand and Vietnam, has increased its importance in absolute terms and in relative importance to the extra-GMS trade. Before the COVID-19 pandemic, the value of intra-GMS trade had been rising by 41.2 percent or 10.3 percent per annum from US\$37.3 billion in 2015 to US\$52.6 billion in 2019. Such growth is twice that for extra-GMS trade which was recorded at 21.4 percent or 5.3 percent per

annum for the period 2015-2019. This has increased the share of intra-GMS trade in GMS’s total agricultural trade from 14.3 percent in 2015 to 16.2 percent in 2019 (Figure 1a).

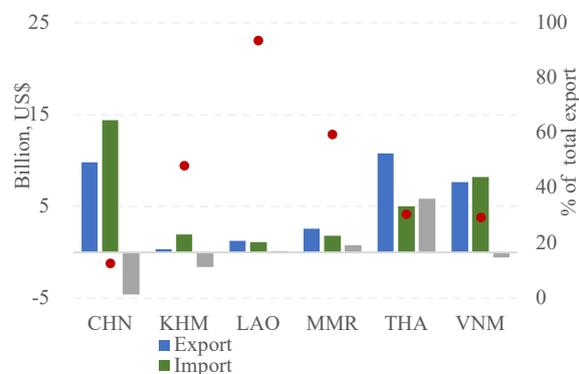
The same trend of agricultural trade growth continued during the pandemic. The intra-GMS trade grew at 9.2 percent in 2020, while the extra-GMS trade grew at 6.6 percent that same year (Figure 1a). The sustaining of agricultural production and the maintaining of an open agricultural trade policy in the subregion during the COVID-19 outbreak have been encouraging. It also highlights the importance of agricultural trade in ensuring food security in the subregion, and in providing essential income for farmers and traders in the exporting countries.

Figure 1: Agricultural trade of GMS countries, 2015-2020

a. Intra- and extra-GMS trade



b. Intra-GMS trade balance in 2019



Source: Author’s calculation using data from the World Bank’s World Integrated Trade Solution (WITS), available at <http://wits.worldbank.org/WITS/WITS/AdvanceQuery/RawTradeData/QueryDefinition.aspx?Page=RawTradeData>. Accessed December 29, 2021.

The GMS countries are both exporters and importers of agricultural products in the sub-region. In 2019, intra-GMS export was recorded at US\$32.5 billion, 87 percent of which was accounted for by Thailand (33 percent of total intra-GMS export), China (30 percent) and Vietnam (24 percent). The remaining 13 percent was accounted for by Myanmar (8 percent), Laos (4 percent) and Cambodia (1 percent). Countries with less productive capacity tend to export lower quantities of agricultural products than those with greater productive capacity. Nonetheless, agricultural export within the GMS markets accounted for 93 percent of total agricultural export in Laos, 59 percent in Myanmar, and 48 percent in Cambodia (Figure 1b).

Figure 1b also shows China, Cambodia and Vietnam to be net importers of agricultural products in the GMS, while Laos, Myanmar and Thailand are net exporters. Values of agricultural export from China, Cambodia and Vietnam are lower than those of their agricultural import, resulting in trade deficit between these countries and other GMS

countries. Meanwhile, values of agricultural export from Laos, Myanmar and Thailand are greater than those of their agricultural import, resulting in trade surplus between them and other GMS countries. The status of net importers or net exporters in the GMS suggests that any policy aimed at restricting agricultural trade reduces social wellbeing in the sub-region, and limits the variety of products available to the net importers, while destroying job opportunities and income sources among the net exporters.

DIVERSITY IN NON-TARIFF MEASURES

Agricultural exports in the GMS have been affected by NTMs imposed by their governments and their trading partners' governments. On the export side, the coverage ratio in Figure 2a reveals that Cambodia, China, Laos, Myanmar and Vietnam have imposed NTMs on almost all their agricultural exports, especially vegetable and animal products. In contrast, agricultural exports from Thailand are less affected by NTMs imposed by its government.

In addition, the prevalence score in Figure 2b shows that the number of NTMs on agricultural exports is largest in China, followed by Laos, Myanmar and Vietnam. On average, China applies five NTMs on its exports of food and vegetable products, and six NTMs on its exports of animal products. In contrast, the average number of NTMs applied on agricultural exports in Thailand is almost zero. This suggests that Thai producers and exporters of agricultural products face less complex trade regulations than those in other GMS countries.

Meanwhile, exporters have to comply with different market access conditions at destination markets, such as product standards for food safety and packaging and labelling requirements. NTMs on imports have greater coverage than those on exports. In Vietnam, the coverage ratio is 69 percent for food export, while it is 100 percent for food import. In Thailand, the coverage ratio is 19 percent for animal export, while it is 98 percent for animal import. China, Cambodia, Laos and Myanmar have maintained a relatively high coverage ratio of NTMs (Figure 3a).

The prevalence score of agricultural imports in Figure 3b shows that China applies 24 NTMs on imports of food and vegetable products. This is greater than those on its exports by almost four times. Similarly, Thailand's imports of vegetables, animals and food face 8, 9 and 13 NTMs, respectively, which are significantly more than those imposed on its exports. The cost of regulatory compliance incurred by agricultural producers and exporters increases when they export products to two or more markets with different NTMs.

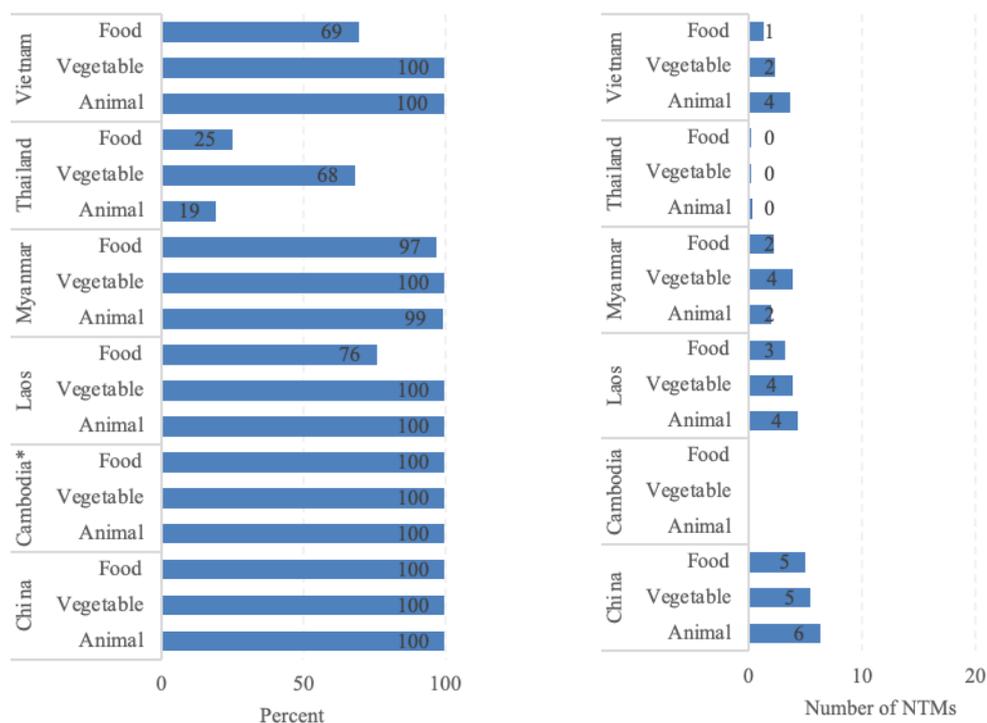
More than half of NTMs on agricultural imports are accounted for by the sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT). For example, the number of NTMs on import of vegetables (HS070960) ranges from 3 in Cambodia to 9 in Laos, 13 in Myanmar, 15 in Thailand and 20 in China and Vietnam. The share of SPS and TBT measures in total NTMs imposed on import of vegetables is 90 percent in Cambodia, 56 percent in Laos, 77 percent in Myanmar, 93 percent in Thailand, 90 percent in China and 85 percent in Vietnam.

The most frequently found SPS measures on agricultural imports in the GMS are the authorization requirement for SPS reasons, tolerance limits for residues of certain substances, product registration and approval requirement as well as testing, certification and inspection requirements. The most commonly found TBT measures on agricultural imports include product quality, safety or performance requirements as well as labelling and packaging requirements.

Figure 2: Incidence of NTMs in export of agricultural products

a. Coverage ratio (percent)

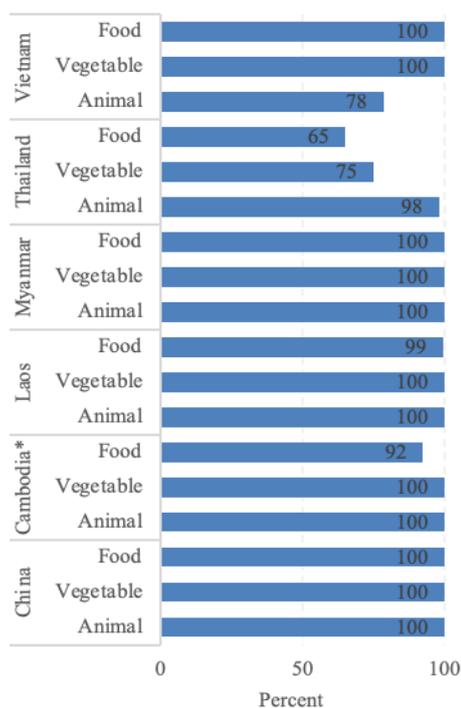
b. Prevalence score (count of NTMs)



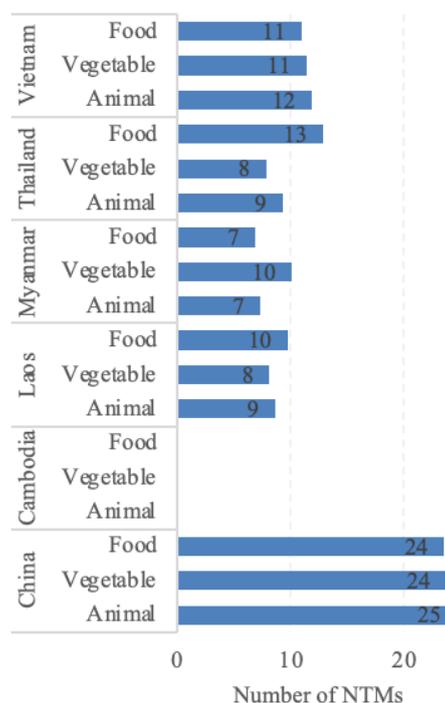
Source: Author’s compilation using data for Cambodia from the World Bank’s World Integrated Trade Solution (wits.worldbank.org), and data for other GMS countries from the UNCTAD TRAINS database (trains.unctad.org).

Figure 3: Incidence of NTMs in import of agricultural products

a. Coverage ratio (percent)



b. Prevalence score (count of NTMs)



Note: Cambodia’s data on the prevalence score is not available.

Source: Author’s compilation using data for Cambodia from the World Bank’s World Integrated Trade Solution (wits.worldbank.org), and data for other GMS countries from the UNCTAD TRAINS database (trains.unctad.org).

The SPS and TBT measures aim to reduce the impacts of perceived market imperfections such as risks for human, animal or plant health, or information asymmetries (Beghin et al., 2012).⁴ The empirical evidence shows that import prices of agricultural products can increase by about 15 percent due to restriction or special authorization for TBT or SPS reasons and conformity assessment. At the same time, they can increase demand for agricultural imports by providing a positive signal to consumers that enhances confidence in imported products (Gordon *et al.*, 2020).⁵ When the quality of products is heterogeneous and unknown to buyers, SPS and TBT measures such as labelling and packaging requirements can overcome the information deficit and convey a signal that all producers conform to a certain standard, encouraging demand for such products.

POTENTIAL BENEFITS OF REGULATORY COOPERATION

This section assesses the extent to which a lower level of differences in NTMs between the importing country and the exporting country in the GMS increases the intensive margin and

the extensive margin of agricultural trade. This happens when NTMs imposed on an imported product by an importing country are significantly different from those applied in the exporting country. NTM-related costs for traders and producers include gathering information on regulatory requirements in different markets, adjusting the specification of goods and services to comply with different regulatory requirements of importing countries, and complying with different conformity assessment procedures across importing countries. The information and specification costs raise fixed costs, while the costs of conformity assessment increase variable costs for exports. Higher fixed and variable costs of NTMs discourage firms from scaling up their production and investing in the development of new products for exports.

The regional cooperation on NTMs to reduce regulatory differences may be viewed as a gradual process involving the promotion of transparency, adoption of international standards and mutual recognition of conformity assessment procedures of GMS countries.

This study applies counterfactual simulations by conducting “what if” exercises based on the current reality of regulatory differences and two reform scenarios, namely partial and full harmonization of NTMs. The level of regulatory differences between the importing country and the exporting country is measured by the regulatory distance at the HS 6-digit product level. This is obtained from Govindaraju *et al.* (2021, pp. 42-44).

Table 1: Regulatory distance for NTMs in GMS countries

Importer	Exporter					
	CHN	KHM	LAO	MMR	THA	VNM
CHN		0.377	0.355	0.393	0.366	0.352
KHM	0.377		0.212	0.217	0.255	0.254
LAO	0.355	0.212		0.215	0.219	0.258
MMR	0.393	0.217	0.215		0.233	0.271
THA	0.366	0.255	0.219	0.233		0.267
VNM	0.352	0.254	0.258	0.271	0.267	

Note: CHN = China, KHM = Cambodia, LAO = Laos, MMR = Myanmar, THA = Thailand, VNM = Vietnam. The value of regulatory distance is between 0 and 1; a value closer to one indicates a greater dissimilarity between two countries.

Source: Author’s compilation from Govindaraju *et al.* (2021, pp. 42-44).

Table 1 reveals that the structure of NTMs on agricultural imports in China is substantially different from that in other GMS countries. The regulatory distance for bilateral trade between China and other GMS countries is greater than 0.35, while the regulatory distance for other country pairs is lower than 0.27. Among country pairs in the GMS, the regulatory distance is lowest at 0.21 for the bilateral trade between Cambodia and Laos, and highest at 0.39 for the bilateral trade between China and Myanmar. This confirms our findings in the last section on the diversity of NTMs in the GMS, where China imposes a greater number

of NTMs than the other countries. A higher value of regulatory distance for a country pair means greater dissimilarity in NTMs between them.

The simulation results of agricultural trade gains under Scenario 1 in Table 2 reveal that the partial harmonization of NTMs in the GMS enhances the agricultural trade between China and other GMS countries. It increases the intensive margin of agricultural trade by 10.62-17.45 percent, and boosts its extensive margin by 5.05-8.16 percent. These findings suggest that reducing the regulatory differences would boost the agricultural trade largely by increasing the volume of existing products, and to a lesser extent by diversifying the export baskets.

The partial harmonization of NTMs in the GMS is represented by the reducing of the regulatory distance of all country pairs in Table 1 to the regional average of 0.283. This reduces the regulatory distance for country pairs between China and other GMS countries by 20-28 percent. The reduction of regulatory distance is then used to simulate the agricultural trade gains based on the estimated coefficients of regulatory distance on agricultural trade in Govindaraju *et al.* (2021, pp. 24-25). Govindaraju *et al.* (2021) find that the coefficient of regulatory distance is estimated at -1.461 for the log of intensive margin and at -0.713 for the log of extensive margin.

Table 2: Simulated intensive and extensive margins of agricultural trade (percent of baseline value) under partial and full harmonization of NTMs in the Greater Mekong Subregion.

Importer	Intensive margin of agricultural trade						Extensive margin of agricultural trade					
	Exporter						Exporter					
	CHN	KHM	LAO	MMR	THA	VNM	CHN	KHM	LAO	MMR	THA	VNM
<i>Scenario 1: Partial harmonization of NTMs</i>												
CHN		14.73	11.10	17.45	12.90	10.62		6.94	5.27	8.16	6.10	5.05
KHM	14.73		0.00	0.00	0.00	0.00	6.94		0.00	0.00	0.00	0.00
LAO	11.10	0.00		0.00	0.00	0.00	5.27	0.00		0.00	0.00	0.00
MMR	17.45	0.00	0.00		0.00	0.00	8.16	0.00	0.00		0.00	0.00
THA	12.90	0.00	0.00	0.00		0.00	6.10	0.00	0.00	0.00		0.00
VNM	10.62	0.00	0.00	0.00	0.00		5.05	0.00	0.00	0.00	0.00	
<i>Scenario 2: Full harmonization of NTMs</i>												
CHN		73.46	67.98	77.57	70.70	67.24		30.84	28.80	32.34	29.82	28.53
KHM	73.46		36.31	37.31	45.14	44.93	30.84		16.32	16.73	19.94	19.85
LAO	67.98	36.31		36.90	37.71	45.78	28.80	16.32		16.57	16.90	20.20
MMR	77.57	37.31	36.90		40.55	48.58	32.34	16.73	16.57		18.07	21.32
THA	70.70	45.14	37.71	40.55		47.71	29.82	19.94	16.90	18.07		20.97
VNM	67.24	44.93	45.78	48.58	47.71		28.53	19.85	20.20	21.32	20.97	

Source: Author’s simulation using the regulatory distance and estimated coefficients from Govindaraju *et al.* (2021).

For example, the regulatory distance between China and Vietnam is 0.352. In Scenario 1, reducing the regulatory distance to the regional average of 0.283 means that the regulatory distance between China and Vietnam must be reduced by 20 percent from 0.352 to 0.283. The reduction in regulatory distance is -0.069 (0.283 - 0.352). The impact of the reduction in regulatory distance on the intensive margin is estimated at 10.62 percent with the formula: $100 \times [\exp(-1.461 \times (-0.069)) - 1]$.⁶ Similarly, the impact of the reduction in regulatory distance on the extensive margin is estimated at 5.05 percent with the formula: $100 \times [\exp(-0.713 \times (-0.069)) - 1]$. The simulation result shows that a 20-percent reduction in regulatory distance between China and Vietnam enhances the bilateral trade by raising the volume of existing agricultural products by 10.62 percent and increasing the variety of agricultural products by 5.05 percent.

Full harmonization of NTMs is more ambitious and will result in larger and more inclusive trade gains than its partial harmonization in Scenario 1. In Scenario 2, the full harmonization of NTMs is represented by the reduction of existing regulatory distance to zero, indicating the regulatory convergence in the GMS. In this case, the regional average of the intensive margin of agricultural trade (all GMS countries) is around 52 percent of its baseline value. The range is wide, running from 36 percent for Cambodia-Laos trade to 48 percent for Thailand-Vietnam trade and 78 percent for China-Myanmar trade. The full harmonization of NTMs would also increase the extensive margin of agricultural trade, ranging from 16 percent for Cambodia-Laos trade to 18 percent for Thailand-Myanmar trade and 32 percent for China-Myanmar trade in agricultural products (Table 2). This suggests that greater harmonization of NTMs expands the benefits of agricultural trade for all GMS countries.

CONCLUSION AND POLICY IMPLICATIONS

This study demonstrates the potential benefits of greater regulatory cooperation in agricultural trade in the GMS. The intra-GMS trade in agricultural products has grown by 10.3 percent per annum in the period 2015-2019 and shown a robust growth of 9.2 percent despite the COVID-19 outbreak in 2020. Thailand is the largest exporter, and China is the largest importer. While the transport distance between China and other GMS countries has been shortened by the road corridors, the regulatory distance for NTMs between them has not yet been streamlined. Producers and traders in the subregion face the challenge of complying with the diversity of NTMs, especially SPS and TBT, imposed on imports and exports by the GMS governments.

The simulation results in this study show that greater harmonization of NTMs results in larger and more inclusive gains in agricultural trade in the GMS. Partial harmonization of NTMs would see an increase in the intensive margin of agricultural trade between China and other GMS countries by 10.62-17.45 percent, and boost its extensive margin by 5.05-8.16 percent. Under a more ambitious scenario of full harmonization of NTMs, the trade gains would be expanded to all trading pairs in the GMS and be associated with an increase in the intensive margin of agricultural trade by 36.31-77.57 percent, while its extensive margin will be boosted by 16.32-32.34 percent. These findings suggest that reducing the regulatory differences would boost the agricultural trade largely by increasing the volume of existing products, and to a lesser extent by diversifying the export baskets.

There are legitimate reasons for different structures in NTMs on agricultural products across GMS countries. These include different perceptions of risk, income levels, cultures, or political and legal systems. To facilitate agricultural trade, however, the GMS governments should consider the impact of their NTMs beyond their domestic borders, incorporate the design and implementation of the existing and proposed NTMs of their trading partners into their NTMs, and cooperate with their trading partners in bilateral, regional or multilateral contexts to reduce unnecessary trade costs associated with the diversity of NTMs across countries.

The GMS countries should strengthen their cooperation on NTMs under the Regional Comprehensive Economic Partnership (RCEP) for three reasons. First, the GMS economic cooperation programme does not have a comprehensive legal framework for NTM cooperation. The key document on trade facilitation in the subregion is the Cross-Border Transport Agreement (CBTA) ratified by Laos, Thailand and Vietnam in 1999, Cambodia in 2001, China in 2002, and Myanmar in 2003,⁷ which focuses on transport and trade facilitation rather than the harmonization of trade-related regulations.

Second, the RCEP provisions on SPS and TBT include the regulatory cooperation instruments commonly found in other regional trade agreements. These include the promotion of transparency, adoption of international standards, and mutual recognition of conformity assessment procedures. The provisions on transparency and adoption of international standards require regulators of RCEP partners to embed international best practices into their domestic rule-making procedures and prevent regulations creating unnecessary barriers to trade. In addition, mutual recognition of conformity assessment results between two or more RCEP partners will help ensure that traders do not face duplicative requirements or procedures when regulations differ across markets.

SPS cooperation under RCEP aims to protect human, animal or plant health; enhance the implementation of WTO SPS Agreement;⁸ increase the transparency and understanding of the development and application of SPS measures; and encourage the adoption of international standards, guidelines and recommendations (Article 5.2). Chapter 5 in the document stresses compliance with the WTO SPS Agreement (Articles 5.5 and 5.7 of RCEP); encourages the use of international standards for SPS measures (Article 5.5); promotes mutual recognition and acceptance of SPS certificates issued by RCEP partners to prevent goods being tested by both exporting and importing countries (Article 5.5); and increases transparency through the notification of SPS measures with significant trade effects to WTO (Article 5.12) and the establishment of contact points to facilitate communication on SPS matters.

The TBT cooperation under the RCEP is covered in Chapter 6. It aims to reduce unnecessary trade costs associated with standards, technical regulations, and conformity assessment procedures; enhance the implementation of WTO TBT Agreement;⁹ and strengthen information exchange and cooperation. It stresses compliance with the WTO TBT Agreement (Article 6.4 of RCEP); promotes the transparency through information exchange and cooperation (Articles 6.5 and 6.6) and establishment of contact points (Article 6.12); provides guidance on assessment procedures for conformity to technical standards and norms and how they should be implemented or accepted (Article 6.8); promotes mutual recognition of the conformity assessment procedures used by the RCEP partners to prevent goods being tested in both the exporting and importing countries (Article 6.8); and

encourages the use of international standards and harmonization of technical regulations (Article 6.5).

Finally, all GMS countries are RCEP partners, and five GMS¹⁰ have already ratified the agreement. By being early adopters of the SPS and TBT provisions in RCEP, they should be able to enhance intra-GMS agricultural trade. Subregional NTM cooperation among a small number of countries coupled with the possibility of technical and financial supports under the GMS programme should be effective in dealing with specific challenges such as building bridges with existing national regulatory systems, agreeing on common regulatory objectives, and domestic resistance to liberalize agricultural trade. The RCEP-based NTM reform in the GMS can be scaled up or linked to NTM reforms among other RCEP partners. In the long run, RCEP should consolidate the national regulatory reforms of its members, and reduce trade costs associated with the regulatory diversity.

The harmonization of NTMs should be complemented with a strict monitoring and evaluation mechanism. Part of NTM-related trade costs occurs during their implementation. Menon and Roth (2022)¹¹ find that NTMs in GMS countries are used in a discretionary fashion to protect domestic production whenever required and that this can be a moving target, i.e. a new NTM can morph and be a substitute for the original one after that has been identified and targeted for dismantling by the authorities. These are usually applied at the border with China, and other GMS countries can do little to address it, or seek compensation for losses incurred. While harmonization can go some way towards reducing its occurrence, it cannot overcome the problem entirely.

Annex 1: Economic Corridors in the Greater Mekong Subregion



Note: **SEC:** Southern Economic Corridor; **NSEC:** North-South Economic Corridor; **EWEC:** East-West Economic Corridor

Source: Greater Mekong Subregion, GMS Economic Corridors, available at <https://www.greatermekong.org/gms-economic-corridors-subcorridors>; accessed March 15, 2021.

ENDNOTES

- ¹ Hettige, M. (2008). *Greater Mekong Subregion: Maturing and Moving Forward*. Manila: Asian Development Bank.
- ² Govindaraju, V.C., Foster-McGregor, N., and Devadason, E.S. (2021). *Regulatory Distance, Margins of Trade, and Regional Integration: The Case of the ASEAN+5*, ERIA Discussion Paper Series, No. 403. Jakarta: Economic Research Institute for ASEAN and East Asia.
- ³ World Bank's World Development Indicators, available at <https://databank.worldbank.org/source/world-development-indicators#>. Accessed December 8, 2021.
- ⁴ Beghin, J., Disdier, A.-C., Marette, S. and Tongeren, F. van (2012). Welfare Costs and Benefits of Nontariff Measures in Trade: A Conceptual Framework and Application. *World Trade Review*, 11(3), 356-375.
- ⁵ Gourdon, J., Stone, S. and Tongeren, F. van (2020). *Non-tariff Measures in Agriculture*, OECD Food, Agriculture and Fisheries Papers, No. 147. Paris: OECD Publishing.
- ⁶ The simulated intensive and extensive margins in Table 2 are calculated by the following formula: $100 \times [\exp(\hat{\beta} \times \Delta x) - 1]$, where *exp* is the exponential, $\hat{\beta}$ is the estimated coefficient of regulatory distance on the intensive or extensive margin of agricultural trade, and Δx is the change in regulatory distance.
- ⁷ <http://www.gms-cbta.org/cross-border-transport-agreement>
- ⁸ WTO Website, available at https://www.wto.org/english/tratop_e/sps_e/spsagr_e.htm
- ⁹ WTO Website, available at https://www.wto.org/english/docs_e/legal_e/17-tbt_e.htm
- ¹⁰ As of 7 December 2021, the RCEP has been ratified by five GMS countries, namely Cambodia, China, Laos, Thailand and Vietnam.
- ¹¹ Menon, J. and Roth, V. (eds.) (2022). *Agricultural Trade between China and the Greater Mekong Subregion Countries: A Value Chain Analysis*. Singapore: ISEAS – Yusof Ishak Institute.

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