



Food and Agriculture
Organization of the
United Nations



SITUATION ANALYSIS REPORT

**PESTICIDE MONITORING
PROGRAMME IN ASSOCIATION
OF SOUTHEAST ASIAN NATIONS
(ASEAN)**



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**Food and Agriculture Organization of the United Nations
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Abstract

In the objective of developing a guide for the countries in the Association of Southeast Asian Nations (ASEAN), a questionnaire was circulated among them to assess the status of their pesticide monitoring programmes. Many countries around the globe have adopted a pesticide risk management framework which incorporates a range of functions and activities including pesticide registration, MRL setting, approval of a pesticide product label, farmer education, pesticide control-of-use regulation, food traceability, verification of good agricultural practice, national residue monitoring programmes, facilitation of trade and market access, traceback investigation and pesticide review. The frameworks tend to be operated as a continuum seeking ongoing improvement in good agricultural practice and enhancements to food safety. The Food and Agriculture Organization of the United Nation (FAO), World Health Organization (WHO), Codex Alimentarius Commission, and members recognize the need for a comprehensive framework for pesticide residue management through science-based risk assessment, management and communication. Member countries recognize that a sound pesticide residue framework does not rely only on residue monitoring but it importantly includes at the very least pesticide registration, chemical control-of-use, traceback investigation and a chemical review process. In consultation with the ASEAN Health Cluster 4: Ensuring Food Safety (AHC4), these findings are the result of a meeting occurred on 25 August 2020 and it elaborates the responses from a questionnaire to assess the situation responses to the comprehensive questionnaire issued on 12 September 2020.

Keywords

Pesticide residue, food safety, maximum residue limit, monitoring, regulation, compliance, ASEAN, Situation analysis



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Abbreviations and acronyms

AFSN	ASEAN Food Safety Network
ASEAN	Association of South East Asian Nations
AHC4	ASEAN Health Cluster 4: Ensuring Food Safety
DG	Director-General
FAO	Food and Agriculture Organization of the United Nations
MRL	maximum residue limit
SPS	The Agreement on the Application of Sanitary and Phytosanitary Measures

1

Introduction

1.1 Background

The Food and Agriculture Organization of the United Nations (FAO) conducted a regional workshop entitled “Capacity building on risk categorization for ranking risk of ASEAN food hazards for developing the risk-based monitoring protocol for food safety” on 23-25 April 2019. In parallel, the Association of South East Asian Nations (ASEAN) members responsible for the ASEAN Health Cluster 4: Ensuring Food Safety (AHC4) collaborated with FAO and planned to develop a series of criteria for food safety risk categorization. An Electronic Working Group was established within AHC4 and based on the developed categorization for ranking risk of ASEAN food hazards for risk-based monitoring protocol for food safety, pesticide residues in agricultural commodities has been selected to be a common prioritized issue and AHC4 to start working on collecting relevant scientific data in various ASEAN countries. FAO and AHC4 agreed that the best approach is to develop an ASEAN-wide guide to develop/improve pesticide residue monitoring and surveillance programmes.

1.2 Overview of the situation analysis methodology

After the video conference discussions last 25 August 2020, ASEAN members were asked a few introductory questions which were analysed and used for a more comprehensive questionnaire. This was circulated between 11 and 28 September 2020. A total of fifteen responses were obtained from the ten ASEAN countries. The situation analysis presented in this document led to the identification of the next steps, which include a meeting between FAO and AHC4 and the development of a guide to develop/improve pesticide residue monitoring and surveillance programme for ASEAN countries.

The results of the survey directly contribute to the assessment in addressing the countries’ needs and priorities. The FAO guide will consider all the inputs provided by the countries, thus it is important for all



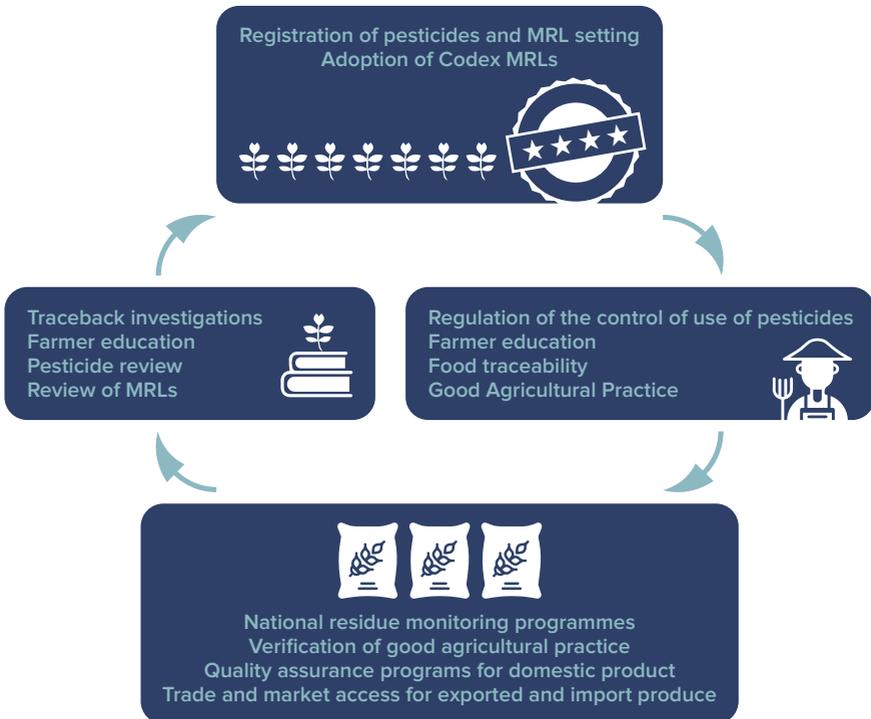
ASEAN countries to share the needs, any concerns, issues, opportunities, success stories and lessons learned, to have them included or addressed in the FAO guide.

Accordingly, the three contributions to this situation analysis is report are (i) general information on national residue monitoring programmes from available documents and reports, (ii) key outcomes from the virtual meeting and (iii) the on-line questionnaire.

1.3 Situation analysis concepts

The following diagram explains the pesticide risk management framework and the adoption of maximum residue limits (MRLs) adopted in most countries as a continuum of functions focused on good agricultural practice, food safety and market access. The situation analysis will address each function with a particular focus on the integral component, national residue monitoring programmes, which is the subject of this FAO project.

FIGURE 1 Pesticide risk management network



2

General situation overview

The fifteen respondents provided variable answers to the questionnaire based on their different national contexts and responsible agencies. While it was clear that the levels of capacity in the ASEAN group vary from basic to advanced, the important common thread was the need to develop national pesticide monitoring programme with consistent MRLs in the region.

One of priorities of ASEAN countries' agricultural policies is increasing productivity to ensure sufficient food for a growing population. The use of pesticide together with other technologies helps in increasing crop yields while achieving pest control. However, the increased use of pesticides in the region can lead to an increase of food safety problems if there is insufficient-controlled use of pesticides in the agriculture sector. Globally, there is a gained attention on chemical residues in food and consumers are becoming highly concerned about pesticide residues on agro-products.

Fruit and vegetables are the important food and export goods for many Asian countries. In addition, due to insufficient research backup and lack of regular and effective pesticide residues monitoring system, many Asian developing countries find it difficult to meet the today's market demand on safety. The economic losses of trade rejection caused by high pesticide residues are considerable to farmers, industry, governments and the people of the affected countries.

In Asian region, many countries have developed food safety regulations, and some are linked to pesticide residue issues; however, the enforcement generally remains weak, and pesticide residue monitoring plans have been developing very slowly. The countries are now realising that pesticide residue monitoring is an important issue for food safety management and the necessity to strengthen pesticide residue monitoring is becoming more apparent. It was reported in Regional Training Workshop on Development of Pesticide Residue Monitoring Programme in Asian Countries, Beijing 2015 that many Asian countries are seeking support to develop residue monitoring plans.



Pesticide residue monitoring is only a part of the overall pesticide risk management framework. Effective pesticide risk reduction and food safety management through residue monitoring programmes requires not only adequate skills and knowledge but also systems and institutions to develop policies, regulate, enforce and monitor.

Residue monitoring programmes exist in more than half the ASEAN member countries but a lesser proportion claim to have established a pesticide risk management framework encompassing pesticide registration, farmer control-of-use oversight, verification of good agricultural practice through monitoring, traceback investigation and response and pesticide review. It is therefore not surprising to find harmonization of standards as a common element of the ASEAN Food Safety Policy selected by many ASEAN member countries to be important for the establishment of future residue monitoring programmes.

For those ASEAN members with national residue monitoring programmes, establishment of programmes appears to be based on respective agricultural production, imports and exports. Most countries had established MRL compliance programmes but not all had import/export programs. Those with import/export programmes tended to list trade/market access as a key driver while those focused on MRL compliance programmes listed food safety/consumer concerns as the drivers.



3

Perception of capacity ranking

About half of the ASEAN countries considered their pesticide residue monitoring capacities as basic. Based on the online questionnaire responses, most countries are likely to self-evaluate their respective pesticide risk management frameworks as basic. However, ASEAN initiatives on pesticide registration and harmonized MRLs are expected to fill some of those perceived gaps in respective management frameworks.

In general, countries were keen to address each element of the pesticide management framework. However, many confirmed a lack of technical capacity to undertake regulatory functions such as pesticide registration. Based on the responses provided at the videoconference and the questionnaire, four countries (Brunei, Cambodia, Myanmar and Lao People's Democratic Republic) believe their capacity to develop and manage residue monitoring programmes is basic. Six countries (Thailand, Viet Nam, Indonesia, Malaysia, Singapore and Philippines) assigned themselves as intermediate capacity. No country categorized itself as having advanced capacity to develop and manage residue monitoring programs.

Importantly, the capacity to manage residue monitoring programmes does not necessarily correlate to other elements of the pesticide risk management framework. However, interpretation of other questionnaire responses would suggest that a basic capacity applies to the entire framework. Similarly, those countries indicating an intermediate capacity in residue monitoring appear to have established capacity to varying degrees in pesticide registration, farmer control-of-use, traceback investigation and pesticide review.

Within the residue monitoring element, countries with a basic capacity indicated a lack of technical capacity and analytical instrumentation as the greatest impediments. Countries with intermediate capacity cited poor national coordination as an obstacle to having a comprehensive residue monitoring programme.



4

Existing pesticide risk management framework elements

The ASEAN food safety policy seeks to help member states protect the health of its consumers, ensure fair practices in food trade and facilitate the free movement of safe food products within the region. With regard to pesticide residues, each ASEAN member must have capabilities/capacity to address all elements of the pesticide risk management framework and if not be able to draw on the ASEAN group to establish consistent shared approaches to:

1. establishing and implementing food safety measures;
2. fostering the process of harmonization of food safety measures and control procedures of ASEAN Member States; and
3. supporting the efforts of ASEAN Member States in strengthening national food control systems.

However, most countries indicated that a comprehensive pesticide risk management framework had not been established to date. The development and management of a national residue monitoring programme must be supported by:

- registered/approved pesticides
- maximum residue limits (MRLs)
- pesticide product label instructions
- pesticide use education programmes
- farmer agronomic extension support
- produce traceability
- analytical residue testing capacity/capability
- management process for MRL exceedances including traceback investigations
- pesticide and MRL review



To achieve the requisite comprehensive pesticide risk management framework, countries will need to consider harmonization, resource sharing and technology transfer, all of which are included in the objectives of the ASEAN initiatives in this area.

The success of a national residue monitoring programme is highly dependent on a pesticide risk management framework and in particular the existence of maximum residue limits with which to compare residue testing results and determine levels of compliance with good agricultural practice or, in the case of exports/imports, a trade standard. Responses indicate that while less than half of the Member countries set respective MRLs, all appear to adopt Codex MRLs and most also reference ASEAN MRLs.



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Government oversight

Government oversight for pesticide registration, MRL setting, public health/food safety, pesticide control-of-use and the management of residue monitoring programmes was less obvious for those countries which considered its capacity as basic in regard to those elements. Conversely, those countries with a perceived intermediate capacity cited a range of government agencies responsible for overseeing respective pesticide risk management frameworks.

Government oversight is defined as the exercise of political authority over certain functions, actions and affairs of people as well as the performance of certain functions for the people including actions of governing and administration. It does not necessarily indicate a strict regulatory approach but instead could relate to cooperative relationships with for example certain industry sectors.

It follows that within the ASEAN group, and in the absence of some level of government oversight for the pesticide risk management framework, a focus on consistent harmonised approaches and capacity building is required. The question is therefore; “What are the opportunities for ASEAN governments to establish consistent shared approaches?” and “Can a member of the ASEAN group without a pesticide registration authority or MRL setting capability adopt the formal approaches of another ASEAN member?”

In 2003, the ASEAN Food Safety Network (AFSN) was established according to the resolution of the 25th meeting of the ASEAN Ministers on Agriculture and Forestry in Malaysia. AFSN is developed as a platform for information sharing on food safety initiatives amongst AMS. The draft ASEAN Food Safety Regulatory Framework Agreement was established and continues to be developed to allow ASEAN members to adopt coherent integrated approaches to legal frameworks, comprehensive frameworks for pesticide management and harmonized food safety across the food chain. The key objective of the ASEAN Food Safety Regulatory



Framework is to build upon the existing commitments in order to provide a structure and the instruments to realise the free flow of safe food in the ASEAN. Therefore, each ASEAN member has the opportunity to establish a comprehensive pesticide risk management framework via existing ASEAN governments' food safety initiatives.

In regard to ASEAN members with existing government oversight on pesticide registration, MRL setting, residue monitoring programs, pesticide control-of-use and food safety/public health, there are general commonalities with food safety/public health oversight by Health/Food and Drug Administration agencies with the remainder covered by Agriculture agencies. An example of common government oversight appears to be the roles and responsibilities of food safety agencies within Health, Food and Drug Administration and other departments in the management of incidents where residues are detected above the MRL and traceback investigation is required. Those ASEAN members which conduct residue monitoring have indicated that traceback investigations are undertaken with the main objectives of addressing public health concerns followed by farmer compliance.

Notwithstanding appropriate government oversight, the success of many existing pesticide risk management frameworks is the cooperation and coordination between government agencies, farmers, farmer representative organisations, pesticide manufacturers and export/import associations. Given that all parties have a vested interest in successful agricultural production and trade, it is important to establish channels of communication. ASEAN members have indicated an inclusive approach toward vested interests for most elements of pesticide risk management. This approach will be critical to success in further development of a risk management framework.



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Opportunities for harmonization

The AFSN was established accordingly with the resolution of the 25th meeting of the ASEAN Ministers on Agriculture and Forestry (2003 in Malaysia). The AFSN is developed as a platform for information sharing on food safety initiatives amongst AMS.

Further, the ASEAN Trade in Goods Agreement defined a comprehensive framework for the market integration in ASEAN towards the realisation of the ASEAN Economic Community (AEC) when it entered-into-force on 17 May 2010. The Agreement directs ASEAN members to develop and implement Mutual Recognition Arrangements and harmonised regulatory regimes in regulated areas where applicable”. Specifically, Members are directed, noting Article 84 of the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS), to establish measures to facilitate trade through the development of equivalence arrangements and mutual regional recognition of sanitary and phytosanitary measures.

Currently, the task force on ASEAN Food Safety Regulatory Framework is leading the development of the ASEAN Food Safety Regulatory Framework Agreement, which would provide an integrated approach in implementing a coherent food safety control system based on the principles outlined in the ASEAN Food Safety Policy including harmonization of food safety measures in the ASEAN.

It follows that member countries have consistently included harmonization in respective responses to the questionnaire particularly in regard to the adoption of the ASEAN Food Safety Policy.



With this in mind, a reasonable conclusion would suggest that the ASEAN member countries are fully aware of the need to harmonise regulatory measures and standard setting where practicable in the development of respective pesticide risk management frameworks., taking into consideration existing ASEAN initiatives. Therefore, the development of a residue monitoring programme guide could occur with reasonable assurance that the other components of a risk management framework are not overlooked.

Produce sampling and accredited analytical capability are critical to the integrity of any residue monitoring programme. Most member countries have indicated that international standards and guidelines such as Codex General Guidelines on Sampling (CAC/GL 50-2004) and the International Laboratory Accreditation Cooperation mutual recognition are considered. This further supports the view that Member countries have and are prepared to establish a strong foundation for harmonization of respective national residue monitoring programmes.



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The final word: development of a national residue monitoring programme

The responses to this comprehensive questionnaire highlight the significant differences in capacity, capability and approaches to national residue monitoring programmes with the ASEAN group. One key prerequisite to undertake residue monitoring programmes in all ASEAN countries is having established systems to allow the competent authorities in food safety/public health to respond immediately when needed. While having clear roles and responsibilities, and a sound pesticide risk management framework, ASEAN countries should also have the necessary resources available to be used at any time.

The responsiveness of a pesticide risk management framework and associated national residue monitoring programmes to international trade and market access requirements should be viewed as sound government investment to enhance its status as an exporter of quality agricultural products. To this extent, the guide to developing pesticide residue monitoring programmes should be used as a reference document for relevant government authorities. Achieving minimum requirements for pesticide residue monitoring should be seen as a preventive measure to mitigate the risks of import rejections.

One ASEAN member appeared to demonstrate a strong management framework which focuses on the elements necessary to conduct an imported food programme that seeks to protect public health within the country. Conversely, about half the members indicate a basic capacity for the development of a monitoring programme coupled with the absence of other critical elements of a pesticide risk management framework.

In response to questions regarding desirable activities, the main obstacles and the immediate priorities, ASEAN countries indicated the diverse nature of current situations and challenges facing each country. This has been the consistent style of response with all ASEAN countries believing there is much to be done to achieve a comprehensive pesticide risk management framework and from this science-based national residue monitoring programmes.



ASEAN countries in making their respective responses consistently referenced the ASEAN Food Safety Policy and its principles. Key words in the responses were harmonization, mutual recognition, expertise, resources, funding, analytical capability, coordination and traceability. ASEAN countries indicated a sound understanding of international standards and guidelines regarding sampling, food classification, laboratory accreditation/proficiency and MRL setting.

The national residue monitoring programme guide needs to be developed with all ASEAN members in mind from those with basic capacity through to those with existing monitoring programmes in place. In addition, the guide needs to acknowledge not only the diversity of capacities and capabilities but also the future requirements indicated in the responses to the questionnaire.

Accordingly, the guide should be developed to promote harmonization, information sharing and support existing ASEAN group initiatives. The guide should be presented as a comprehensive tool encompassing all components of a national residue monitoring programme allowing each ASEAN country to draw on the information source to the extent necessary to facilitate the establishment or improvement to its respective programmes. Finally the guide will outline the minimum requirements to develop and implement a science-based programme.



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ANNEX A

Questionnaire: Government oversight

1. Does your country have existing national residue monitoring programme(s)?
2. What principles of the ASEAN Food Safety Policy are considered in the development of your monitoring programme? Are other risk assessment paradigms considered?
3. Please list all the residue monitoring programme(s) your country has, and categorize with any of the following key words: [MRL compliance, food safety, quality assurance, export, domestic, import, random, targeted, consignment testing]
4. For each programme listed above, please provide its rationale using the following key words: [trade/market access, public health, consumer concerns, political direction, farmer compliance]?
5. Which category do you self-evaluate your country's pesticide residue monitoring capacities? Please be true to the situations of your country. Also please note, the assistance will likely be provided based on your self-evaluation. For example, if you choose the first one (basic), the technical assistance will be prioritized for your country. If you choose the last one (advanced), FAO will understand your country may not need a substantial technical assistance.
 - a. Basic capacity (none to fair capacity, this can be described as a development stage, commencement, limited monitoring or sporadic monitoring)
 - b. Intermediate capacity (at least some data has been produced and easily accessible, regular monitoring activity of at least one pesticide/commodity exists, but data is not enough to achieve desired results)
 - c. Advanced capacity (regular monitoring of key pesticides/commodities is taking place, capacity is already developed, capacity is sustainable)
6. Please explain the reasons for selecting this capacity level above?



7. The development of what elements of the pesticide residue management framework would help to increase your capacity level? Please use any of the following key phrases – pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education, and pesticide use review.
8. What agency is responsible for pesticide registration authority which registers pesticides for use domestically? If nobody, write “none”.
9. What agency is responsible for setting maximum residue limits (MRLs)? If nobody, write “none”.
10. What agency is responsible for public health and/or food safety? If nobody, write “none”.
11. What agency is responsible for pesticide control of use (regulates how the farmers uses the pesticide)? If nobody, write “none”.
12. What agency is responsible for management of pesticide residue monitoring? If nobody, write “none”.
13. In regard to MRLs, does your country: *set its own MRLs, adopt Codex MRLs and/or adopt/refer to other, e.g. ASEAN, EU or USA MRLs?
14. Who is responsible for the development of your Residue Monitoring Programme Plans? For each of the programs listed in your response to the section 3 question, who is responsible for each Programme?
15. How is the monitoring programme’s chemical screen established? List the criteria used to determine inclusion of pesticides to your programme screen?
16. Is your country using the Codex General Guidelines on Sampling (CAC/GL 50-2004) for sample collection?
17. Does your country have analytical laboratory capacity and capability for pesticide residue analyses?
18. In regard your pesticide residue management framework, please describe the interaction/coordination/cooperation between ASEAN region, government, farmers, farmer groups and exporters/traders in the following circumstances:
Scenarios: develop monitoring plans, verification of good agricultural practice, pesticide use – training/education, compliance/traceback investigation, pesticide review, domestic and export trade requirement
19. Which agencies are responsible for pesticide residue incident management and how are the incidents managed?



20. What is the focus of the pesticide residue incidents? Public health, MRL compliance, quality assurance, market access
21. Are traceback investigations undertaken to determine the cause of the MRL exceedance?
22. Who is responsible for traceback investigations?
23. Do you have any projects with any international/regional development partners on pesticide residue issues? Please explain, it will be helpful in finding synergies.
24. What residue-related activities would your country like to undertake but are currently unable to do so?
25. Apart from the limited financial and human resources, what are the main barriers to developing/improving pesticide residue monitoring programmes in your country?
26. What is the biggest priority action do you think your country needs to do immediately, on the issue of pesticide residues?
27. Are the following currently available in your country?
 - a. Information on what chemicals are being used on what commodities
 - b. Information on the commodities of most residue concern
 - c. Documented results of the national level risk assessment on certain pesticides
 - d. Pesticide residue analytical capacity and capability
 - e. Training resources to manage pesticide residue monitoring
28. Please provide the website URLs, if available, for each of your monitoring programmes?
29. Please provide the links to any fact sheets, if available, for each of your monitoring programmes



ANNEX B

Respondents to the questionnaire

Brunei Darussalam	Faaid Kasim Lisea Addly Azim Zainudin Hj Shukri Khadijah Latip Helwa Mazlan
Cambodia	Dim Teng Chuon Mony Roth
Indonesia	Sulistiyorini Sulistiyorini
Lao People's Democratic Republic	Viengxay Vansilalom Phoxay Sisomvang Alouny Chanthavong Houngtheva Douangsavanh
Malaysia	Nurhayati Kamyon Vajidah Sunoto
Myanmar	Khin Moe Kyaw Aung Thu Win
Philippines	Vivencio R. Mamaril Bella Fe Carmona Angelo Bugarin
Singapore	Wong Zhi Ning
Thailand	Jarunee Intrasook Panadda Tungsawas
Viet Nam	Ngo Thi Phuong Dung



ANNEX C

Answers of the questionnaire

BRUNEI DARUSSALAM	
QUESTION	RESPONSE
Does your country have existing national residue monitoring programme(s)?	No
What principles of the ASEAN Food Safety Policy are considered in the development of your Monitoring Programme? Are other risk assessment paradigms considered?	
Please list ALL the residue monitoring programme(s) your country has, and categorize with any of the following key words: [MRL compliance, food safety, quality assurance, export, domestic, import, random, targeted, consignment testing]	
For each programme listed above, please provide its rationale using the following key words: [trade/market access, public health, consumer concerns, political direction, farmer compliance]?	
Which category do you self-evaluate your country's pesticide residue monitoring capacities?	Basic capacity (none to fair capacity, this can be described as at development stage, commencement, limited monitoring or sporadic monitoring)
Please explain the reasons for selecting this capacity level above?	We do not have the national residue monitoring programme.



QUESTION	RESPONSE
What elements of the pesticide residue management framework would help to increase your capacity level? [Example elements: pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education, pesticide use review.]	pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education, pesticide use review
Does your country have a government agency responsible for: [pesticide registration authority which registers pesticides for use domestically?]	No
Does your country have a government agency responsible for: [setting maximum residue limits (MRLs)?]	No
Does your country have a government agency responsible for: [public health and/or food safety?]	Yes
Does your country have a government agency responsible for: [pesticide control of use (regulates how the farmers uses the pesticide)]	No
Does your country have a government agency responsible for: [management of pesticide residue monitoring]	No
What agency is responsible for pesticide registration authority which registers pesticides for use domestically? If nobody, write "none".	None
What agency is responsible for setting maximum residue limits (MRLs)? If nobody, write "none".	None
What agency is responsible for public health and/or food safety? If nobody, write "none".	Food Safety and Quality Division, Ministry of Health, along with the Department of Agriculture and Agrifood, Ministry of Primary Resources and Tourism



QUESTION	RESPONSE
What agency is responsible for pesticide control of use (regulates how the farmers uses the pesticide)? If nobody, write "none".	None
What agency is responsible for management of pesticide residue monitoring? If nobody, write "none".	None
In regard to MRLs, does your country: [set its own MRLs]	No
In regard to MRLs, does your country: [adopt Codex MRLs]	Yes
In regard to MRLs, does your country: [adopt/refer to other, e.g. ASEAN, EU or USA MRLs?]	Yes
Who (what agency) is responsible for the development of the pesticide residue monitoring programme/plans?	Department of Agriculture and Agrifood
How is the monitoring programme's chemical screen established? List the criteria used to determine inclusion of pesticides to your programme screen?	None
Is your country using the Codex General Guidelines on Sampling (CAC/GL 50-2004) for sample collection?	No
Does your country have analytical laboratory capacity and capability for pesticide residue analyses?	Yes, with sufficient capacity and the labs are accredited by a body that is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Development of monitoring plans]	Government



QUESTION	RESPONSE
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Verification of good agricultural practice]	Government, Farmer, farmer groups
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide use training/education]	Government, Farmer, farmer groups
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Compliance and traceback investigation]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide review]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Domestic and export trade requirement]	Government, Farmer
Which agencies are responsible for pesticide residue incident management and how are the incidents managed?	Food Safety and Quality Division, MoH and Department of Agriculture and Agrifood, MPRT
What is the focus of the pesticide residue incidents?	Public health, MRL compliance, Quality assurance, Market access (e.g., trade)
Are traceback investigations undertaken to determine the cause of the MRL exceedance?	In the case of imported goods found to exceed MRL, the department notifies the exporting country of the finding but not launch investigations.



QUESTION	RESPONSE
Who is responsible for traceback investigations?	Currently, none.
Do you have any projects with any international/regional development partners on pesticide residue issues? Please explain, it will be helpful in finding synergies.	None
What residue-related activities would your country like to undertake but are currently unable to do so?	pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, pesticide use review
Apart from the limited financial and human resources, what are the main barriers to developing/improving pesticide residue monitoring programmes in your country?	<ol style="list-style-type: none"> 1. Lack of pesticide-residue related expertise 2. No dedicated unit/division to handle residue-related cases in the country
What is the biggest priority action do you think your country needs to do immediately, on the issue of pesticide residues?	<ol style="list-style-type: none"> 1. A dedicated and committed group of experts to form a unit/division to handle the issues of pesticide residues in the country
Are the following currently available in your country? [Information on what chemicals are being used on what commodities]	No
Are the following currently available in your country? [Information on the commodities of most residue concern]	No
Are the following currently available in your country? [Documented results of the national level risk assessment on certain pesticides]	No
Are the following currently available in your country? [Pesticide residue analytical capacity and capability]	Yes, available



QUESTION	RESPONSE
Are the following currently available in your country? [Training resources to manage pesticide residue monitoring]	No
Please provide the website URLs, if available, for each of your monitoring programmes?	None
Please provide the links to any fact sheets, if available, for each of your monitoring programmes.	None



CAMBODIA

QUESTION	RESPONSE
Does your country have existing national residue monitoring programme(s)?	No
What principles of the ASEAN Food Safety Policy are considered in the development of your Monitoring Programme? Are other risk assessment paradigms considered?	
Please list ALL the residue monitoring programme(s) your country has, and categorize with any of the following key words: [MRL compliance, food safety, quality assurance, export, domestic, import, random, targeted, consignment testing]	
For each programme listed above, please provide its rationale using the following key words: [trade/market access, public health, consumer concerns, political direction, farmer compliance]?	
Which category do you self-evaluate your country's pesticide residue monitoring capacities?	Basic capacity (none to fair capacity, this can be described as a development stage, commencement, limited monitoring or sporadic monitoring)
Please explain the reasons for selecting this capacity level above?	We still lack of technical capacity to identify the types/names of pesticides. Operating skill and instrument are limited to be conducting analysis.
What elements of the pesticide residue management framework would help to increase your capacity level? [Example elements: pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education, pesticide use review.]	pesticide control-of-use with farmers, residue monitoring programs, food traceability, farmer education, pesticide use review



QUESTION	RESPONSE
Does your country have a government agency responsible for: [pesticide registration authority which registers pesticides for use domestically?]	Yes
Does your country have a government agency responsible for: [setting maximum residue limits (MRLs)?]	Yes/No
Does your country have a government agency responsible for: [public health and/or food safety?]	Yes/No
Does your country have a government agency responsible for: [pesticide control of use (regulates how the farmers uses the pesticide)]	Yes/No
Does your country have a government agency responsible for: [management of pesticide residue monitoring]	Yes/No
What agency is responsible for pesticide registration authority which registers pesticides for use domestically? If nobody, write "none".	Ministry of Agriculture Forestry and Fisheries (MAFF)
What agency is responsible for setting maximum residue limits (MRLs)? If nobody, write "none".	"none", MAFF adopts from codex and ASEAN
What agency is responsible for public health and/or food safety? If nobody, write "none".	MOH for Public Health, MAFF, MOC, MISTI
What agency is responsible for pesticide control of use (regulates how the farmers uses the pesticide)? If nobody, write "none".	Department of Agriculture
What agency is responsible for management of pesticide residue monitoring? If nobody, write "none".	Department of Agriculture
In regard to MRLs, does your country: [set its own MRLs]	No



QUESTION	RESPONSE
In regard to MRLs, does your country: [adopt Codex MRLs]	Yes
In regard to MRLs, does your country: [adopt/refer to other, e.g. ASEAN, EU or USA MRLs?]	Yes
Who (what agency) is responsible for the development of the pesticide residue monitoring programme/plans?	MAFF
How is the monitoring programme's chemical screen established? List the criteria used to determine inclusion of pesticides to your programme screen?	none
Is your country using the Codex General Guidelines on Sampling (CAC/GL 50-2004) for sample collection?	Yes/No
Does your country have analytical laboratory capacity and capability for pesticide residue analyses?	Yes, but with minimum capacity, and labs are not accredited.
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Development of monitoring plans]	Government, ASEAN region, Farmer, farmer groups
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Verification of good agricultural practice]	Government, Farmer, farmer groups
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide use training/education]	Government, Farmer, farmer groups, ASEAN region



QUESTION	RESPONSE
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Compliance and traceback investigation]	Government, Farmer, farmer groups
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide review]	Government, exporters/traders, Farmer, farmer groups
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Domestic and export trade requirement]	Government, Farmer, farmer groups, exporters/traders
Which agencies are responsible for pesticide residue incident management and how are the incidents managed?	MAFF, MOH
What is the focus of the pesticide residue incidents?	Public health, Quality assurance, Market access
Are traceback investigations undertaken to determine the cause of the MRL exceedance?	Yes/No
Who is responsible for traceback investigations?	MAFF
Do you have any projects with any international/regional development partners on pesticide residue issues? Please explain, it will be helpful in finding synergies.	We are joining the project on ASEAN STDF, MRLs.
What residue-related activities would your country like to undertake but are currently unable to do so?	Monitoring residues program in fresh vegetable and fresh fruits. Monitoring pesticides such as: Tricyclazole, Dimethoate, Diazonone, Acephate, Chlorpyrifos, Cypermethrin



QUESTION	RESPONSE
Apart from the limited financial and human resources, what are the main barriers to developing/improving pesticide residue monitoring programmes in your country?	Coordination issues and determination of roles, limited financial and limited instrument
What is the biggest priority action do you think your country needs to do immediately, on the issue of pesticide residues?	To develop and implement national programs, to upgrade instrument GC-MS.MS and reagent
Are the following currently available in your country? [Information on what chemicals are being used on what commodities]	Not sure
Are the following currently available in your country? [Information on the commodities of most residue concern]	Yes, available
Are the following currently available in your country? [Documented results of the national level risk assessment on certain pesticides]	No
Are the following currently available in your country? [Pesticide residue analytical capacity and capability]	Yes, available
Are the following currently available in your country? [Training resources to manage pesticide residue monitoring]	Yes, available
Please provide the website URLs, if available, for each of your monitoring programmes?	none
Please provide the links to any fact sheets, if available, for each of your monitoring programmes.	none



INDONESIA

QUESTION	RESPONSE
Does your country have existing national residue monitoring programme(s)?	Yes
What principles of the ASEAN Food Safety Policy are considered in the development of your Monitoring Programme? Are other risk assessment paradigms considered?	Systematic Risk Analysis Framework (2), Science based (3).
Please list ALL the residue monitoring programme(s) your country has, and categorize with any of the following key words: [MRL compliance, food safety, quality assurance, export, domestic, import, random, targeted, consignment testing]	MRL compliance, export, import, targeted
For each programme listed above, please provide its rationale using the following key words: [trade/market access, public health, consumer concerns, political direction, farmer compliance]?	public health, trade/market access
Which category do you self-evaluate your country's pesticide residue monitoring capacities?	Intermediate capacity (at least some data has been produced and easily accessible, regular monitoring activity of at least one pesticide/commodity exists, but data is not enough to achieve desired results)
Please explain the reasons for selecting this capacity level above?	Pesticide Residue Monitoring has been conducted as part of post market-food safety control, but some areas need to be increased, such as: mechanism for determine the target (prioritization with limited resources: human and budget), method in monitoring data processing, method for measuring control/monitoring effectiveness.



QUESTION	RESPONSE
<p>What elements of the pesticide residue management framework would help to increase your capacity level? [Example elements: pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education, pesticide use review.]</p>	<p>Residue monitoring programs (mechanism for determine target with limited resources, data processing, method for measuring program effectiveness), food traceability, traceback investigation, pesticide use review.</p>
<p>Does your country have a government agency responsible for: [pesticide registration authority which registers pesticides for use domestically?]</p>	<p>Yes</p>
<p>Does your country have a government agency responsible for: [setting maximum residue limits (MRLs)?]</p>	<p>No</p>
<p>Does your country have a government agency responsible for: [public health and/or food safety?]</p>	<p>Yes</p>
<p>Does your country have a government agency responsible for: [pesticide control of use (regulates how the farmers uses the pesticide)]</p>	<p>Yes</p>
<p>Does your country have a government agency responsible for: [management of pesticide residue monitoring]</p>	<p>Yes</p>
<p>What agency is responsible for pesticide registration authority which registers pesticides for use domestically? If nobody, write “none”.</p>	<p>Directorate General of Agricultural Infrastructure and Facilities (unit under Ministry of Agriculture)</p>
<p>What agency is responsible for setting maximum residue limits (MRLs)? If nobody, write “none”.</p>	<p>none</p>



QUESTION	RESPONSE
What agency is responsible for public health and/or food safety? If nobody, write "none".	It's a multi sectoral ministries/ institution: National Drug and Food Control (for process Food), Ministry of Agriculture (fresh food of plant and animal origin), Ministry of Marine Affair and Fishery (fresh food of fishery), Ministry of Health (ready to eat food), Ministry of Industry.
What agency is responsible for pesticide control of use (regulates how the farmers uses the pesticide)? If nobody, write "none".	Technical Directorate General under Ministry of Agriculture, such as: DG of Food Crops, DG of Horticulture, and DG of Estate Crop.
What agency is responsible for management of pesticide residue monitoring? If nobody, write "none".	The Agency for Food Security (under Ministry of Agriculture) conduct post market control for FFPO including for pesticide residue monitoring. The technical DG conduct monitoring for pesticide residue monitoring for harvested FFPO (on farm).
In regard to MRLs, does your country: [set its own MRLs]	No
In regard to MRLs, does your country: [adopt Codex MRLs]	Yes
In regard to MRLs, does your country: [adopt/refer to other, e.g. ASEAN, EU or USA MRLs?]	No
Who (what agency) is responsible for the development of the pesticide residue monitoring programme/plans?	The Agency for Food Security develop post market control for fresh food of plant origin (FFPO) including for pesticide residue monitoring in FFPO for distributed FFPO. Technical DG also monitor pesticide residue in harvested fresh food.



QUESTION	RESPONSE
How is the monitoring programme's chemical screen established? List the criteria used to determine inclusion of pesticides to your programme screen?	We follow Codex standard. This standard is kited in Ministry of Agriculture Regulation.
Is your country using the Codex General Guidelines on Sampling (CAC/GL 50-2004) for sample collection?	Indonesia National Standard (SNI)
Does your country have analytical laboratory capacity and capability for pesticide residue analyses?	We use accredited private laboratory.
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Development of monitoring plans]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Verification of good agricultural practice]	Farmer, farmer groups, exporters/traders
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide use training/education]	Government, other
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Compliance and traceback investigation]	Government, exporters/traders
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide review]	Government, other



QUESTION	RESPONSE
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Domestic and export trade requirement]	Government, exporters/traders
Which agencies are responsible for pesticide residue incident management and how are the incidents managed?	<ol style="list-style-type: none"> 1. Most of the incident of pesticide is related to misuse of pesticide. This incident cause toxication. Such kind of incident is handled by Ministry of Health. 2. The Agency for Food Security conducts post market control including for pesticide residue monitoring. If there is pesticide residue above permitted standard, we informed the related technical DG as they are responsible for on farm activities (including pesticide use), and also the business actor/importer who distribute the FFPO.
What is the focus of the pesticide residue incidents?	Public health, MRL compliance, Market access (e.g., trade)
Are traceback investigations undertaken to determine the cause of the MRL exceedance?	In some level
Who is responsible for traceback investigations?	It involves some units.
Do you have any projects with any international/regional development partners on pesticide residue issues? Please explain, it will be helpful in finding synergies.	We still working on risk based FFPO categorization for prioritizing the target.
What residue-related activities would your country like to undertake but are currently unable to do so?	Develop effective and sustainable programme; measuring program effectiveness; building traceability.



QUESTION	RESPONSE
Apart from the limited financial and human resources, what are the main barriers to developing/improving pesticide residue monitoring programmes in your country?	Limited human resource for FFPO related to institution structure/ organization. So, the awareness of leader for food safety as crucial matter (between other main issues) is an important issue. We also need increase in capacity and coordination between many units that are involved.
What is the biggest priority action do you think your country needs to do immediately, on the issue of pesticide residues?	Increase awareness from producer to consumer.
Are the following currently available in your country? [Information on what chemicals are being used on what commodities]	Not sure
Are the following currently available in your country? [Information on the commodities of most residue concern]	Not sure
Are the following currently available in your country? [Documented results of the national level risk assessment on certain pesticides]	Yes, available
Are the following currently available in your country? [Pesticide residue analytical capacity and capability]	Not sure
Are the following currently available in your country? [Training resources to manage pesticide residue monitoring]	Not sure
Please provide the website URLs, if available, for each of your monitoring programmes?	none
Please provide the links to any fact sheets, if available, for each of your monitoring programmes.	none



LAO PEOPLE'S DEMOCRATIC REPUBLIC

QUESTION	RESPONSE
Does your country have existing national residue monitoring programme(s)?	Yes
What principles of the ASEAN Food Safety Policy are considered in the development of your Monitoring Programme? Are other risk assessment paradigms considered?	There are 4 principles of the ASEAN Food Safety Policy which Laos consider in pesticide residue monitoring.
Please list ALL the residue monitoring programme(s) your country has, and categorize with any of the following key words: [MRL compliance, food safety, quality assurance, export, domestic, import, random, targeted, consignment testing]	Principle 3 (Science-based, Independent Risk Assessment Process), principle 4 (Harmonization with International Standards), principle 8 (Reliable Traceability System), and principle 9 (Strengthening and Harmonization of Regional and National Food Control Systems)
For each programme listed above, please provide its rationale using the following key words: [trade/market access, public health, consumer concerns, political direction, farmer compliance]?	Trade, market access (export markets), and consumer concerns.
Which category do you self-evaluate your country's pesticide residue monitoring capacities?	Basic capacity (none to fair capacity, this can be described as at development stage, commencement, limited monitoring or sporadic monitoring)
Please explain the reasons for selecting this capacity level above?	Laos PDR just established testing capacity in MOH laboratory while MoH still underlines the development.
What elements of the pesticide residue management framework would help to increase your capacity level? [Example elements: pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education, pesticide use review.]	Pesticide control of use with farmers, residue monitoring programs, food traceability, and farmer education.



LAO PEOPLE'S DEMOCRATIC REPUBLIC

CONTINUED

QUESTION	RESPONSE
Does your country have a government agency responsible for: [pesticide registration authority which registers pesticides for use domestically?]	Yes
Does your country have a government agency responsible for: [setting maximum residue limits (MRLs)?]	Yes
Does your country have a government agency responsible for: [public health and/or food safety?]	Yes
Does your country have a government agency responsible for: [pesticide control of use (regulates how the farmers uses the pesticide)]	No
Does your country have a government agency responsible for: [management of pesticide residue monitoring]	Yes
What agency is responsible for pesticide registration authority which registers pesticides for use domestically? If nobody, write "none".	Department of Agriculture (DoA), Ministry of Agriculture and Forestry(MoAF)
What agency is responsible for setting maximum residue limits (MRLs)? If nobody, write "none".	Food and Drug Department (FDD) MOH and DoA, MoAF
What agency is responsible for public health and/or food safety? If nobody, write "none".	Food and Drug Department (FDD) MOH
What agency is responsible for pesticide control of use (regulates how the farmers uses the pesticide)? If nobody, write "none".	DoA, MoAF
What agency is responsible for management of pesticide residue monitoring? If nobody, write "none".	Food and Drug Department (FDD) MOH and DoA, MoAF
In regard to MRLs, does your country: [set its own MRLs]	No



QUESTION	RESPONSE
In regard to MRLs, does your country: [adopt Codex MRLs]	Yes
In regard to MRLs, does your country: [adopt/refer to other, e.g. ASEAN, EU or USA MRLs?]	Yes
Who (what agency) is responsible for the development of the pesticide residue monitoring programme/plans?	Food and Drug Department (FDD) MOH and DoA, MoAF
How is the monitoring programme's chemical screen established? List the criteria used to determine inclusion of pesticides to your programme screen?	banned pesticides and export market's pesticides
Is your country using the Codex General Guidelines on Sampling (CAC/GL 50-2004) for sample collection?	Yes
Does your country have analytical laboratory capacity and capability for pesticide residue analyses?	Yes, with intermediate capacity, and labs are not accredited.
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Development of monitoring plans]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Verification of good agricultural practice]	Government, farmer groups, ASEAN region
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide use training/education]	Government, farmer groups



QUESTION	RESPONSE
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Compliance and traceback investigation]	Government, exporters/traders
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide review]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Domestic and export trade requirement]	Government, exporters/traders
Which agencies are responsible for pesticide residue incident management and how are the incidents managed?	Food and Drug Department (FDD) MOH and DoA, MoAF
What is the focus of the pesticide residue incidents?	Public health, MRL compliance, Market access (e.g., trade)
Are traceback investigations undertaken to determine the cause of the MRL exceedance?	Yes
Who is responsible for traceback investigations?	Food and Drug Department (FDD) MOH (Poisoning cases) and DoA, MoAF (Rejection cases)
Do you have any projects with any international/regional development partners on pesticide residue issues? Please explain, it will be helpful in finding synergies.	FAO, EU, IAEA but very limited funding for residue monitoring.
What residue-related activities would your country like to undertake but are currently unable to do so?	Imported Fruit and Vegetable and exported crops.



QUESTION	RESPONSE
Apart from the limited financial and human resources, what are the main barriers to developing/improving pesticide residue monitoring programmes in your country?	Laboratory testing capacity (equipment and chemical)
What is the biggest priority action do you think your country needs to do immediately, on the issue of pesticide residues?	Provide field testing tools, laboratory equipment, farmer education for using pesticide, and import monitoring plan.
Are the following currently available in your country? [Information on what chemicals are being used on what commodities]	Not sure
Are the following currently available in your country? [Information on the commodities of most residue concern]	Not sure
Are the following currently available in your country? [Documented results of the national level risk assessment on certain pesticides]	Yes, available
Are the following currently available in your country? [Pesticide residue analytical capacity and capability]	Yes, available
Are the following currently available in your country? [Training resources to manage pesticide residue monitoring]	Yes, available
Please provide the website URLs, if available, for each of your monitoring programmes?	none
Please provide the links to any fact sheets, if available, for each of your monitoring programmes.	Not yet published



MALAYSIA

QUESTION	RESPONSE
Does your country have existing national residue monitoring programme(s)?	Yes
What principles of the ASEAN Food Safety Policy are considered in the development of your Monitoring Programme? Are other risk assessment paradigms considered?	Safety to consume by people also the usage of banned pesticide in the food
Please list ALL the residue monitoring programme(s) your country has, and categorize with any of the following key words: [MRL compliance, food safety, quality assurance, export, domestic, import, random, targeted, consignment testing]	Domestic selling or market (MRL Compliance), Import monitoring (import), GAP certification compliance (MRL compliance). Food Act 1983 and Food Regulations 1985; Pesticide Act 1974;
For each programme listed above, please provide its rationale using the following key words: [trade/market access, public health, consumer concerns, political direction, farmer compliance]?	Consumer concerns, market access, farmer compliance. Food Act 1983 and Food Regulations 1985 (public health, consumer concern); Pesticide Act 1974 (trade/market access, public health, consumer concerns); Importing country's requirements (trade/market access); GAP Certification programme (trade/market access, public health, consumer concerns, political direction, farmer compliance)
Which category do you self-evaluate your country's pesticide residue monitoring capacities?	Intermediate capacity (at least some data has been produced and easily accessible, regular monitoring activity of at least one pesticide/commodity exists, but data is not enough to achieve desired results)
Please explain the reasons for selecting this capacity level above?	The capacity of all laboratory is not same.



QUESTION	RESPONSE
For example, there are 4 laboratories under Department of Agriculture to monitor the MRL in farm level, and only one laboratory manage to analyze 105 pesticide active ingredients while another 3 laboratories only managed to analyze 32 active ingredients.	
Some data can be access, monitoring through GAP can be done, but still not enough to achieve desired results.	
What elements of the pesticide residue management framework would help to increase your capacity level? [Example elements: pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education, pesticide use review.]	Pesticide control-of-use with farmers is very important in order to educate the farmer adhere the post-harvest interval and to avoid cocktail pesticide. Also the pesticide registrant knowledge about the product that what market needed the most rather than just registered the same product with different trade name. Farmer education is very important. An educated farmer can solve the rest of issues.
Does your country have a government agency responsible for: [pesticide registration authority which registers pesticides for use domestically?]	Yes
Does your country have a government agency responsible for: [setting maximum residue limits (MRLs)?]	Yes
Does your country have a government agency responsible for: [public health and/or food safety?]	Yes
Does your country have a government agency responsible for: [pesticide control of use (regulates how the farmers uses the pesticide)]	Yes
Does your country have a government agency responsible for: [management of pesticide residue monitoring]	Yes



QUESTION	RESPONSE
What agency is responsible for pesticide registration authority which registers pesticides for use domestically? If nobody, write "none".	Department of Agriculture, Ministry of Agriculture and Food Industry
What agency is responsible for setting maximum residue limits (MRLs)? If nobody, write "none".	Department of Agriculture as the custodian to compile all the residue data. Ministry of Health
What agency is responsible for public health and/or food safety? If nobody, write "none".	Ministry of Health
What agency is responsible for pesticide control of use (regulates how the farmers uses the pesticide)? If nobody, write "none".	Department of Agriculture (Pesticide board)
What agency is responsible for management of pesticide residue monitoring? If nobody, write "none".	Ministry of Health, DOA
In regard to MRLs, does your country: [set its own MRLs]	Yes
In regard to MRLs, does your country: [adopt Codex MRLs]	Yes
In regard to MRLs, does your country: [adopt/refer to other, e.g. ASEAN, EU or USA MRLs?]	Yes
Who (what agency) is responsible for the development of the pesticide residue monitoring programme/plans?	Ministry of Health, DOA
How is the monitoring programme's chemical screen established? List the criteria used to determine inclusion of pesticides to your programme screen?	Use 5 years back data to compare with recent trend usage of pesticide.
Is your country using the Codex General Guidelines on Sampling (CAC/GL 50-2004) for sample collection?	Yes



QUESTION	RESPONSE
Does your country have analytical laboratory capacity and capability for pesticide residue analyses?	Yes, with sufficient capacity and the labs are accredited by a body that is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement.
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Development of monitoring plans]	Government, Farmer, farmer groups, exporters/traders, ASEAN region
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Verification of good agricultural practice]	Government, ASEAN region, Farmer, farmer groups
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide use training/education]	Government, Farmer, farmer groups
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Compliance and traceback investigation]	Government, exporters/traders
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide review]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Domestic and export trade requirement]	Government, exporters/traders



QUESTION	RESPONSE
Which agencies are responsible for pesticide residue incident management and how are the incidents managed?	Ministry of Health
What is the focus of the pesticide residue incidents?	Public health, MRL compliance, Market access (e.g., trade)
Are traceback investigations undertaken to determine the cause of the MRL exceedance?	Yes
Who is responsible for traceback investigations?	Ministry of Health, Department of Agriculture
Do you have any projects with any international/regional development partners on pesticide residue issues? Please explain, it will be helpful in finding synergies.	None
What residue-related activities would your country like to undertake but are currently unable to do so?	The residue determination for minor crops(herbs, tropical fruits) in Malaysia; Pesticide residue analytical capacity and capability
Apart from the limited financial and human resources, what are the main barriers to developing/improving pesticide residue monitoring programmes in your country?	The cooperation between agencies; High capacity of accredited laboratory
What is the biggest priority action do you think your country needs to do immediately, on the issue of pesticide residues?	In Malaysia, the punishment towards the usage of excessive pesticide in the farm still have gray area and the authority body that can take action. The issues of foreign worker who use the pesticide in the farm and did not follow the recommended rate at the label, sometimes makes the increasing no of pesticide residue violation. Awareness of food safety needs to be enhanced
Are the following currently available in your country? [Information on what chemicals are being used on what commodities]	Yes, available



QUESTION	RESPONSE
Are the following currently available in your country? [Information on the commodities of most residue concern]	Yes, available
Are the following currently available in your country? [Documented results of the national level risk assessment on certain pesticides]	Yes, available
Are the following currently available in your country? [Pesticide residue analytical capacity and capability]	Yes, available
Are the following currently available in your country? [Training resources to manage pesticide residue monitoring]	Not sure
Please provide the website URLs, if available, for each of your monitoring programmes?	http://fsq.moh.gov.my/v6/xs/page.php?id=72 http://www.doa.gov.my/index.php/pages/view/373
Please provide the links to any fact sheets, if available, for each of your monitoring programmes.	none



MYANMAR

QUESTION	RESPONSE
Does your country have existing national residue monitoring programme(s)?	No
What principles of the ASEAN Food Safety Policy are considered in the development of your Monitoring Programme? Are other risk assessment paradigms considered?	
Please list ALL the residue monitoring programme(s) your country has, and categorize with any of the following key words: [MRL compliance, food safety, quality assurance, export, domestic, import, random, targeted, consignment testing]	
For each programme listed above, please provide its rationale using the following key words: [trade/market access, public health, consumer concerns, political direction, farmer compliance]?	
Which category do you self-evaluate your country's pesticide residue monitoring capacities?	Basic capacity (none to fair capacity, this can be described as at development stage, commencement, limited monitoring or sporadic monitoring)
Please explain the reasons for selecting this capacity level above?	Myanmar monitor residue of pesticides from the samples of GAP implementation around the country. But testing capability is only 40 a.i compounds by GC-ECD and HPLC though 200 compounds are registered in Myanmar. But Myanmar is trying to increase testing capability with LC-MS/MS equipment very soon for procurement and delivery during second quarter of 2021.



QUESTION	RESPONSE
<p>What elements of the pesticide residue management framework would help to increase your capacity level? [Example elements: pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education, pesticide use review.]</p>	<p>Pesticide control-of-use with farmers, residue monitoring programs and pesticide registration.</p>
<p>Does your country have a government agency responsible for: [pesticide registration authority which registers pesticides for use domestically?]</p>	<p>Yes</p>
<p>Does your country have a government agency responsible for: [setting maximum residue limits (MRLs)?]</p>	<p>Yes</p>
<p>Does your country have a government agency responsible for: [public health and/or food safety?]</p>	<p>Yes</p>
<p>Does your country have a government agency responsible for: [pesticide control of use (regulates how the farmers uses the pesticide)]</p>	<p>Yes</p>
<p>Does your country have a government agency responsible for: [management of pesticide residue monitoring]</p>	<p>Yes</p>
<p>What agency is responsible for pesticide registration authority which registers pesticides for use domestically? If nobody, write “none”.</p>	<p>Plant protection Division (PPD), Department of Agriculture is taking responsible for pesticide registration.</p>
<p>What agency is responsible for setting maximum residue limits (MRLs)? If nobody, write “none”.</p>	<p>Plant protection Division (PPD), Department of Agriculture is taking responsible for pesticide registration.</p>



QUESTION	RESPONSE
What agency is responsible for public health and/or food safety? If nobody, write “none”.	Multiagency, intergovernmental approach. Food and drug Administration (FDA) is taking responsible for processing food and PPD is taking responsible for the agricultural primary products.
What agency is responsible for pesticide control of use (regulates how the farmers uses the pesticide)? If nobody, write “none”.	Plant protection Division (PPD), Department of Agriculture is taking responsible for pesticide control of use.
What agency is responsible for management of pesticide residue monitoring? If nobody, write “none”.	Plant protection Division (PPD), Department of Agriculture is taking responsible for management of pesticide residue monitoring.
In regard to MRLs, does your country: [set its own MRLs]	No
In regard to MRLs, does your country: [adopt Codex MRLs]	Yes
In regard to MRLs, does your country: [adopt/refer to other, e.g. ASEAN, EU or USA MRLs?]	Yes
Who (what agency) is responsible for the development of the pesticide residue monitoring programme/plans?	Plant Protection Division (PPD)
How is the monitoring programme’s chemical screen established? List the criteria used to determine inclusion of pesticides to your programme screen?	None
Is your country using the Codex General Guidelines on Sampling (CAC/GL 50-2004) for sample collection?	Yes
Does your country have analytical laboratory capacity and capability for pesticide residue analyses?	Yes, with intermediate capacity, and labs are not accredited.



QUESTION	RESPONSE
<p>Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Development of monitoring plans]</p>	<p>Government, Farmer, Farmer, farmer groups, exporters/traders, ASEAN region</p>
<p>Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Verification of good agricultural practice]</p>	<p>Government, Farmer, farmer groups, ASEAN region, other</p>
<p>Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide use training/education]</p>	<p>Government, Farmer, Farmer, farmer groups, exporters/traders, ASEAN region</p>
<p>Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Compliance and traceback investigation]</p>	<p>Government, Farmer, farmer groups, exporters/traders, ASEAN region</p>
<p>Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide review]</p>	<p>Government, Farmer, farmer groups, exporters/traders, ASEAN region</p>
<p>Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Domestic and export trade requirement]</p>	<p>Government, Farmer, farmer groups, exporters/traders, ASEAN region, other</p>
<p>Which agencies are responsible for pesticide residue incident management and how are the incidents managed?</p>	<p>Plant Protection Division (PPD), Department of Agriculture</p>
<p>What is the focus of the pesticide residue incidents?</p>	<p>Public health, MRL compliance, Quality assurance, Market access (e.g., trade)</p>



QUESTION	RESPONSE
Are traceback investigations undertaken to determine the cause of the MRL exceedance?	No
Who is responsible for traceback investigations?	Plant Protection Division and Agricultural Extension Division under Department of Agriculture.
Do you have any projects with any international/regional development partners on pesticide residue issues? Please explain, it will be helpful in finding synergies.	Myanmar did not have any projects yet for pesticide residue issues. JICA, a very small project will be initiated probably on next month for one about one or two years.
What residue-related activities would your country like to undertake but are currently unable to do so?	Target market MRL compliance, Monitoring of Pesticide Residue on Fruit and Vegetable
Apart from the limited financial and human resources, what are the main barriers to developing/improving pesticide residue monitoring programmes in your country?	Systematic sampling techniques and regular monitoring; human resources and financial are the main barriers improving pesticide residue monitoring programme.
What is the biggest priority action do you think your country needs to do immediately, on the issue of pesticide residues?	Target market MRL compliance; Monitoring of Pesticide Residue on Market Demanded Agricultural Products such as sesame, rice
Are the following currently available in your country? [Information on what chemicals are being used on what commodities]	Yes, available
Are the following currently available in your country? [Information on the commodities of most residue concern]	No
Are the following currently available in your country? [Documented results of the national level risk assessment on certain pesticides]	No



MYANMAR*CONTINUED*

QUESTION	RESPONSE
Are the following currently available in your country? [Pesticide residue analytical capacity and capability]	No
Are the following currently available in your country? [Training resources to manage pesticide residue monitoring]	No
Please provide the website URLs, if available, for each of your monitoring programmes?	“www.ppd.myanmar” for pesticide registration information
Please provide the links to any fact sheets, if available, for each of your monitoring programmes.	None



PHILIPPINES

QUESTION	RESPONSE
Does your country have existing national residue monitoring programme(s)?	Yes
What principles of the ASEAN Food Safety Policy are considered in the development of your Monitoring Programme? Are other risk assessment paradigms considered?	Principle of Integrated 'Food Chain' Approach of the ASEAN Food Safety Policy was currently being adopted based on the current activities of the FSRAs. Principle No. 7 – Harmonization with international standards Also, the Philippines implements the Food Safety Act of 2013 which has the objective of strengthening the food safety regulatory system in the country by (a) protecting the public from food-borne and water-borne illnesses and unsanitary, unwholesome, misbranded or adulterated foods; (b) enhancing industry and consumer confidence in the food regulatory system; and (c) achieving economic growth and development by promoting fair trade practices and sound regulatory foundation for domestic and international trade.
Please list ALL the residue monitoring programme(s) your country has, and categorize with any of the following key words: [MRL compliance, food safety, quality assurance, export, domestic, import, random, targeted, consignment testing]	MRL for domestic and imported agricultural products
For each programme listed above, please provide its rationale using the following key words: [trade/market access, public health, consumer concerns, political direction, farmer compliance]?	Maximum residue limits of pesticides are set to ensure food safety and quality among crops produced and imported in the Philippines. MRLs also provide a measurable trading standard that help ensure food produced using pesticides is suitable for human consumption.



QUESTION	RESPONSE
Which category do you self-evaluate your country's pesticide residue monitoring capacities?	Basic capacity (none to fair capacity, this can be described as at development stage, commencement, limited monitoring or sporadic monitoring)
Please explain the reasons for selecting this capacity level above?	The country's pesticide residue monitoring capacity is very limited as to this moment and that we are not aware on the frequency of pesticide residue monitoring being done by other partner agency.
What elements of the pesticide residue management framework would help to increase your capacity level? [Example elements: pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education, pesticide use review.]	Residue monitoring capacity and Risk assessment and Risk Profiling; pesticide control-of-use with farmers, food traceability, traceback investigation, farmer education, pesticide use review; Harmonization of national MRLs with Codex and international MRLs
Does your country have a government agency responsible for: [pesticide registration authority which registers pesticides for use domestically?]	Yes
Does your country have a government agency responsible for: [setting maximum residue limits (MRLs)?]	Yes
Does your country have a government agency responsible for: [public health and/or food safety?]	Yes
Does your country have a government agency responsible for: [pesticide control of use (regulates how the farmers use the pesticide)]	Yes



QUESTION	RESPONSE
Does your country have a government agency responsible for: [management of pesticide residue monitoring]	Yes
What agency is responsible for pesticide registration authority which registers pesticides for use domestically? If nobody, write "none".	Fertilizer and Pesticide Authority
What agency is responsible for setting maximum residue limits (MRLs)? If nobody, write "none".	Bureau of Agriculture and Fisheries Standards
What agency is responsible for public health and/or food safety? If nobody, write "none".	Department of Agriculture, Department of Health, and other Food Safety Regulatory Agencies mentioned in the IRR of the Food Safety Act of 2013
What agency is responsible for pesticide control of use (regulates how the farmers uses the pesticide)? If nobody, write "none".	Fertilizer and Pesticide Authority
What agency is responsible for management of pesticide residue monitoring? If nobody, write "none".	Fertilizer and Pesticide Authority and Bureau of Plant Industry
In regard to MRLs, does your country: [set its own MRLs]	Yes
In regard to MRLs, does your country: [adopt Codex MRLs]	Yes
In regard to MRLs, does your country: [adopt/refer to other, e.g. ASEAN, EU or USA MRLs?]	Yes
Who (what agency) is responsible for the development of the pesticide residue monitoring programme/plans?	Fertilizer and Pesticide Authority and Bureau of Plant Industry
How is the monitoring programme's chemical screen established? List the criteria used to determine inclusion of pesticides to your programme screen?	Pesticide Residue Analysis



QUESTION	RESPONSE
Is your country using the Codex General Guidelines on Sampling (CAC/GL 50-2004) for sample collection?	CACGL 33-1999 Recommended Methods of Sampling for the Determination of Pesticide Residues for Compliance with MRLs
Does your country have analytical laboratory capacity and capability for pesticide residue analyses?	Yes, with sufficient capacity and the labs are accredited by a body that is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Development of monitoring plans]	Government, other
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Verification of good agricultural practice]	Government, Farmer, other
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide use training/education]	Government, Farmer, farmer groups, other
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Compliance and traceback investigation]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide review]	Government, other



QUESTION	RESPONSE
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Domestic and export trade requirement]	Government, exporters/traders
Which agencies are responsible for pesticide residue incident management and how are the incidents managed?	Bureau of Plant Industry and Fertilizer and Pesticide Authority
What is the focus of the pesticide residue incidents?	Public health, MRL compliance, Market access (e.g., trade), Quality assurance, Market access (e.g., trade)
Are traceback investigations undertaken to determine the cause of the MRL exceedance?	Yes
Who is responsible for traceback investigations?	Bureau of Plant Industry, Fertilizer and Pesticide Authority
Do you have any projects with any international/regional development partners on pesticide residue issues? Please explain, it will be helpful in finding synergies.	None
What residue-related activities would your country like to undertake but are currently unable to do so?	Comprehensive Risk Assessment and Risk Profiling, Harmonized Detection of MRL on Import/Export, Dietary Risk Assessment of agricultural produce
Apart from the limited financial and human resources, what are the main barriers to developing/improving pesticide residue monitoring programmes in your country?	Improvement of communication and coordination among government institutions, academe, pesticide companies, and others; Harmonization of pesticide residue monitoring programs with Codex and trading partner countries



QUESTION	RESPONSE
What is the biggest priority action do you think your country needs to do immediately, on the issue of pesticide residues?	Review the National Pesticide Monitoring Program; Updating of a pesticide residue program with more defined scope and responsibilities and strict implementation; Capacity building of laboratory conducting pesticide residue analysis and monitoring programs
Are the following currently available in your country? [Information on what chemicals are being used on what commodities]	Yes, available
Are the following currently available in your country? [Information on the commodities of most residue concern]	Not sure
Are the following currently available in your country? [Documented results of the national level risk assessment on certain pesticides]	Not sure
Are the following currently available in your country? [Pesticide residue analytical capacity and capability]	Yes, available
Are the following currently available in your country? [Training resources to manage pesticide residue monitoring]	Not sure
Please provide the website URLs, if available, for each of your monitoring programmes?	http://bpi.da.gov.ph/bpi/index.php
Please provide the links to any fact sheets, if available, for each of your monitoring programmes.	http://bpi.da.gov.ph/bpi/index.php



SINGAPORE

QUESTION	RESPONSE
Does your country have existing national residue monitoring programme(s)?	Yes
What principles of the ASEAN Food Safety Policy are considered in the development of your Monitoring Programme? Are other risk assessment paradigms considered?	Food chain, Systematic risk analysis framework and science base.
Please list ALL the residue monitoring programme(s) your country has, and categorize with any of the following key words: [MRL compliance, food safety, quality assurance, export, domestic, import, random, targeted, consignment testing]	MRL compliance of imported food; MRL compliance at local farms; food safety monitoring at retail level
For each programme listed above, please provide its rationale using the following key words: [trade/market access, public health, consumer concerns, political direction, farmer compliance]?	Public health
Which category do you self-evaluate your country's pesticide residue monitoring capacities?	Intermediate capacity (at least some data has been produced and easily accessible, regular monitoring activity of at least one pesticide/commodity exists, but data is not enough to achieve desired results)
Please explain the reasons for selecting this capacity level above?	Monitoring is not comprehensive and may not cover all commodities due to random sampling.
What elements of the pesticide residue management framework would help to increase your capacity level? [Example elements: pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education, pesticide use review.]	Farmer education, pesticide control-of-use with farmers



SINGAPORE

CONTINUED

QUESTION	RESPONSE
Does your country have a government agency responsible for: [pesticide registration authority which registers pesticides for use domestically?]	Yes
Does your country have a government agency responsible for: [setting maximum residue limits (MRLs)?]	Yes
Does your country have a government agency responsible for: [public health and/or food safety?]	Yes
Does your country have a government agency responsible for: [pesticide control of use (regulates how the farmers uses the pesticide)]	Yes
Does your country have a government agency responsible for: [management of pesticide residue monitoring]	Yes
What agency is responsible for pesticide registration authority which registers pesticides for use domestically? If nobody, write "none".	Singapore food agency
What agency is responsible for setting maximum residue limits (MRLs)? If nobody, write "none".	Singapore food agency
What agency is responsible for public health and/or food safety? If nobody, write "none".	Singapore food agency
What agency is responsible for pesticide control of use (regulates how the farmers uses the pesticide)? If nobody, write "none".	Singapore food agency
What agency is responsible for management of pesticide residue monitoring? If nobody, write "none".	Singapore food agency
In regard to MRLs, does your country: [set its own MRLs]	Yes



SINGAPORE

CONTINUED

QUESTION	RESPONSE
In regard to MRLs, does your country: [adopt Codex MRLs]	Yes
In regard to MRLs, does your country: [adopt/refer to other, e.g. ASEAN, EU or USA MRLs?]	Yes
Who (what agency) is responsible for the development of the pesticide residue monitoring programme/plans?	Singapore food agency
How is the monitoring programme's chemical screen established? List the criteria used to determine inclusion of pesticides to your programme screen?	Science-based, evidence-based, horizon scanning
Is your country using the Codex General Guidelines on Sampling (CAC/GL 50-2004) for sample collection?	Not aware
Does your country have analytical laboratory capacity and capability for pesticide residue analyses?	Yes, with sustainable/advanced capacity and the labs are accredited by a body that is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement.
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Development of monitoring plans]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Verification of good agricultural practice]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide use training/education]	Farmer



QUESTION	RESPONSE
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Compliance and traceback investigation]	exporters/traders
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide review]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Domestic and export trade requirement]	exporters/traders
Which agencies are responsible for pesticide residue incident management and how are the incidents managed?	Singapore food agency
What is the focus of the pesticide residue incidents?	Public health, MRL compliance
Are traceback investigations undertaken to determine the cause of the MRL exceedance?	Not aware
Who is responsible for traceback investigations?	Singapore food agency
Do you have any projects with any international/regional development partners on pesticide residue issues? Please explain, it will be helpful in finding synergies.	Not aware
What residue-related activities would your country like to undertake but are currently unable to do so?	Not sure



QUESTION	RESPONSE
Apart from the limited financial and human resources, what are the main barriers to developing/improving pesticide residue monitoring programmes in your country?	None
What is the biggest priority action do you think your country needs to do immediately, on the issue of pesticide residues?	Balance between food supply and food safety
Are the following currently available in your country? [Information on what chemicals are being used on what commodities]	Not sure
Are the following currently available in your country? [Information on the commodities of most residue concern]	Not sure
Are the following currently available in your country? [Documented results of the national level risk assessment on certain pesticides]	No
Are the following currently available in your country? [Pesticide residue analytical capacity and capability]	Yes, available
Are the following currently available in your country? [Training resources to manage pesticide residue monitoring]	Not sure
Please provide the website URLs, if available, for each of your monitoring programmes?	None
Please provide the links to any fact sheets, if available, for each of your monitoring programmes.	None



THAILAND

QUESTION	RESPONSE
Does your country have existing national residue monitoring programme(s)?	Yes
What principles of the ASEAN Food Safety Policy are considered in the development of your Monitoring Programme? Are other risk assessment paradigms considered?	Principle 3: Science-based, Principle 7: Harmonization with International Standards, Principle 10: Transparency
Please list ALL the residue monitoring programme(s) your country has, and categorize with any of the following key words: [MRL compliance, food safety, quality assurance, export, domestic, import, random, targeted, consignment testing]	Import monitoring programme, and domestic monitoring programmes. Both are for MRL compliance and food safety purposes. The programmes cover random and targeted approach based on history of importers, last 5-year results, and current situation in domestic country and abroad.
For each programme listed above, please provide its rationale using the following key words: [trade/market access, public health, consumer concerns, political direction, farmer compliance]?	public health, consumer concerns
Which category do you self-evaluate your country's pesticide residue monitoring capacities?	Intermediate capacity (at least some data has been produced and easily accessible, regular monitoring activity of at least one pesticide/commodity exists, but data is not enough to achieve desired results)
Please explain the reasons for selecting this capacity level above?	Regular monitoring activity is implemented but limitation of comprehensive data and limitation of budget



QUESTION	RESPONSE
What elements of the pesticide residue management framework would help to increase your capacity level? [Example elements: pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education, pesticide use review.]	residue monitoring programs, food traceability, traceback investigation
Does your country have a government agency responsible for: [pesticide registration authority which registers pesticides for use domestically?]	Yes
Does your country have a government agency responsible for: [setting maximum residue limits (MRLs)?]	Yes
Does your country have a government agency responsible for: [public health and/or food safety?]	Yes
Does your country have a government agency responsible for: [pesticide control of use (regulates how the farmers uses the pesticide)]	Yes
Does your country have a government agency responsible for: [management of pesticide residue monitoring]	Yes
What agency is responsible for pesticide registration authority which registers pesticides for use domestically? If nobody, write "none".	Department of Agriculture, Ministry of Agriculture and Cooperatives
What agency is responsible for setting maximum residue limits (MRLs)? If nobody, write "none".	National Bureau of Agricultural Commodity and Food Standards (ACFS), Ministry of Agriculture and Cooperatives
What agency is responsible for public health and/or food safety? If nobody, write "none".	Thai FDA, Ministry of Public Health



THAILAND

CONTINUED

QUESTION	RESPONSE
What agency is responsible for pesticide control of use (regulates how the farmers uses the pesticide)? If nobody, write "none".	Department of Agriculture, Ministry of Agriculture and Cooperatives
What agency is responsible for management of pesticide residue monitoring? If nobody, write "none".	Multi-agencies (Department of Agriculture and ACFS, Ministry of Agriculture and Cooperatives, Thai FDA, Ministry of Public Health)
In regard to MRLs, does your country: [set its own MRLs]	Yes
In regard to MRLs, does your country: [adopt Codex MRLs]	Yes
In regard to MRLs, does your country: [adopt/refer to other, e.g. ASEAN, EU or USA MRLs?]	No
Who (what agency) is responsible for the development of the pesticide residue monitoring programme/plans?	Thai FDA for domestic and import pesticide residue monitoring programmes.
How is the monitoring programme's chemical screen established? List the criteria used to determine inclusion of pesticides to your programme screen?	<ol style="list-style-type: none"> 1. Results of non-compliance based on last 5-years results (both types of products and exporting country) 2. Quantity/Volume of importation, 3. Alert news/report 4. Capacity of Testing laboratories, 5. Resources (budgets, human resources)
Is your country using the Codex General Guidelines on Sampling (CAC/GL 50-2004) for sample collection?	No



QUESTION	RESPONSE
Does your country have analytical laboratory capacity and capability for pesticide residue analyses?	Yes, with intermediate capacity, and the labs are accredited by a body that is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Development of monitoring plans]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Verification of good agricultural practice]	Government, other
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide use training/education]	Government, farmer groups
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Compliance and traceback investigation]	Government, exporters/traders
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide review]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Domestic and export trade requirement]	Government, exporters/traders



QUESTION	RESPONSE
Which agencies are responsible for pesticide residue incident management and how are the incidents managed?	Multi-agencies (Department of Agriculture and ACFS, Ministry of Agriculture and Cooperatives, Thai FDA, Ministry of Public Health) with case-by-case basis.
What is the focus of the pesticide residue incidents?	MRL compliance
Are traceback investigations undertaken to determine the cause of the MRL exceedance?	No
Who is responsible for traceback investigations?	Thai FDA, in case of domestic and imported food.
Do you have any projects with any international/regional development partners on pesticide residue issues? Please explain, it will be helpful in finding synergies.	FAORAP, Capacity building on risk categorization for ranking risk of ASEAN food hazards for developing the risk-based monitoring protocol for food safety.
What residue-related activities would your country like to undertake but are currently unable to do so?	Development of effective risk-based monitoring programmes and food-chain based traceability system.
Apart from the limited financial and human resources, what are the main barriers to developing/improving pesticide residue monitoring programmes in your country?	Information sharing and collaboration with relevant stakeholders.
What is the biggest priority action do you think your country needs to do immediately, on the issue of pesticide residues?	Development of effective risk-based monitoring programmes.
Are the following currently available in your country? [Information on what chemicals are being used on what commodities]	Not sure
Are the following currently available in your country? [Information on the commodities of most residue concern]	Yes, available



QUESTION	RESPONSE
Are the following currently available in your country? [Documented results of the national level risk assessment on certain pesticides]	Not sure
Are the following currently available in your country? [Pesticide residue analytical capacity and capability]	Yes, available
Are the following currently available in your country? [Training resources to manage pesticide residue monitoring]	No
Please provide the website URLs, if available, for each of your monitoring programmes?	For annual monitoring plan of imported food including fresh fruits and vegetables (Thai version): https://www.fda.moph.go.th/sites/logistics/Shared%20Documents/Other/2019/keepsample2020.pdf
Please provide the links to any fact sheets, if available, for each of your monitoring programmes.	None



VIET NAM

QUESTION	RESPONSE
Does your country have existing national residue monitoring programme(s)?	Yes
What principles of the ASEAN Food Safety Policy are considered in the development of your Monitoring Programme? Are other risk assessment paradigms considered?	I am not sure as I was not involved in the development of the monitoring programs
Please list ALL the residue monitoring programme(s) your country has, and categorize with any of the following key words: [MRL compliance, food safety, quality assurance, export, domestic, import, random, targeted, consignment testing]	Residue monitoring programmes on vegetables and lychee [MRL compliance, food safety, quality assurance, export, domestic]
For each programme listed above, please provide its rationale using the following key words: [trade/market access, public health, consumer concerns, political direction, farmer compliance]?	Residue monitoring programme on vegetables: to protect public health against risks of pesticide residues on vegetables supplied to 2 main cities (Hanoi and Ho Chi Minh city)
Residue monitoring programme on lychee: to ensure MRL compliance with Japanese requirements for market access.	
Which category do you self-evaluate your country's pesticide residue monitoring capacities?	Intermediate capacity (at least some data has been produced and easily accessible, regular monitoring activity of at least one pesticide/commodity exists, but data is not enough to achieve desired results)
Please explain the reasons for selecting this capacity level above?	Residues of some pesticide active ingredients commonly used on the target crops were monitored



QUESTION	RESPONSE
What elements of the pesticide residue management framework would help to increase your capacity level? [Example elements: pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education, pesticide use review.]	Pesticide registration, pesticide control-of-use with farmers, residue monitoring programs, food traceability, traceback investigation, farmer education.]
Does your country have a government agency responsible for: [pesticide registration authority which registers pesticides for use domestically?]	Yes
Does your country have a government agency responsible for: [setting maximum residue limits (MRLs)?]	Yes
Does your country have a government agency responsible for: [public health and/or food safety?]	Yes
Does your country have a government agency responsible for: [pesticide control of use (regulates how the farmers uses the pesticide)]	Yes
Does your country have a government agency responsible for: [management of pesticide residue monitoring]	Yes
What agency is responsible for pesticide registration authority which registers pesticides for use domestically? If nobody, write "none".	Plant Protection Department, under Ministry of Agriculture and Rural Development
What agency is responsible for setting maximum residue limits (MRLs)? If nobody, write "none".	Ministry of Health
What agency is responsible for public health and/or food safety? If nobody, write "none".	Ministry of Health



QUESTION	RESPONSE
What agency is responsible for pesticide control of use (regulates how the farmers uses the pesticide)? If nobody, write "none".	Plant Protection Department
What agency is responsible for management of pesticide residue monitoring? If nobody, write "none".	Plant Protection Department
In regard to MRLs, does your country: [set its own MRLs]	No
In regard to MRLs, does your country: [adopt Codex MRLs]	Yes
In regard to MRLs, does your country: [adopt/refer to other, e.g. ASEAN, EU or USA MRLs?]	Yes
Who (what agency) is responsible for the development of the pesticide residue monitoring programme/plans?	Plant Protection Department
How is the monitoring programme's chemical screen established? List the criteria used to determine inclusion of pesticides to your programme screen?	The monitoring programmes were established on the basis of current situation, related duties defined in the National Target Program on Health and Population, Ministry's delegation and budget allocation.
Criteria to determine pesticides in the programme: based on the local reports on pesticide use situation; pesticide monitoring results of previous years; notifications; MRLs of importing countries; current pesticide regulations.	
Is your country using the Codex General Guidelines on Sampling (CAC/GL 50-2004) for sample collection?	CAC/GL 50-2004 is referred to in developing Viet Nam technical standards



QUESTION	RESPONSE
Does your country have analytical laboratory capacity and capability for pesticide residue analyses?	Yes, with intermediate capacity, and the labs are accredited by a body that is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Development of monitoring plans]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Verification of good agricultural practice]	other
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide use training/education]	Government, Farmer
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Compliance and traceback investigation]	Government, exporters/traders
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Pesticide review]	Government
Please check the checkbox if you have a substantial level of interaction/coordination/cooperation with the listed stakeholders in each of the following circumstances. [Domestic and export trade requirement]	Government, exporters/traders



QUESTION	RESPONSE
Which agencies are responsible for pesticide residue incident management and how are the incidents managed?	Ministry of Health, local agriculture agencies
What is the focus of the pesticide residue incidents?	I do not understand the question
Are traceback investigations undertaken to determine the cause of the MRL exceedance?	Yes
Who is responsible for traceback investigations?	Ministry of Agriculture and Rural Development
Do you have any projects with any international/regional development partners on pesticide residue issues? Please explain, it will be helpful in finding synergies.	Yes. That is "Implementing Residue Study of Azoxystrobin and Difenoconazole in Dragon Fruit" to conduct a field trial and collect treated and untreated residue samples from appropriate field site according to the application parameters requested, in order to provide data and information for JMPR evaluation for the establishment of Codex MRLs
What residue-related activities would your country like to undertake but are currently unable to do so?	Residue monitoring on fruits for export
Apart from the limited financial and human resources, what are the main barriers to developing/improving pesticide residue monitoring programmes in your country?	Difference in MRL regulations on domestic products and export
What is the biggest priority action do you think your country needs to do immediately, on the issue of pesticide residues?	Revise MRL regulation, capacity building for MRL establishment
Are the following currently available in your country? [Information on what chemicals are being used on what commodities]	Yes, available



QUESTION	RESPONSE
Are the following currently available in your country? [Information on the commodities of most residue concern]	Not sure
Are the following currently available in your country? [Documented results of the national level risk assessment on certain pesticides]	Not sure
Are the following currently available in your country? [Pesticide residue analytical capacity and capability]	Yes, available
Are the following currently available in your country? [Training resources to manage pesticide residue monitoring]	Not sure
Please provide the website URLs, if available, for each of your monitoring programmes?	None
Please provide the links to any fact sheets, if available, for each of your monitoring programmes.	None



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**Food and Agriculture Organization
of the United Nations
Bangkok, Thailand**

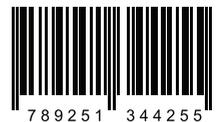
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