

Food Safety Control Measures in Developing Asian Countries

Bangladesh, Cambodia, Lao PDR and Myanmar



Contents

Acknowledgements	4
Abbreviations	5
Foreword.....	6
1. Introduction	8
2. Methodology	10
3. Key Findings	11
Findings I: Food safety concerns	11
Findings II: Status of food safety control measures	12
4. FSCM in Cambodia, Lao PDR, Myanmar and Bangladesh	14
4.1 Cambodia	14
4.2 Lao PDR	16
4.3 Myanmar	18
4.4 Bangladesh	19
5. Sharing Best Practices.....	22
5.1 Malaysia	22
5.2 Thailand.....	24
6. Recommendations and the way forward.....	27
7. Concluding remarks	29
8. Appendices	30
Appendix I: Food safety control measures – Country report for Cambodia	30
Appendix II: Food safety control measures – Country report for Lao PDR.....	30
Appendix III: Food safety control measures – Country report for Myanmar	30
Appendix IV: Food safety control measures – Country report for Bangladesh.....	30

List of Tables

Table 1: Objectives of the project	9
Table 2: Number of participating stakeholders involved in the respective countries.....	10
Table 3: Barriers to achieving food safety.....	12
Table 4: Presence of food-safety-related institutions in the countries surveyed.....	12
Table 5: Presence of legislative measures for food safety and consumer protection in the countries surveyed.....	13

Table 6: Key Findings of surveyed countries	25
Table 6: Key Findings of surveyed countries (<i>continued</i>). Fehler! Textmarke nicht definiert.	
Table 7: Proposed immediate follow-up activities	27

List of Figures

Figure 1: Managing and inspecting food imports using FoSIM in Malaysia	23
--	----

List of Images

Image 1: Food safety logos in Thailand	24
--	----

Acknowledgements

A large number of individuals, experts, governmental and inter-governmental agencies, institutions, industry actors and civil society organisations involving in food safety in Cambodia, Lao PDR, Myanmar and Bangladesh helped make this project and its reports and activities possible. The CI team would like to express their gratitude and appreciation for all these people's active contributions and cooperation during the course of the project. CI would also like to thank its members and partners in the study countries who provided their support and services as focal points for coordinating research activities and field visits.

A special mention must go to Mr Giovanni Villafuerte of the Sustainable Agriculture and Environment Development Association for his assistance in documenting the workshop proceedings, which were key for preparing this report.

Last but not least, CI would like to express its gratitude to GIZ for supporting the cause of consumer empowerment and strengthening the vital role of consumer organisations to address food safety concerns.

Abbreviations

3-MCPD	3-monochloropropane-1,2-diol
AAS	Atomic Absorption Spectroscopy
ACCP	ASEAN Committee on Consumer Protection
ASEAN	Association of Southeast Asian Nations
BFSN	Bangladesh Food Safety Network
BSTI	Bangladesh Standards and Testing Institution
CAB	Consumers Association of Bangladesh
CI	Consumers International
CIRD	Cambodian Institute for Research and Rural Development
CLT	Central Laboratory Thailand Ltd
CO	Consumer organisation
FAO	Food and Agriculture Organization, United Nations
FDA	Food and Drug Administration, Myanmar
FDD	Food and Drug Department, Lao PDR
FFC	Foundation for Consumers, Thailand
FOMCA	Federation of Malaysian Consumers Associations
FoSIM	Food Safety Information System of Malaysia
FSCM	Food safety control measures
FSWG	Food Security Working Group, Myanmar
GAP	Good agricultural practice
GC	Gas chromatography
GCMS	Gas chromatography-mass spectrometry
GHP	Good husbandry practice
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GMO	Genetically modified organism
GMP	Good manufacturing practice
HACCP	Hazard analysis critical control point
HPLC	High performance liquid chromatography
IEC	International Electrotechnical Commission
ILCC	Industrial Laboratory Center of Cambodia
INFOSAN	The International Food Safety Authorities Network
ISO	International Organization for Standardization
ISO COPOLCO	ISO Committee on Consumer Policy
LMOIC	Ministry of Industry and Commerce, Lao PDR
NATA	National Association of Testing Authorities, Australia
SAARC	South Asian Association for Regional Cooperation
SAC	Singapore Accreditation Council
SAEDA	Sustainable Agriculture and Environment Development Association
SME	Small and medium-size enterprises
SPS	Sanitary and phytosanitary
UNIDO	United Nations Industrial Development Organization
WHO	World Health Organization

Foreword

*“With the food supply chain stretching around the world, the need to strengthen food safety systems within and among countries is becoming more critical. That is why [...] **we all have a role to play in keeping food safe – from farm to plate.**”*

- Ban Ki-Moon (Secretary-General of the United Nations)

The agriculture and food industry is one of the most important economic sectors in Southeast Asia, accounting for up to 48 per cent of the gross domestic product in the individual states. Until today, ASEAN Member States (AMS) have prioritised achieving food security, by increasing food availability and access over concerns about food safety. In recent years however, public attention to and demand for safe food has grown, in response to an increased awareness on the prevalence of foodborne diseases across the region. Although all countries across the world share similar concerns about the safety of their food, Southeast Asia is subject to higher food safety risks due to climate, diets, income levels and public infrastructure.

Lack of attention to food safety also has implications on trade opportunities. Food safety is a moving target - a food incident in one country can quickly spread to a geographical area - and plays a critical role for importing countries. Compliance with food safety regulations and standards is thus seen as a general prerequisite for market access. Some ASEAN countries have already put strong measures in place to ensure the safety of their food, such as Thailand, and have become leading producers and exporters of agricultural produce worldwide. CLMV (Cambodia, Lao PDR, Myanmar and Vietnam) countries have similar potentials, but without a concrete food safety control system, the options for export to lucrative markets outside (Europe, USA and Japan) as well as within the region remain limited. The latter is particularly relevant today as the region has been moving towards the creation of a single economic community in 2015, and where economic disparities between the CLMV countries and the other AMSs persist.

Based on years of experience and comprehensive know-how, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH provides expertise on regionally adapted strategies for sustainable development to countries across the world. There are three approaches in particular that focus on issues of food security, food safety and food standards within the Southeast Asian context: Sector programme *Regional Development and Agriculture* (dedicated towards enhancing food security and regional development), *ASEAN Sustainable Agrifood Systems (SAS)* (aims to develop regionally coordinated policies and strategies for sustainable agriculture), and *Standards in the Southeast Asian Food Trade (SAFT)* (supports the implementation of food certification, including the ASEAN GAP and organic standards).

On behalf of GIZ, Consumers International (CI) conducted a study on the state of food safety in four Asian countries, namely Cambodia, Lao PDR, Myanmar and Bangladesh. The objective of the study is twofold: 1) to take stock of the existing food safety control measures in place in the studied countries and 2) to examine possibilities to strengthen the role of consumer organisations (COs) in monitoring and carrying out market surveillance. Although the study mainly focuses on the ASEAN region, Bangladesh is included in this study

because of the presence of COs that are already working with agencies to address food safety concerns - a movement which is absent in the other three surveyed countries.

Key findings of the study indicate that consumers in all four countries are mainly concerned about:

- high use of agricultural chemicals;
- limited number of food inspectors;
- lack of properly equipped infrastructure and trained personnel to test and identify food safety risks; and
- poor hygiene practices among consumers, producers and food handlers.

Key shortcomings identified in the food safety control system in all four countries include:

- need for further improvement in coordinating the different competent authorities to enforce food safety control measures;
- lack of harmonisation between national food safety standards and the Codex Alimentarius; and
- low level of awareness among consumers, producers and food handlers due to limited communication and access to information on food safety.

The report is structured as follows: Firstly, a general overview of the necessity for a credible food safety system in the ASEAN region is provided. In the second part, the report examines the food safety concerns of consumers in each of the selected countries. Thirdly, the study gauges Cambodia, Lao PDR and Myanmar's readiness for the ASEAN food safety harmonisation process. The report also analyses Bangladesh's experience with food safety control measures and COs. Best practices from Malaysia and Thailand are then discussed as possible ways to strengthen and enhance activities in the four surveyed countries. Lastly, recommendations are offered and conclusions drawn.

This report is supplemented with individual country reports for the countries surveyed (Cambodia, Lao PDR, Myanmar and Bangladesh).

1. Introduction

Food safety

Food is considered safe when it is suitable for consumption and does not cause harm to the consumer when it is prepared and/or eaten according to its intended use (World Health Organization).

Food safety control measures (FSCM)

The control of potential hazards associated with foods typically involves the application of control procedures and practices in the food chain, from primary production, through processing, to consumption.

As the Association of Southeast Asian Nations (ASEAN) is moving towards the ASEAN Economic Community (AEC) and thus greater economic integration, increased harmonisation, convergence and regulatory cooperation within the region is essential. With a market-base of more than 600 million consumers, the economies of the ASEAN Member States (AMSs) are expected to grow following the new opportunities arising from intra-regional trade. In parallel to the increase in consumer wealth, comes an increase in awareness and interest in food safety issues among consumers. Regardless of whether food is imported or produced locally, consumers want protection against food-borne health risks that can arise from fresh agricultural produce. Although some AMSs already have sound food safety control measures (FSCMs) in place, for others, such as the CMVL countries, access to safe foods remains a major challenge.

To improve food safety in the region, all AMSs need to strengthen governance structures and enforce standards consistently, fairly and predictably. Alongside formal measures to ensure and control the safety of food, it is essential to deliver consumer education and community awareness on food safety issues. This responsibility should however not be shouldered by the governments alone. Industry actors and COs must also contribute to putting in place the level playing fields and best practices required to ensure food safety is practised from farm to table.

The overall **goals** of the Food Safety Control Measures project are twofold:

- To strengthen food safety standards in order to protect and promote consumer health by controlling the entire food chain.
- To strengthen the role of COs in monitoring and carrying out market surveillance.

Table 1 displays three specific objectives of the project that support the above overall goals.

Table 1: Objectives of the project

Objective 1	Objective 2	Objective 3
To map and document national food safety control measures.	To examine the control system for both imported and exported foods.	To outline recommendations on capacity building needs for delivering food safety.
<p><u>The focus:</u></p> <ul style="list-style-type: none"> • the food marketing system; • current food safety situations; and • complexities in ensuring food safety. 	<p><u>The focus:</u></p> <ul style="list-style-type: none"> • Current procedures and practices: capacities (strengths and gaps). 	<p><u>The focus:</u></p> <ul style="list-style-type: none"> • The development of a national roadmap for ensuring food safety from the consumers' perspective.

2. Methodology

The findings presented in this report are based on the outcomes of the *Food Safety Control Measures in Developing Asian Countries* regional workshop, which was held in Bangkok on 3 and 4 December 2013. The Workshop was the final activity in the Food Safety Control Measures project that was carried out by Consumers International (CI) from November 2012 to December 2013 with GIZ funding support.

Table 2: Number of participating stakeholders involved in the respective countries

Region	Countries visited	Key informants	Agencies/ organisations	Sites	Roundtable discussion
ASEAN	Cambodia	11	11	4	15
	Lao PDR	11	11	5	10
	Myanmar	8	8	3	64
SAARC	Bangladesh	30	18	10	13
Total		60	48	22	102

This event served as a forum that enabled participants to discuss their experience with food safety issues in their countries, identify focus areas, share best practices in FSCM and collectively make recommendations for improving the safety of food products. The workshop participants (Table 2) came from selected ASEAN and SAARC Member States and represented a range of agencies and institutions, including consumer and civil society organisations.

3. Key Findings

Findings I: Food safety concerns

Consumers are inevitably exposed to and affected by the food production and processing practices of their country. Consumers often look to their respective governments to protect them against unsafe foods, particularly in regards to imported food and agricultural produce. Consumers commonly assume that the products that come into their countries have gone through stringent processes to ensure their safety. It is also generally assumed that industry actors and food producers take care to ensure that their food products are safe. In recent years however, consumers have become wary about the ability and willingness of these actors to protect them from food-borne illnesses caused by unethical food production practices. There are four main food safety issues in particular that consumers are concerned about:

1. **Information:** Consumers believe that they are not given sufficient information to make informed choices. Proper and standardised food labelling is noticeably lacking in these countries and the labelling of fresh agricultural produce in local markets is very much absent. Due to the lack of transparent mechanisms and where present, certain corrupt practices, vital information may be withheld or not communicated.
2. **Radiation and new food technology:** Consumers feel that they are not provided with enough information to understand the new technologies that are employed in food production, which cause some to doubt the safety of these new technologies.
3. **Contamination:** Consumers lack confidence in the ability of food control services to provide the necessary protection from pesticide residues and microbiological contamination occurring during the production, processing or handling of food and agricultural produce along the supply-chain.
4. **Food additives and preservatives:** Consumers are uncertain about the many food items available on the Southeast Asian market that contain substances, which are banned or restricted in other countries like Germany, France and the UK, due to their health concerns. These include formalin, 3-MCPD, borax, certain food colourings and additives.

Currently, the inspection and surveillance activities operated by each country at border checkpoints mainly focus on generic and routine activities, including: physical (visual) examination of imported foods, basic tests like the formalin test or borax test, and inspection of health certificates provided by the exporting country.

Despite these measures taken to eliminate harmful substances in food, there are however several governance, scientific and technical and social issues that have formed barriers to delivering safe food in the surveyed countries, which are illustrated in Table 3.

Table 3: Barriers to achieving food safety

GOVERNANCE	TECHNICAL	SOCIAL
<ul style="list-style-type: none"> • Inter-agency or inter-ministerial coordination • Process and steps towards certification • Mandatory vs. voluntary requirements 	<ul style="list-style-type: none"> • End-product testing vs. at-source controls • Safety issues of GMOs • Use of agrochemicals • Antibiotic and veterinary drug residues/resistance • R&D and national baseline data 	<ul style="list-style-type: none"> • Corruption issues and food safety assurance • Consumer choices (rights and responsibilities) • Private sector awareness and social responsibility • Role of the media (education vs. marketing)

Findings II: Status of food safety control measures

All four countries reported that the institutions mentioned in Table 4 have limited numbers of food inspectors and technical experts with the relevant experience and qualifications and that this represents a critical challenge. Table 5 shows the main legislative measures in place to protect consumers against food hazards in the four countries.

Table 4: Presence of food-safety-related institutions in the countries surveyed

	Food safety agency	Food safety council	Standards institutions	Food safety lab	Food testing lab	Consumer protection agency	Consumer organisations
Cambodia	✓	✓	✓	ND	✓	✓	NF
Lao PDR	MA	✓	✓	ND	✓	✓	NF
Myanmar	MA	NF	✓	ND	✓	NF	✓
Bangladesh	✓	✓	✓	✓	✓	✓	✓

Key: NF = not formed. ND = not dedicated. MA = multi-agency.

Table 5: Presence of legislative measures for food safety and consumer protection in the countries surveyed

	Food law	Food safety law	Food safety policy	Agri. law	Livestock & fisheries law	Food standards	Agri. standards	Import policy on food	Consumer protection act
Cambodia	✓	✓		✓	✓	limited	limited	ND	
Lao PDR	✓	✓	✓	✓	✓	limited	limited	ND	✓
Myanmar	✓	✓			✓	limited	limited	ND	P
Bangladesh	✓	✓	✓	✓	✓	limited	limited	✓	✓

Key: ND = not dedicated. P = currently being drafted.

4. FSCM in Cambodia, Lao PDR, Myanmar and Bangladesh

The status of FSCMs in each individual surveyed country will now be closely examined, followed by recommendations for immediate action in response to the gaps and challenges identified.

4.1 Cambodia

The Inter-Ministerial Prakas No. 868 on the Implementation and Institutional Arrangements of Food Safety Based on the Farm to Table Approach (IMP868) is a key legislative measure that forms the framework for food safety in Cambodia. A progressive measure currently being developed to ensure consumer protection against unsafe food is the national policy on food safety. The Food Safety Bureau under the Ministry of Health is overseeing the drafting of this legislation, with the following objective: The implementation of a sound food safety system for the protection of consumer health, the reduction of the Royal Government of Cambodia's fiscal burden of disease, and the enhancement of national production efficiencies and national food export competitiveness. In addition, a new food safety initiative is implementing the Prakas through setting modalities and guidelines for the issue of voluntary certificates of good hygiene practice for restaurants and catering establishments, as well as the development of a recognisable logo (health mark).

The gaps and challenges in FSCMs in Cambodia include:

- lack of food safety policy;
- lack of inter-ministerial coordination and overlapping responsibilities;
- lack of effective border controls (inspection and monitoring);
- lack of expert assistance to work on food safety issues;
- insufficient staff in food safety administration;
- lack of trained manpower (for using equipment and kits);
- lack of national standards on food safety and management;
- absence of consumer representation/consumer voice; and
- porous borders.

Given the identified gaps and challenges listed above, there are six areas where immediate action can be taken to improve food safety in Cambodia:

1. Develop a national food safety policy

To move forward, it is important to engage food policy experts in discussions with the Food Safety Bureau, in providing the Bureau with guidance and technical assistance, and in ensuring a consumer perspective is taken in developing a holistic farm-to-table approach.

2. Develop national standards that are harmonised with ASEAN standards

To ensure the effective implementation and enforcement of food safety in Cambodia, it is vital to strengthen the capacity of the standards agency, Institute of Standards of Cambodia

(ISC), in the following areas: 1) produce a high-risk food list and 2) establish technical committees to develop national standards that must include consumer representation and focus on:

- assisting the development of food-related standards;
- assisting in developing the capacities and experience of ISO auditors;
- advancing standards by making voluntary standards become mandatory; and
- drawing up halal standards.

3. Strengthen and maintain a food safety database

It is important to integrate the current efforts of the ASEAN Food Safety Network with those of the International Food Safety Authorities Network (INFOSAN). The latter is a joint programme of FAO and WHO, which links together the national authorities in its member states responsible for managing food safety emergencies.

4. Develop and strengthen COs

To support governmental and industry efforts to ensure food safety, it is important to enhance the role of COs in Cambodia. The Consumers Association of Cambodia needs to be reactivated and its role strengthened, and the Cambodian Institute for Research and Rural Development's (CIRD) interest in diversifying its functions as a CO needs to be supported. It is also important to build the knowledge and capacity of the focal point for the ASEAN Committee on Consumer Protection (ACCP), a role currently delivered by Camcontrol, and to empower independent COs to support monitoring and surveillance activities.

5. Provide human resource development and training

The strategy going forward should seek to take advantage of and leverage existing initiatives in the country, including:

- Scaling up FAO and UNIDO efforts to improve the laboratory/testing capacity and facilities of the Food Safety Bureau.
- Building ILCC's capacity to provide services and generate income and, thereby, enable it to be financially independent, sustain its operations and cover its accreditation fees.
- Providing laboratory training and technical assistance on the use of newly acquired modern chemical equipment (HPLC, GC, GC-MS, AAS), delivered through partnerships and secondment programmes conducted within or between ASEAN countries, and also with donor countries.
- Providing training on analysis and detection methods, and on data reading and interpretation, especially for beta-agonist and aflatoxin (the beneficiaries of this training would be Camcontrol, ILCC, ISC and COs).
- Providing training to producers, manufacturers, importers, exporters and consumer representatives or organisations on: food safety compliance processes; the requirements for SPS, GAP, GMP, HACCP and labelling; and understanding Codex, ISO, ASEAN and other international standards like Global GAP, UNECE, etc.).

6. Promote consumer education and community awareness

Consumers are the end users of commercial products, which means they should be informed about what they are consuming and their associated health risks, benefits and other social impacts. In Cambodia, the most important factor in educating consumers about food safety is enabling them to understand their own role, responsibilities and rights to safe food. Education campaigns and awareness programmes may be aligned with the regional work and efforts of the ASEAN Committee on Consumer Protection (ACCP).

Other priorities and focus areas for strengthening FSCM in Cambodia are captured in the supplementary country report in Appendix I.

4.2 Lao PDR

Lao PDR has made progressive efforts to ensure food safety in the country. Apart from the government, other stakeholders including inter-governmental agencies like FAO and WHO, and civil society organisations have been actively working to raise public awareness on food safety issues. Since 2006, the WHO Healthy Food Markets initiative has been operating in seven provinces across the country with the aim of improving the health of urban populations, especially those with low incomes. Most of the programme measures taking place in the country are donor-funded programmes. The Government of Lao PDR allocates a limited budget to the operations under the food safety programme.

In addition, the provincial city development programme called the Green City Programme is working to deliver cleaner, healthier cities in three provinces and is also prioritising the sustainable production of agricultural produce and the promotion of organic markets, while emphasising GMP practices and environmental controls for crop and animal products. Lao Organic Standards is an important tool for advancing food safety in the country by preventing issues from occurring at source. However, the Lao GAP Project, which was launched in 2012, has yet to get underway and, to date, no on-the-ground project activity has been observed. The main constraint is limited staff numbers – for example, at present, only six staff work on promoting technical and clean agricultural practices in the Vientiane area. Basic rapid test kits (usually sourced from Thailand), e.g. for formalin adulteration, are commonly used in market surveillance.

Gaps and challenges in FSCMs in Lao PDR include:

- insufficient human resources;
- limited equipment, tools and testing kits; and
- inexperienced/inadequately trained staff for dealing with domestic controls and import inspections (lacking appropriately qualified, certified and trained human resources).

Given the identified gaps and challenges listed above, there are four areas where immediate action can be taken to improve food safety in Lao PDR:

1. Human resource development and training

In the short term, secondments, staff exchanges or internships can be provided – for example, qualified and trained staff from countries that have more advanced food safety systems can be brought in to train local teams. Human resource development and training needs to focus on the technical aspects of food safety and consumer protection, as well as policy implementation and enforcement. Ultimately, to ensure food safety in Lao PDR in the long term, it is vital to build human capacity. This can be supported by engaging with the Ministry of Health, Ministry of Agriculture and Forestry and the Ministry of Industry and Commerce (LMOIC), and also by setting up a system to develop local university programmes that match recruitment needs, including food technologists, laboratory technicians and food inspectors.

The Consumer Protection and Competition Division (under LMOIC's Department of Domestic Trade) needs increased capacity and a stronger role for dealing with food safety issues. Currently, this division is failing to address food safety issues in the country and instead, uses and capitalises on the knowledge and experience of mature civil society organisations like Sustainable Agriculture and Environment Development Association (SAEDA), which also support surveillance and monitoring activities and lessen the government's burden.

2. Food safety facilities, labs and accreditation

Guidance for achieving lab accreditation is important for Lao PDR as to date, no lab in the country has received ISO 17025 accreditation. Working on securing accreditation is therefore, an immediate priority. New laboratories have been constructed, especially animal laboratories. At present, FDD mainly focuses on chemical testing and will require support if it is to secure accreditation and become a fully-fledged food testing facility. Expert support is also needed on auditing and procedures, and on operating equipment and tools.

3. Food import control system

Strengthening entry-point transactions is crucial for ensuring consumer protection in the domestic market and best practice in this area needs to be shared. At the time of writing, no routine or specific food testing was carried out at the land transport entry-points. Added to this, communication and data management facilities are insufficient. While improving and upgrading these facilities may require substantial financial support, providing basic tools and computer or hand-held devices to ensure more systematic data entry and reporting can help in preventing the recurrence of cases involving products with problematic histories, given that on-the-spot checks can be carried out.

4. Developing and strengthening COs to carry out surveillance and monitoring

Enhancing the role of COs in Lao PDR is an important way to support governmental and industry efforts to ensure food safety. For this project, the absence of COs in the country has been compensated by the presence of other civil society organisations, such as SAEDA.

Other priorities and focus areas for strengthening FSCM in Lao PDR are captured in the supplementary country report in Appendix II.

4.3 Myanmar

The absence of a single national-level committee for consumer protection is a causal factor in the country's weak provision of food safety, even though two main food safety institutions have been established. Progressive efforts to ensure food safety through consumer protection are being made, with the Department of Commercial and Consumer Affairs (under the Ministry of Industry and Commerce) currently drafting a consumer protection policy. The policy aims to address consumer concerns and also tackle the issue of import/export licenses for consumer goods.

There are four areas where immediate action can be taken to improve food safety in Myanmar:

1. Policy formulation and coordination

In order for a comprehensive food safety strategy to be effectively implemented, existing policies will need to be better coordinated to avoid overlaps and define specific responsibilities. To this end, initial work must be undertaken on reviewing and revising national food laws and other relevant laws. External policy expertise is required to support Myanmar in formulating a food safety control framework that encompasses consumer protection.

2. Food safety education for consumer protection

The best protection against any potential hazards is self-protection. Understanding food safety issues can help consumers minimise experiences with potential food hazards. Food safety campaigns, information sharing and media sensitisation can help to educate and create community awareness. Targeting food safety awareness and promotion at cottage industries through a national development scheme and supporting the Myanmar Fisheries Federation and Myanmar Livestock Federation to educate their members about food safety compliance (HACCP, GAP, GMP, CAC and ISO) can further enhance consumer protection.

3. Developing national food standards that are harmonised with regional and international standards

Increasing food safety compliance among the market actors involved in food and agricultural production is important for Myanmar, but progress is relatively slow. Laws on standardisation and also national standards on food and agricultural produce, planting materials, fertilisers, agrochemicals and heavy metals are still being developed.

The standards development process needs to be expedited by enhancing the technical capacity of the relevant agencies and ministries like Myanmar's Ministry of Science and Technology Research Department and Ministry of Livestock and Fisheries (in areas like GAP,

GMP, HACCP and ISO). Competent systems for the certification and issue of health certificates for fisheries and livestock need to be installed and the potential of public-private partnerships for addressing food safety issues needs to be harnessed. When industry adopts good production practices, the health care costs currently met by the Government and people of Myanmar will be reduced.

4. Developing and strengthening COs to carry out surveillance and monitoring

The presence of the Food Security Working Group (FSWG) is a good indication that the time is ripe to drive the food safety agenda forward in Myanmar. Enhancing FSWG's role by making it a fully functional and recognised CO would mean it could support the government and industry in their efforts to deliver safe food. FSWG has participated in several platforms on food security and food safety, and works to educate its members (producers) and conduct research.

Other priorities and focus areas for strengthening FSCM in Myanmar are captured in the supplementary country report in Appendix III.

4.4 Bangladesh

The adoption of the new Food Safety Act (2013) is a progressive measure for ensuring food safety, which has promoted a more strategic and defined framework for ensuring consumer protection against unsafe food. The development and implementation plan for the Act also recognised the role and functions of COs in providing inputs and taking part in surveillance and monitoring.

Surveillance and inspection in Bangladesh is not carried out using a risk-based approach, but based on end-product analysis and does not cover the entire food chain. Weak enforcement powers, coupled with limited technical skills and poorly equipped facilities, continue to hold back the development of food safety. In addition, poor, inconsistent and decentralised data recording and filing systems also limit Bangladesh's capacity to deliver food safety and preventive measures.

Unique issues for Bangladesh are: the challenge of managing its large consumer base; the mega-urban food systems involving street vendors who operate small, unregulated carts that feed millions of people daily, but that problematize the delivery of food safety; and poverty, which means many households are forced to prioritise food availability, affordability and accessibility over food safety.

Gaps and challenges in FSCMs in Bangladesh include:

- lack of consumer education;
- insufficient community monitoring roles and functions to help enhance food safety measures;
- insufficient market surveillance (food safety indicators based on the number of samples and areas covered);

- insufficient COs with the capacity to carry out independent market surveillance;
- lack of food inspectors (to enhance the image and reputation of the service);
- insufficient infrastructure and technical and public facilities; and
- insufficient safe street-food carts.

Given the identified gaps and challenges listed above, there are five areas where immediate action can be taken to improve food safety in Bangladesh:

1. Consumer education and community awareness

Mobilising the community

Consumers need to take responsibility themselves for food safety and for ensuring it is made an important issue in Bangladesh. Understanding cultural affinities is a key factor in raising the public's awareness. To mobilise the community, education campaigns on food safety may be delivered through drama performances, folk songs and other arts-based approaches. Initiatives should also seek to enhance the role of the District Consumer Rights Committees, imams, community leaders and BFSN.

Embedding food safety and consumer protection in primary-level course curricula

Instilling positive habits and behaviours that enable people to protect themselves against unsafe food can be achieved through education. Integrating food safety components and consumer protection courses into the school syllabus at the primary level can help change behaviours and mind-sets and ensure food safety at the individual and household level. To make this happen, the cooperation and empowerment of the Ministry of Education is required.

2. Developing national standards that are harmonised with regional and international standards

To ensure effective implementation and enforcement of food safety in Bangladesh, it is vital to strengthen the capacity of BSTI. Efforts must focus on the adoption of international standards on pesticide residues, food additives, heavy metals and GMOs. The capacities of the technical committees developing standards need to be enhanced to enable them to deal with the technical issues at hand. In addition, stakeholder representation in the standards development process must be inclusive. National GAP or organic standards also need to be developed and best practices shared.

3. Developing and strengthening COs to carry out surveillance and monitoring

Enhancing the role of COs in Bangladesh is an important way to support government and industry efforts to ensure food safety. The capacity of CAB and other civil society organisations like BFSN and UBINIG to carry out independent surveillance and monitoring activities needs to be strengthened.

4. Inspection and enforcement

Technical support for the relevant agencies needs to extend through the integration of risk-based analysis. Inspection and enforcement require trained personnel and inclusiveness, meaning that COs must be represented on the inspection team. The strength and role of

BSFN need to be fully exploited. In addition, the professionalization of the food inspector role should be given greater accreditation and recognition in order to build respect for the career.

5. Human resource development and training

In order to develop training programmes that meet Bangladesh's needs for enhanced food safety, a proper study and inventory exercise must be carried out. When gathering data on existing staff involved in FSCMs, it is important to capture not only numbers but also individual qualifications and experience in inspection, testing and surveillance. Bangladesh's food safety laboratories and facilities currently lack sufficient numbers of trained personnel.

Other priorities and focus areas for strengthening FSCM in Bangladesh are captured in the supplementary country report in Appendix IV.

5. Sharing Best Practices

In this section good, practices to ensure the safety of food products from Malaysia and Thailand will be shared, as these can be replicated and tailored to the needs and circumstances of the four surveyed countries.

5.1 Malaysia

Malaysia, a fast-developing AMS, has put strong measures in place to ensure that food imported into the country is safe. Even though the Ministry of Health does not require import permits for food imports, there are nonetheless, some foods that require a health certificate, certificate of analysis or special approval for importation. These measures are predominantly implemented in compliance with the Food Act 1983 and its regulations.

Malaysia uses an automated and linked platform to manage and monitor food safety at import entry points. The intelligent web-based information system called the Food Safety Information System of Malaysia (FoSIM) has been used to enhance the management of food importation activities electronically. FoSIM works in conjunction with the Customs Information System and enables enforcement officers at every entry point in the country to carry out continuous monitoring of all food consignments entering the country.

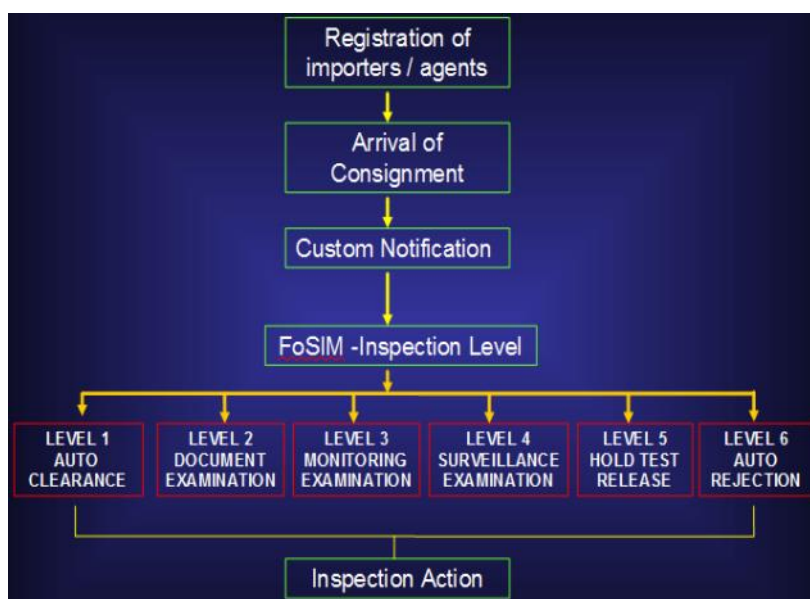
Although the system requires a high financial investment, in the long run, it has proven to be invaluable, generating health-cost savings and ensuring the quality of life of all consumers in Malaysia. The convenience of using the system has also allowed the Ministry to channel its human resources to focus more on preventive measures at-source rather than at the end-point stage. There are also negative aspects of too much food testing along the supply chain and at the end-point, given that the chemicals used for testing are also sources of environmental contamination and can end up polluting rivers or the water supply. For this reason, preventive steps towards ensuring food safety must be carried out at the source of food production.

Since 2003, FoSIM has supported the Food Import Control Programme of Malaysia. The enforcement regime on food imported into Malaysia involves:

- by sea – inspection of 40% consignments
- by air – inspection of 35% consignments
- over land – inspection of 70% consignments
- 10% sampling of inspected consignments

FoSIM has enabled decision-making based on risk-based approach to inspection. As importers and agents have to log on to FoSIM, prior notice of planned imports can be obtained or new enquiries on the examination level required for a particular food item can also be performed. Food alerts can be shared online and any previous entry of a specific consignment of food can be tracked and detected, thus deterring the 'port-hopping' phenomenon. To carry out import notifications, importers or agents must first declare their imports on the Customs Information System and then log on to FoSIM and complete the notification module. This process is illustrated in Figure 1.

Figure 1: Managing and inspecting food imports using FoSIM in Malaysia



Surveillance and food safety risk assessment in Malaysia addresses the actions to be taken on rejected consignments. Depending on the nature or reason for rejection, the consignments may be re-exported, destroyed (high risk), and relabelled, reprocessed or reconditioned.

Market surveillance is carried out when there are specific concerns on food safety, and often involves food products being analysed for a particular contaminant, such as rice for arsenic, seaweed for heavy metals, starch-based food products for maleic acid or eggs for *Salmonella enteritidis*.

In the event that a food recall is commissioned, the following actions are required:

- the importer or manufacturer is instructed to recall the contaminated food, provided that 1) the name and address of the importer or manufacturer is available and 2) the product batch number is available.
- if the above information is not available, then a food alert will be issued to seize the product nationwide.

At the moment, Malaysia is the only AMS to implement the system, meaning some issues do arise from inconsistency or unharmonised standards among trade partners. In the near

future, when all ASEAN countries have harmonised their standards, the region will be able to operate the same levels of safety inspection at source rather than at the end point. With harmonised ASEAN standards, Malaysia envisages lower inspection and surveillance costs, given it will no longer have to perform inspections for the full suite of options in its surveillance system.

The main benefits of FoSIM in ensuring safety and managing food imports include:

- the effective, efficient and transparent clearance of food import consignments;
- importer/agent preparedness through prior knowledge of import status;
- a harmonised surveillance system at all entry points;
- better preparedness for crisis management relating to imported food; and
- the prevention of port hopping.

5.2 Thailand

The Thailand National Food Committee Act 2008 emphasises four key areas: food security, food safety, food quality and food education. The Act also specifies the roles and responsibilities of the Thai FDA in ensuring food safety, particularly in:

1. issuing notifications on behalf of the Ministry of Public Health;
2. performing pre-marketing controls;
3. performing post-marketing controls;
4. performing import controls;
5. conducting surveillance;
6. providing technical support, cooperation and knowledge sharing; and
7. disseminating knowledge and developing consumer behaviour.

Thailand's FSCM are also based on a consumer protection approach to ensure safety and efficacy (identity and nutrition). Food safety is communicated to consumers through recognisable and identifiable logos or food safety marks (see Image 1).

Image 1: Food safety logos in Thailand



Thailand has a very comprehensive FSCM strategy; however, policing the all areas involved in FSCM is not an easy task. Thailand, despite being categorised as a newly industrialised

country, is still plagued by budgetary constraints. As such, a greater focus is needed on the more vulnerable areas of the food chain, rather than trying to cover all bases.

Table 6 summarises the key findings of all six countries.

Table 6: Key Findings of surveyed countries

	SUMMARY
Cambodia	<ul style="list-style-type: none"> • Inter-Ministerial Prakas IMP868 is a key legislative measure for inter-agency coordination. • National food safety policy is currently under development. • Consumer rights are embedded in the national constitution. • Several labs, such as ILCC, have NATA, SAC and ISO 17025:2005 accreditations. • The national certification system and accreditation bodies have yet to comply with international requirements or secure accreditation from recognised international bodies. • Expert assistance is needed on developing standards.
Lao PDR	<ul style="list-style-type: none"> • The Food and Drug Department (FDD) is the key food safety agency. • Food Law 2004 is currently being revised to include provisions on SPS, farm-to-table food services, labelling and GMOs. • A national Food Safety Policy has been in place since 2009 • Laboratory and border checkpoint facilities for managing, inspecting and monitoring food safety and agricultural products are underdeveloped and, in part, deficient. • Human resources and expertise are insufficient in several food safety areas, including the identification, diagnosis and testing of foods. • Lao organic certification is in place and organic produce is being promoted. • Some immediate concerns include the lack of: data on veterinary drug abuse or misuse on livestock farms; reporting on consumer complaints; and capacity to test or work with residues in meat products.
Myanmar	<ul style="list-style-type: none"> • There is a number of food safety implementing agencies, coordinated through two main national institutions: the Department of Food and Drug Administration (FDA) and the Myanmar Food and Drug Board of Authority (MFDBA). • Consumer protection is enshrined in the Consumer Protection Law that was adopted on 14 March 2014. • There are currently laws in place on labelling or rights to information. • FDA delivers programmes and training using IEC materials and traditional media to raise the awareness of food producers about food safety. • Government agency staffs do not have sufficient experience or the right

	<p>qualifications to implement FSCM.</p> <ul style="list-style-type: none"> • Food inspection, surveillance and monitoring at border checkpoints needs to be strengthened. • The coordination of and communication between the authorities responsible for food safety control need to be improved.
Bangladesh	<ul style="list-style-type: none"> • A Food Safety Act has been adopted and a new Food Safety Authority established. • Food safety indicators have been determined. • A limited number of food safety and quality standards are in place. • Food inspections suffer from a lack of manpower but the administrative units are widely distributed and the coverage is therefore broad. • Food safety facilities and infrastructure range from out-dated to modern and technical experts are insufficient in terms of numbers and/or skills. • A small number of companies possess ISO food safety management certification.
Malaysia	<ul style="list-style-type: none"> • Coordinating the safety of food imports is a ministerial responsibility. • Since 2003, a web-based platform (FoSIM) is used to manage food import activities and facilitate online information sharing. • There are six examination levels in the inspection and clearance process. • Adequate manpower helps to ensure the system is effective.
Thailand	<ul style="list-style-type: none"> • A Strategic Framework of Food Management is being planned. • An umbrella institution (the National Food Committee) is being established to ensure inter-ministerial and inter-agency coordination (for food security, safety and quality, and food education). • Consumer education is being delivered through branding and recognisable food quality and safety logos. • Food education is being strengthened (basic, best practice, output-based on R&D and knowledge use). • Current and emerging issues in the food sector are being dealt with using a food safety management system.

6. Recommendations and the way forward

Strengthening FSCM in Cambodia, Lao PDR, Myanmar and Bangladesh requires a multi-level approach that needs to be tailored and targeted at various levels. In general, there is an immediate need in these countries to provide education and raise public awareness on food safety issues, while enhancing the capacity of governmental and private testing laboratories specialised in analysing pesticide residues on fruit and vegetables. It can be concluded that these four countries need to improve the competence of their laboratories and their inspection systems for food and agricultural products. Table 7 summarises suggested actions for following up on this project.

Table 7: Proposed immediate follow-up activities

	TOPICS	TARGET GROUPS (action points to be supported)	PARTICIPANTS (beneficiaries)
National baseline studies	<ul style="list-style-type: none"> • Training needs analysis 	<ul style="list-style-type: none"> • CI and relevant human resource development agencies (national or regional) 	<ul style="list-style-type: none"> • All government agencies and institutions involved in food safety control measures
	<ul style="list-style-type: none"> • Benchmarking national standards against best practices in the region 	<ul style="list-style-type: none"> • CI and ISO COPOLCO 	<ul style="list-style-type: none"> • The standards agencies and standards users in each country
National seminar series and campaigns	<ul style="list-style-type: none"> • Consumer and food safety 	<ul style="list-style-type: none"> • CI • COs and food safety agencies in the country 	<ul style="list-style-type: none"> • Community networks, government agencies, industry actors and the media
	<ul style="list-style-type: none"> • Food preservation and preparation 	<ul style="list-style-type: none"> • WHO and COs 	<ul style="list-style-type: none"> • Community networks, food handlers and sellers, and SMEs
National workshop	<ul style="list-style-type: none"> • Food production and compliance 	<ul style="list-style-type: none"> • Departments of agriculture, fisheries and livestock 	<ul style="list-style-type: none"> • Food producers, importers, exporters, distributors, retailers and SMEs

series	<ul style="list-style-type: none"> Developing national standards 	<ul style="list-style-type: none"> Standards agencies 	<ul style="list-style-type: none"> Other relevant government agencies, industry actors and COs
	<ul style="list-style-type: none"> National food safety policy formulation and implementation 	<ul style="list-style-type: none"> Cooperation with ASEAN Member States or SAARC Member States 	<ul style="list-style-type: none"> The food safety agencies and stakeholders in each recipient country
	<ul style="list-style-type: none"> Enforcement of food safety laws 	<ul style="list-style-type: none"> Food safety agency, consumer protection agency and the judiciary 	<ul style="list-style-type: none"> Food safety agencies and stakeholders in each recipient country, including the consumer protection agency
	<ul style="list-style-type: none"> FAO Risk Analysis Toolkit¹ 	<ul style="list-style-type: none"> Food safety agencies 	<ul style="list-style-type: none"> Food inspectors, lab technicians, industry actors, consumer agencies and organisations
Regional workshops	<ul style="list-style-type: none"> Recall and alert mechanisms 	<ul style="list-style-type: none"> ASEAN Food Safety Network and ASEAN Committee on Consumer Protection, CI 	
	<ul style="list-style-type: none"> Food safety information sharing 	<ul style="list-style-type: none"> WHO INFOSAN 	
	<ul style="list-style-type: none"> ASEAN GAP 	<ul style="list-style-type: none"> ASEAN Secretariat 	<ul style="list-style-type: none"> Food and agricultural producers, standards agencies, consumers, SMEs and organisations
Technical training workshops	<ul style="list-style-type: none"> Pesticide residue limits and testing 	<ul style="list-style-type: none"> Laboratory services and suppliers, technical experts on maximum residue limits in ASEAN/ SAARC, FAO 	<ul style="list-style-type: none"> Food laboratories
	<ul style="list-style-type: none"> Modern chemical instruments (GCMS, HPLC, AAS) 	<ul style="list-style-type: none"> Laboratory services and suppliers, technical experts on maximum residue limits in ASEAN/ SAARC, FAO 	<ul style="list-style-type: none"> Food laboratories

¹ The FAO Risk Analysis Toolkit is designed to assist countries with different capacities, resources and challenges to strengthen their food control systems (at the time of writing, this was still being developed).

7. Concluding remarks

At present, donor support in terms of financial, technical and infrastructural is critical to move forward all the efforts aimed at ensuring food safety in developing and least-developed countries, in both ASEAN and the wider world. Least-developed countries are seeking the support of international donors and the governments of developed countries, not only to strengthen their competency to participate in international trade, but also as a means to provide safer domestic markets and, in so doing, protect their consumers.

This exercise, which was undertaken by Consumers International with the financial support of GIZ, has led to a greater realisation that much remains to be done in the surveyed countries, given that all four face an uphill struggle to address food safety issues and that these issues are often overshadowed by other fundamental food security concerns. It is hoped that the recommendations provided in this report are taken on board to improve food safety, not only in Cambodia, Myanmar, Lao PDR and Bangladesh, but also in other developing countries where access to safe food remains an everyday struggle.

8. Appendices

Appendix I: Country Report for Cambodia

Appendix II: Country Report for Lao PDR

Appendix III: Country Report for Myanmar

Appendix IV: Country Report for Bangladesh

Contact

Mr. Thomas Breuer
Ländliche Entwicklung und Agrarwirtschaft
Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH
Friedrich-Ebert-Allee 36
53113 Bonn
Germany
Email: thomas.breuer@giz.de

Mr. Matthias Bickel
ASEAN Sustainable Agrifood Systems (SAS)
50 Department of Agriculture
Sitthiporn Building, 4th Floor
Phaholyothin Road, Ladyao,
Chatuchak, Bangkok 10900
Thailand
Email: matthias.bickel@giz.de

Mr. Till Ahnert
Standards in the Southeast Asian Food Trade
(SAFT)
C/o Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH
Menara BCA, 46th Floor
Jl. M.H. Thamrin No. 1
Jakarta 10310
Indonesia
Email: till.ahnert@giz.de

Published by:

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Author:

Consumers International
Office for Asia Pacific and the Middle East
Lot 5-1 Wisma WIM,
7 Jalan Abang Heji Openg,
Taman Tun Dr Ismail
6000 Kuala Lumpur
Malaysia
Email: consint@ciroap.org

Printed and distributed by:

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH