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The U.S. Government's Global Hunger & Food Security Initiative



FOOD SECURITY RATE Summary

This document presents the findings of the Regional Agricultural Trade Environment (RATE) assessment conducted in the ASEAN region in 2012 by the Maximizing Agricultural Revenue through Knowledge, Enterprise Development, and Trade (MARKET) Project.



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FOOD SECURITY

Regional Agricultural Trade Environment (RATE) Summary

USAID Maximizing Agricultural Revenue through Knowledge, Enterprise
Development and Trade (MARKET) Project

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On the cover: Taro in a market near Medan on the island of Sumatra
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In Brief

FOOD SECURITY

Why Food Security?

As defined by the Food and Agriculture Organization of the United Nations, food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life. On the basis of this definition, one can identify opportunities to improve food security at many levels—farm, household, market, agro-processing, retail, cross-border, regional, and global. Governments, civil society, research institutions, and private firms can take steps to help farmers' understand and use technologies that raise yields, diversify farming systems, or minimize postharvest losses; raise household incomes so more food can be purchased; recognize women as producers, consumers, and family nutrition overseers; improve institutions and infrastructure so food moves efficiently from point of production to points of sale and consumption; and establish environments that allow food businesses to start up and operate efficiently.

ASEAN's Approach

When international food prices increased sharply in 2007, ASEAN Ministers on Agriculture and Forestry adopted the ASEAN Integrated Food Security Framework and the Strategic Plan of Action on Food Security in the ASEAN Region (2009-2013) to ensure food security and to improve farmers' livelihoods. Food and agricultural cooperation activities at the regional level are overseen by the Senior Officials Meeting of the ASEAN Ministers on Agriculture and Forestry. Under its aegis, sector working groups, joint committees, and expert groups conduct specific activities, such as those affecting harmonization of food quality standards, assurance of food safety, and standardization of trade certification.

Regional Findings

Food laws and policies in many Member States promote food production, but overly rely on protectionist self-sufficiency policies that are barriers to food imports. Policies in some Member States raise food prices with decisions on importing and storage management made by public agencies. Coordination among and authority of national food security institutions varies across Member States. Most states do not have formal institutions to respond to food crises, though some have informal mechanisms.

In devising policies affecting food security, Member State governments consult more regularly with large agribusinesses than with SMEs or farmers, though there are fledgling efforts to engage with farmers.

Opportunities for ASEAN

- Continue to address issues that limit food availability, affordability, and quality.
- Create an ASEAN farmers' association to engage in dialogue on food security. Consider gender in food security plans.

Opportunities for ASEAN Member States

- Focus food security policies on access, affordability, and distribution, as well as production and self-sufficiency.
- Appoint a lead agency to coordinate interministerial coordination of food security policymaking.
- Create a national institution to respond to food crises.

AT ISSUE: STRENGTHENING ASEAN'S ENABLING ENVIRONMENT FOR FOOD SECURITY, AGRICULTURAL TRADE, AND INVESTMENT

As defined by the Food and Agriculture Organization (FAO) of the United Nations, food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life. On the basis of this definition, one can identify opportunities to improve food security at many levels—farm, household, market, agro-processing, retail, cross-border, regional, and global. Governments, civil society, research institutions, and private firms can take steps to

- Help farmers' understand and use technologies that raise yields, diversify farming systems, or minimize postharvest losses;
- Raise household incomes so more food can be purchased;
- Recognize women as producers, consumers, and family nutrition overseers;
- Improve institutions and infrastructure so food moves efficiently from point of production to points of sale and consumption; and
- Establish business enabling environments that allow food businesses to start up and operate efficiently.

Many countries, however, define food security as self-sufficiency, especially where agriculture has a large role in the economy. In most Member States of the Association of Southeast Asian Nations (ASEAN) policymakers focus self-sufficiency policy on rice.

Some structural shifts, however, may change views on food security in the region. The value of food products traded in ASEAN represents less than 10 percent of total trade. Changes in regional income and consumption suggest the need to broaden discussions of food security to include other grains and sources of fats and proteins. As consumption of seafood and meats rises, for example, soy and corn are becoming more important as feed ingredients and experience suggests that as incomes rise, people will consume more wheat products and processed foods. And as formal supermarkets take market share from informal, traditional wet markets, producers of grains, oils, produce, meats, and seafood must be able to meet supermarkets' sourcing requirements to be able to sell into these systems. See the table below on the value of food trade in ASEAN.



Achieving food security requires innovation and creativity.

Value of Food Trade in ASEAN			
Top Ten Food Products Traded (by two-digit HS Code)	Exports (US\$ million)	% Total Food Exports	% Total
Animal or vegetable fats and oils (15)	4,775.3	22.9	
Cereals (10)	2,772.4	13.3	
Beverages, spirits, vinegar (22)	1,964.6	9.4	
Sugars and confectionary (17)	1,764.8	8.5	
Miscellaneous edible preparations (21)	1,526.5	7.3	
Cereals preparations 19)	1,481.7	7.1	
Cocoa and cocoa preparations (18)	1,152.4	5.5	
Fish, crustaceans, aquatic invertebrates (03)	1,001.2	4.8	
Dairy, eggs, and other animal products (04)	726.7	3.5	
Food industry residues, prepared animal feeds (23)	563.1	2.7	
Other food products not mentioned elsewhere	3,147.8	15.1	
Total food (HS 1-23)	20,876.5	100.0	7.8
Total non-food	247,104.5		92.2
Total	267,981.0		100.0

SOURCE: ASEAN Statistics, Table 23, as of 15 Feb 2012.

ASEAN Member States have committed to regional free trade by 2015, with special consideration for rice and sugar trade. ASEAN Ministers of Agriculture and Forestry (AMAF) have committed to a food security framework that supports a multidisciplinary approach to production, agro-industry, markets and trade, information systems, emergency relief, and emerging issues such as biofuels and climate change. But some Member States continue food security policies more in line with a goal of self-sufficiency.

By most measures, most ASEAN Member States are considered moderately secure, but with some problems in undernourishment, especially among children. However, Member States vary widely by some measures of food security, ranging from the world's two largest rice exporters (Thailand and Vietnam) to two of the world's biggest rice importers (Philippines and Indonesia). Per capita income, reliance on agriculture in the economy, and agricultural performance also vary widely, suggesting that many opportunities to improve food security lie in collaboration.

Various data sources provide a quantitative view of food security and offer cross-country comparisons of food security status and trends. The FAO, for example, maintains food "balance sheets" that synthesize production, trade, and utilization data and report per capita availability of kilocalories and specific nutrients; and its Global Information and Early Warning System presents information on global commodity markets.¹ The International Food Policy and Research Institute integrates statistics from the FAO, World Bank, USDA, and other sources at its Food Security Portal. Other sources, seeking to integrate aspects of food security into one index, estimate composites based on simple or weighted averages of individual indicators. The Global Food Security Index (Economist Intelligence Unit and DuPont) combines 16 indicators of food affordability, availability, and quality/safety.² The Global Hunger Index (IFPRI, Welthungerhilfe, and Concern Worldwide) presents an equally weighted average of

undernourishment as a share of the total population and underweight and mortality rates for children under the age of five.³ The table below presents statistics on ASEAN from these two indexes.

Food Security Indicators in ASEAN						
Member State	Calories Available per Capita per Day	Global Food Security Index (100= most favorable)	Global Hunger Index (0=no hunger)			
			Population Undernourished (%)	Underweight Children Under Age 5 (%)	Mortality Children Under Age 5 (%)	GHI Composite
Malaysia	2902	63.7	2	12.9	0.6	5.2
Thailand	2862	57.4	16	7.0	1.3	8.1
Vietnam	2690	49.4	11	20.2	2.3	11.2
Indonesia	2646	45.8	13	19.6	3.5	12.0
Philippines	2580	46.6	13	20.7	2.9	12.2
Myanmar	2493	36.4	N/a	23.0	6.6	N/a
Cambodia	2382	46.6	25	28.8	5.1	19.6
Laos	2377	N/a	22	31.6	5.4	19.7

Note: N/a = Not available

SOURCES: FAOSTAT, Economist Intelligence Unit, and IFPRI Food Security Portal, various years (most data not available for Brunei or Singapore).

Two sources of food security data are available in Southeast Asia. The ASEAN Food Security Information System (AFSIS) presents data on food production, price, trade, and balance for paddy rice, soy, maize, sugarcane, and cassava, as well as other macro indicators for all Member States plus China, Japan, and Korea.⁴ The Rice Bowl Index (Frontier Strategy Group and Syngenta) focuses on farm-level, demand and price, policy and trade, and environmental trends in 14 Asian countries, including six ASEAN Member States.⁵ These are national averages, and do not reflect food security distributional concerns internal to each country. Countries are ranked according to the average per capita daily availability of calories, which tracks imperfectly the country rankings of the Global Food Security and Global Hunger Indexes.

The Danish International Development Agency and USAID are developing the *Agricultural Transformation Index*, a composite indicator that will reflect data on agribusiness, enabling environment, productivity, sustainability, profitability, and food security.⁶ A working group was formed in June 2012 and progress will be reported at the World Bank/IMF Spring 2013 meetings.

Food security has long been equated with self-sufficiency in the national policies of ASEAN Member States. Self-sufficiency principles exacerbated the 2007-2008 food price crisis. For example, when rice prices nearly tripled and India and Vietnam banned rice exports, importers, such as the National Food Authority of the Philippines, engaged in panic-buying that intensified the crisis.⁷ Many countries then sought to boost domestic production to attain rice self-sufficiency. ASEAN established an Emergency Rice Reserve, with contributions from China, Japan, and Korea. The governments of Indonesia and the Philippines established memoranda of understanding with exporting countries (Vietnam, Cambodia, Burma) to stabilize trade expectations. To date, however, private sector traders are not allowed to import rice in Indonesia or the Philippines.

One lesson from the 2007/08 food price crisis is that food trade helps countries respond better to price shocks. Indeed, as part of its Integrated Food Security Framework, ASEAN promotes regional trade in food products, acknowledging the need for compliance with provisions of the ASEAN Trade in Goods Agreement with respect to trade in food products. Still, many Member States have been slow to act on those provisions. Instead, national policies focus on productivity and domestic production, ignoring the lesson that access to global food supplies through trade can moderate price variability when domestic supply suffers a shock.⁸



The abundance and variety of food products in ASEAN markets tells only part of the food security story.

While each country faces unique food security challenges, the FAO's Global Strategic Framework (GSF) for Food Security and Nutrition⁹ provides a good benchmark for assessing food security policies and reflects lessons learned over the past several decades of agricultural development. The GSF offers recommendations to prevent global food crises, eliminate hunger, ensure food security and nutrition for all, and provides guidelines on developing food security policy. National food security and nutrition strategies, whether or not they figure in development or poverty reduction strategies, should cover all aspects of food security and nutrition, including availability, access, utilization, and stability.

To implement the guidelines, GSF recommends that countries create or reinforce high-level governance structures to oversee and coordinate national food security and nutrition policies and programs. Food security institutions should involve representatives from ministries or national agencies from related

areas, including agriculture, social protection, development, health, infrastructure, education, finance, industry, technology, and trade.

The GSF also recommends that countries create mechanisms to coordinate strategies and actions with local levels of government and various stakeholders. States should consider setting up frameworks for national and local dialogue on the design, implementation, and monitoring of food security and nutrition strategies, legislation, policies, and programs. Stakeholders include local governments, NGOs, agribusinesses, farmers' organizations, small-scale and traditional food producers, women and youth associations, representatives of the groups most affected by food insecurity, and donors and development partners.

. Countries stand to benefit from improved regional coordination and collaboration on food security and intergovernmental organizations like ASEAN should agree on acceptable, harmonized policy outcomes and mark progress toward their accomplishment. Member States can decide on specific food security interventions. These policies can cover regional investment in national efforts and specific issues such as eliminating intraregional trade barriers, harmonizing information systems, and coordinating monitoring systems for food emergencies.

This paper summarizes the legal and institutional framework for food security, agricultural trade, and related investment in the ASEAN region. It also suggests opportunities for action to promote food security in ASEAN through expanded regional food trade and investment.

How Food Security Relates to Other RATE Topics

Informal Economy. Most of ASEAN's food-insecure people toil in the region's informal economies.

Infrastructure. Weaknesses in infrastructure may imperil public access to safe and healthy food, particularly in times of emergency.

Trade Facilitation. Promoting and facilitating trade in food and other agricultural products may improve food security, increase income through exports, improve access to productivity advancements, and result in nutritionally varied diets.

Nontariff Barriers. Issues of food quality are part of ASEAN's agenda for harmonization of food standards, which is also a significant issue in the regional discussion of NTBs.

Transparency and Accountability. The close association of corruption and poverty threatens the food security of ASEAN's vulnerable populations.

Gender. A family's food security is often linked to the resources women have to grow, purchase, and prepare food.

WHAT IS ASEAN'S CURRENT APPROACH TO FOOD SECURITY?

The ASEAN Economic Community (AEC) today encompasses ministerial meetings on economic policy, energy, agriculture and forestry, finance, minerals, science and technology, transport, telecommunications and information technology, and tourism. In 2015, the AEC will be creating a single market and production base and the interactions among the Member States will change, from consultative meetings to actions necessary for the integration of 10 economies.

The ASEAN Ministerial Meeting on Agriculture and Forestry (AMAF) bears immediate responsibility for food security coordination. Other ministerial groups are responsible for aspects of food security, such as food science and technology, biotechnology, regional trade (ASEAN Economic Ministers), marine

science (ASEAN Ministerial Meeting on Science and Technology), and the role of women in food and agriculture (ASEAN Committee on Women in the ASEAN Socio-Cultural Community). This assignment of responsibilities fragments the focus and, in the absence of cross-committee coordination, means that certain dimensions of food security are overlooked.

According to AMAF's website, cooperation in agriculture originally focused exclusively on food supply but was broadened in 1977 to include agriculture and forestry in keeping with the responsibilities of most Member States' agriculture ministries.¹⁰ Today, AMAF cooperates on food security, food handling, agricultural training and extension, agricultural cooperatives, and crop, livestock, and fisheries production. The Senior Officials Meeting of the AMAF (SOM-AMAF) oversees regional activities in food and agricultural cooperation. The SOM-AMAF establishes sector working groups, joint committees, and expert groups to work on specific activities, including harmonization of food quality standards, assurance of food safety, and standardization of trade certification.

When international food prices increased sharply in 2007-2008, AMAF adopted the ASEAN Integrated Food Security (AIFS) Framework and its Strategic Plan of Action on Food Security in the ASEAN Region (SPA-FS) (2009-2013) to ensure food security and to improve the livelihoods of farmers.¹¹ The SPA-FS defines food security according to the internationally accepted definition cited at the beginning of this report, highlighting food availability, food accessibility, and utilization. It also identifies rice, maize, soybean, sugar, and cassava as priority commodities. The SPA-FS is organized into six strategic thrusts that seek to (1) strengthen food security arrangements; (2) promote conditions conducive to food markets and trade; (3) strengthen integrated food security information systems; (4) promote sustainable food production; (5) encourage investment in food and agro-based industry; and (6) identify and address emerging issues affecting food security (i.e., biofuels and climate change). Under the SPA-FS, the AMAF has

- Concluded the ASEAN Plus Three Emergency Rice Reserve Agreement,
- Strengthened the ASEAN Food Security Reserve Board,
- Prepared to reinforce the ASEAN Food Security Information System (AFSIS),
- Completed a study and joint policy forum on foreign direct investment in agriculture in ASEAN,
- Conducted two formal government-private sector consultations (the AMAF-Private Sector Dialogue events in 2011 and 2012), and
- Conducted a midterm evaluation of the AIFS/SPA-FS.¹²

FOOD SECURITY IN ASEAN: HIGHLIGHTS FROM THE RATE ASSESSMENT

The RATE assessment reviewed the status of food security in ASEAN in four areas: legal framework, implementing institutions, supporting institutions, and social dynamics.¹³ Questions centered on the presence of a formal legal, policy, and institutional framework for food security that is in step with international best practice, as well as on other aspects of food security, including the extent to which policies comply with regional commitments to free trade, ability to respond to food crises, and public-private dialogue on policy. Key findings of RATE inquiry are set forth below.

Food Security Policies in ASEAN Member States: Promoting Production and Food Self-sufficiency

As shown by the food balance sheet data presented earlier, ASEAN's greatest food security challenges are in access, distribution, and affordability, rather than availability. But protectionist self-sufficiency policies in many Member States promote domestic food production, even if costly and inefficient and erect barriers to food imports. In some states such policies raise food prices for consumers and leave importing and storage management decisions to public agencies. In addition, food security policy planning is not as integrated or comprehensive in all Member States as the AIFS/SPA-FS would suggest, thus jeopardizing achievement of true food security.



Rice is the core food security crop in ASEAN.

The Philippines, for example, lacks a comprehensive approach to food security and policies for rice self-sufficiency have proven counterproductive. The National Food Authority (NFA)—the state-owned enterprise with a monopoly on rice imports and responsible for producer price support and domestic consumer price stabilization—has operated at a loss for many years and done little to stimulate rice production.¹⁴ The Philippines also exempts rice as a staple food from its WTO commitments. The Philippine Development Plan recognizes these policy failures and has mandated reorganization of the NFA.¹⁵ The plan states that the NFA's actions have led to huge public losses, made domestic prices more not less volatile, reduced the welfare of both consumers and producers, and discouraged the private sector from investing in distribution and storage facilities. On the whole, the NFA support price has raised consumer prices in ten regions and contributed little to price stabilization. One main goal of the Philippine Food Staples Self-sufficiency Roadmap (FSSR) 2011–2016 is to achieve self-sufficiency in rice by 2013

and maintain it through 2016.¹⁶ The roadmap also outlines protectionist policies for white corn, sweet potato, cassava, and plantain.

Given the rise in prices, civil society in the Philippines is calling for food policy reform. In 2011, the Philippine Institute for Development Studies argued that “the country’s policies for rice self-sufficiency are obsolete and increasingly untenable.”¹⁷ One goal of the Philippine Development Plan is to transform the NFA into an agency that (1) maintains a predictable regulatory environment for rice trade and (2) responds to extreme shocks in food supply and prices.

Policies in Indonesia, Thailand, and Vietnam also emphasize domestic food production without focusing adequately on distribution and access. Food security challenges in Indonesia are rooted in problems with distribution and affordability. The country’s restrictive import policies, for example, have made rice prices significantly higher than world price equivalents.¹⁸ Weaknesses in the legal framework for infrastructure ultimately impede attempts to improve food distribution; and protectionist trade laws, particularly with respect to staple crops, drive up prices for consumers. The legal framework also does not adequately incorporate opportunities to improve food security by raising agricultural productivity.

Thailand produces a large quantity and wide variety of agricultural products and is a net exporter of food. Its main food security problem is improving access to an adequate diet for poor households and Thailand’s approach is to try to increase incomes of the rural poor, using a variety of pricing schemes. As the world’s second largest exporter of rice, Vietnam’s main food security problems are distribution and access. Its food security policies focus on reducing the number of people who do not have enough to eat and whose diets are poor.

Food policy in many ASEAN Member States sets goals for self-sufficiency in rice or other staples. Some states strengthened those policies in reaction to the 2007-2008 food price crisis. Targets for rice self-sufficiency often indicate the percentage of rice consumption that should be met by domestic production. In several Member States, a national rice buying agency controls rice prices to provide price support and stability for farmers. These domestic support policies often conflict with free trade commitments and consumer interests.

Indonesia’s 2012 Food Law, for example, has three objectives: food sovereignty, self-sufficiency, and security.¹⁹ This emphasis on self-sufficiency conflicts with commitments to agricultural trade established through membership in the WTO and ASEAN. In August 2012, the government announced that the state

View from the Philippines

REFORMING THE NATIONAL FOOD AUTHORITY

Among WTO members, only the Philippines and South Korea maintain quantitative restrictions (QRs) on rice imports. The monopoly power of the National Food Authority (NFA) and its strict implementation of QRs result in high farm-gate rice prices and consequently consumers pay high prices for rice. This policy has contributed to policymakers’ reliance on price controls, rather than productivity increases, to support farmers’ incomes and ensure domestic food security. The NFA, however, is set to be reformed in the coming years. The food security program, for example, has already been adjusted to correct for some unintended consequences. Purchases of imported rice will now be handled through an auction system that will result in prices close or identical to market prices. In addition, since high costs and the lack of access to credit are principal causes of high prices for domestically produced staple crops, efforts are being made under the Comprehensive Agrarian Reform Program to broaden access to affordable credit and to help transform agrarian reform beneficiaries into viable entrepreneurs.

logistics agency, BULOG, will not only intervene in matters of rice trade but also impose price controls on sugar, corn, meat, and soy in the unlikely event that domestic production and national food reserves cannot meet domestic demand.²⁰ Producers, however, are beginning to realize that protectionist policies are not always pro-farmer because they can reduce access to high-quality inputs (e.g., seed and fertilizer). The Indonesian National Farmers Union recently stated that to support farmers the government also needs to improve irrigation systems, infrastructure, and rural access roads.

In Malaysia, as in most ASEAN Member States, rice is the focus of formal food security. After the price shocks and supply shortages of 2008, Malaysia implemented a “temporary” policy that promoted self-sufficiency in rice production (70 percent of consumption). Malaysia’s basic framework for national rice policy, put in place in 1974 after the global food crisis of 1972-1973, mandates that only one buyer may purchase wholesale quantities of rice. Until 1996, that buyer was the Rice Board, a corporation wholly owned by the government. In 1996, a private entity, BERNAS, was granted a 15-year concession to act as the national gatekeeper for rice. BERNAS defends producer paddy prices, manages farm input subsidies, runs milling operations, maintains the nation’s rice stockpile, and acts as the sole importer of rice. This privileged position was extended in 2011 for another 10 years. Malaysia’s National Agri-Food Policy (2011-2020), a successor to the Third National Agriculture Policy, reportedly aims to diminish dependence on food imports by, among other measures, reducing dependence on livestock imports. However, there is also increasing government policy emphasis on free trade. Practical implementation of food security policies frequently involves trade-offs among stakeholders’ interests (e.g., self-sufficiency targets that favor domestic rice producers versus open trade that tends to favor consumers).

View from Malaysia

DEVELOPING OUT OF ITS FOOD SECURITY FRAMEWORK

Despite its food self-sufficiency goals and the special role in the market accorded to BERNAS, Malaysia is a net importer of food—it reportedly sustains a net food import balance of about US\$1 billion per year. The country has undergone vast change by way greatly reduced poverty levels, significant change in dietary preferences, and a much stronger private sector. Malaysia is able to import food because it is strong exporter of petroleum, palm oil, rubber, tin, and manufactures. Yet its food policies encourage domestic production of agricultural products. The country has enacted a number of laws that together provide for national research supporting food crop productivity, removal of infrastructure bottlenecks that obstruct food distribution, and promotion of safety in domestic and imported food products.

Also conflicting with the free trade commitments that attach to ASEAN and WTO membership is Laos’ 1998 Law on Agriculture.²¹ The law allows the state to protect farmers’ interests by encouraging the expansion of production and reducing or restricting the import of unnecessary agricultural products. The law declares that the state ensures minimum prices for certain agricultural products necessary for people’s lives. It requires the state to buy commodities to maintain stable prices and to prevent oppressive pricing of agricultural products to protect producers and consumers.

In Thailand as well, the government intervenes in agricultural markets to assist food producers (of rice, especially, but also sugar and other food commodities). The government uses various policy measures—price supports, a rice mortgage/pledge program, agricultural credit provisions, trade tariffs, and quotas—to support domestic production. The interventions are a result of the government’s stated commitment to improve food security, especially for the rural poor. Intervention in domestic markets, however, has resulted in production surpluses that lead to production stockpiling, and distortions in the prices of certain

food products. Such interventions may also distort farmers' incentives to produce alternative crops and may run counter to Thailand's international commitments.

The food security policies of Cambodia and Vietnam come closer to abiding by free trade agreements. Cambodia's policy on food security is generally consistent with its commitments to free trade, though the country's trade facilitation system is considered weak. According to government officials, food security is the country's top priority, such that only the surplus of its rice crop is exported, although there are no quotas or specific export restrictions in place.

In Vietnam, food security institutions generally act in a manner consistent with commitments to free trade. These institutions include the Ministry of Agriculture and Rural Development, which bears primary responsibility for food security; and the Ministry of Natural Resources and Environment, responsible for land-use management, in coordination with the Ministry of Trade and Industry, Ministry of Construction and Transport, and provincial People's Committees. Though no agricultural goods are subject to export quotas or formal tariffs, the Ministry of Finance has the authority to limit exports in a period of food security crisis or when the government determines that measures are needed to protect the environment or natural resources. Additionally, because of certain attempts to protect Vietnamese input industries, feed prices are high and tariffs were recently raised on fertilizer.

View from Cambodia

FOOD SECURITY INDICATORS HAVE IMPROVED, BUT CHALLENGES REMAIN

In Cambodia, national policy and government efforts—along with a “peace dividend” resulting from the country's emergence from many years of conflict—have significantly improved food security over the past decade. In 2000, nearly half of Cambodia's children suffered from chronic or a combination of chronic and acute protein-energy malnutrition. By 2005, the rate of acute protein-energy malnutrition was down by more than half. Still, rural poverty rates in Cambodia are among the highest in the region and many Cambodians are far from food-secure. The Global Food Security Index ranks Cambodia 89 out of 105 countries surveyed. Challenges cited in the index include lack of government investment in agricultural R&D and poor agriculture-related infrastructure. Food quality and food safety conditions must also be addressed.

National Food Security Institutions: Insufficient Coordination

The FAO Global Strategic Framework for Food Security and Nutrition recommends that countries appoint an interministerial group to coordinate food security policy. To implement this recommendation, senior officials must agree on the importance of such coordination and policymakers must have data on a wide variety of food security indicators. This, in turn, requires national statistical services to collect data that makes reporting on food availability, access, utilization, and stability possible (e.g., data on food production, markets, trade, commodity markets, livelihoods, and consumption and nutrition). As described below, the authority and coordination of national food security institutions varies widely across ASEAN Member States.

Malaysia's food security institution coordinates government agencies involved in food-related issues and is organizationally well-positioned because the Minister of Agriculture reports directly to the Prime Minister. According to its mission statement, the Ministry of Agriculture is charged with transforming the country's agriculture and agro-based industry into a modern, dynamic, and competitive sector; positioning Malaysia as a world food exporter; and developing the agriculture sector as the country's engine of

growth. Other ministries with key roles in food security include the Ministry of International Trade and Industry and the Ministry of Finance. Through long-established roles and institutions, policy coordination is fairly strong. Federal agencies significantly coordinate their work with state and local governments.

Thailand's Agricultural Economics Office formulates agricultural policy and holds a strong position in the government, but competition among agencies and departments involved with food security has slowed programmatic integration. The government has attempted to integrate various institutions through dialogue and by moving groups into the same buildings.

In the Philippines, the National Convergence Initiative, a multisector and integrated planning approach adopted by three rural development agencies, coordinates planning, programming, budgeting, and monitoring and evaluation of progress in rural sector goals.

Cambodia's Council for Agricultural and Rural Development is mandated to manage food security as a cross-cutting issue for the government and reports directly to the Prime Minister.

Under its 2012 Food Law, Indonesia created the Food Security Agency. Housed in the Ministry of Agriculture, the FSA acts as a coordinating body for food security-related ministries. Gaps in coordination with regional and local institutions that are important in responding to emergency food shortages are still considerable, however. The FSA recently pushed to become a cabinet-level post so that it has more authority by reporting directly to the president.

In Laos, coordination is lacking and policies by various ministries, including the Ministry of Trade and Agriculture, are criticized for being contradictory. The National Board for Rural Development and Poverty Alleviation is intended to act as a

coordinating body. According to the Ministry of Agriculture and Forestry's Agriculture Strategy 2020, five government agencies share responsibility for rural development, land, natural resources, and agriculture. Many of these agencies are new or have been reorganized so the risk of overlapping jurisdiction, duplicative effort, and confusion in roles and responsibilities is high.



Communities, like this one having lunch in Luang Prabang, Laos, often share resources to ensure food security for all.

In Vietnam, the Ministry of Agriculture and Rural Development is the primary food security institution. A resolution on food security coordination introduced in 2009 has not yet been implemented. Vietnam also announced plans to establish a National Food Security Committee, but the committee has not yet been established.

Mechanisms for Responding to a Food Security Crisis

The new ASEAN Plus Three Emergency Rice Reserve (APTERR) is a cash fund and a physical stockpile of 800,000 metric tons of milled rice contributed by Member States and by China, Japan, and Korea (the latter three provided nearly 90 percent of the physical stockpile and three-quarters of the capital contribution of approximately US\$4 million). The reserve is to be managed by the ASEAN Food Security Reserve Board and supported by a secretariat. Rice is to be disbursed only during emergencies and if an APTERR party is unable to procure supplies from world markets; detailed rules of storage and disbursement are unclear from the APTERR agreement.²²

Only Vietnam and Thailand have formal institutions to respond to food crises; several other Member States have informal mechanisms. In Vietnam, a Natural Disaster Committee responds to immediate food crises. The Committee is led by the Ministry of Agriculture and Rural Development and involves many ministries. Under the country's food policy, the Ministry of Finance may take steps to control both food prices and exports during a crisis but has yet to exercise this option. Vietnam does not have a national program that regularly provides free or subsidized food but the government does supply food in cases of emergency.

Thailand's Department of Disaster Prevention and Mitigation assumes a number of special powers in an emergency. After the 2004 tsunami, Thailand began reforming its civil defense services to ensure better emergency response. Floods in 2011 showed that there is still room for improvement, especially if the country is to return to a position in which it can export significant volumes of rice. Likewise, after the major natural disasters of recent years, Indonesia's national and local institutions are now better prepared for potential food crises and the logistics agency, BULOG, maintains a rice stockpile to respond to food shortages.

Malaysia and Philippines both have emergency rice stockpiles that were put into place or expanded after the 2008 rice crisis. Malaysia's "temporary" food security policy increased the national stockpile from an amount equivalent to 45 days of rice consumption to an amount equivalent to three months' consumption. The stipulations of that policy remain in effect today. Malaysia has no formal rapid-response institution charged with monitoring and countering threats to food security. Nonetheless, during the food crisis of 2008, the government responded successfully through government-to-government negotiations with Thailand and Vietnam. Since then, national rice buyer BERNAS has recommended establishing a multi-agency Rice Crisis Committee in the event that there are early warnings about a crisis in rice availability. In the Philippines, the NFA also maintains a smaller food security reserve, with rice stocks kept at amounts equivalent to 15 days of consumption year-round.

Laos and Cambodia have less capacity to respond to food security crises. Both have relied heavily on donors during food crises and other emergencies. Laos participated in the FAO's Food Insecurity Vulnerability Information and Mapping System, but that initiative ended in 2008 and nothing has taken its place. The Council for Agriculture and Rural Development oversees the Cambodian government's

food security strategy, though its ability to respond to a crisis is not clear. As in the past, the government would likely rely on donors to respond to food emergencies.

Private Sector Dialogue on Food Security: Better Outreach to Farmers Needed

In ASEAN, government food security policies would benefit from public evaluation and comment, as is the custom in many Western governments. RATE interviews suggest that many Member State governments consult more regularly with large agribusinesses than with SMEs or farmers organizations, though there are fledgling efforts to engage with farmers' forums. Recent AMAF dialogues with "the private sector," for example, have included representatives of large agribusiness, farmers' groups and civil society. In some Member States, there is little public involvement in government decision-making. However, universities and policy institutes appear to be active in dialogue on food security and contribute to policymaking in many countries.

In Laos and Vietnam, dialogue between government and the private sector on food security is weak. Laos has few private sector organizations, marketing boards, commodity associations, or farmer organizations sophisticated enough to participate in policy formation. Donors have worked with farmer organizations to help them engage the government on policy issues with some success. In Vietnam, dialogue between the private sector and farmer organizations is nascent. In 2010, for example, the Public-Private Task Force on Sustainable Agricultural Growth was established with help from the World Economic Forum to promote investment in the agriculture sector.²³ Vietnam's emphasis on rice as critical to food security keeps the debate chiefly in the public domain, since rice trade takes place on a government-to-government basis.

The Government of Malaysia does not engage in significant dialogue on food security with the private sector, except with BERNAS. As holder of the rice trade monopoly in Malaysia, BERNAS is highly active in national discussions of food security. Other private organizations are not, even though they are engaged in advocacy and private-sector development more generally. It does not appear that farmer organizations are particularly strong in advocacy or public dialogue, though members are well aware of the potential to assist individual farmers.

In Cambodia, Indonesia, and Philippines, governments seek input on food security policy from multinational corporations (MNCs) and large agribusinesses and traders but not small-scale producers or farmers associations. Indonesia's KADIN—the national chamber of commerce and industry—has a food and agriculture group that participates regularly in national food policy discussions. MNCs in Indonesia are also well represented in dialogue about trade in agricultural products and have access to government decision-makers through national and regional business organizations. SMEs are less well represented, and government tends to interpret their needs as consistent with Indonesia's protectionist trade policies.

View from Malaysia

STRONG INTEGRATION OF UNIVERSITY PROGRAMS AND FOOD SECURITY DIALOGUE

The Institute of Agricultural and Food Policy Studies, which is housed at the Universiti Putra Malaysia, participates in committees of ministries and forms technical advisory committees. A strong, independent voice for the agriculture sector, the institute brought together stakeholders in "policy labs" to help prepare the national agro-food policy of 2011. Similarly, the Malaysia Agricultural Research and Development Institute (MARDI) is advancing knowledge about the country's rice supply, including research on seed, productivity, and postharvest loss. Through its technology transfer initiatives, MARDI supports the government's goal to make food more available, accessible, and affordable.

Although farmer organizations are valued as contributors to national dialogue, their private sector values are not necessarily appreciated—rather, they are perceived as representing traditional interests in fertilizer subsidies and agricultural price supports. There is an increasing perception among producers that protectionist food practices are not always in the best interest of farmers because such policies reduce access to imported inputs.



Commodities, such as eggs, that enjoy economies of scale, benefit greatly from efficient trade.

Cambodia has strong mechanisms for dialogue on food security but small producers report that they do not feel adequately heard. The government and private sector work together through semi-annual meetings and through at least three working groups relevant to food security: agro-industry, export products, and rice. These meetings and working groups allow the government to regularly consider private sector perspectives in policy matters. Smaller organizations, however, report that they have little more than “observer status” at the meetings and that larger, more powerful groups exert much more influence over the agendas.

The Philippines has improved food security dialogue by reforming food security agencies that solicit input from the private sector. Recent reforms—such as the integration of rural development agencies through the National Convergence Initiative and adjustments in the role of the National Food Authority—have sparked public discussion on management of food security and required public and civil society input on budget matters. Businesses and NGOs are fully part of the process, but small rural farmers are not, except when their views are put forth by NGOs. This is especially a problem in provinces far from the capital. It is too early to gauge the impact of reforms or whether they will be broadened.

In many Member States, universities and policy institutes provide input for food security policies, although in some cases they hesitate to criticize the government. In Malaysia university programs, research, and food security issues are well integrated. In the Philippines, several NGOs solicit the views of members and publish position papers, editorials, and other contributions to the food security debate. Many former policymakers are now associated with local universities and publish widely on food security, especially on rice and agricultural trade. In Thailand, institutions such as the National Economic and Social Development Board, a government-affiliated think tank, and Kasetsart University of Agriculture contribute to national dialogue on agriculture and food security. Indonesia's national agricultural university is a valued participant in food security dialogue, although it tends to support the "self-sufficiency" model. A host of other policy institutes and associations are also active in dialogue, but their influence beyond the capital is limited.

In Cambodia and Laos, universities and policy institutes also contribute to food security dialogue, but are relatively circumspect in doing so. Cambodia's policy institutes, mostly through the support of donors, contribute significantly to dialogue on food security and related matters, such as climate change. They take care to couch their opinions in language that cannot be perceived as too critical of the national government. In Laos, the National University Faculty of Agriculture engages in discussion with the government, but like most supporting institutions in Lao, it is too deeply connected to the government to be an independent voice for reform. Some academics are critical of the government's focus of food self-sufficiency and productivity but are reluctant to risk appearing to be at odds with the government.

View from Thailand

VARYING LEVELS OF PRIVATE SECTOR PARTICIPATION IN FOOD SECURITY DIALOGUE

Thailand's large and well-organized private sector plays a significant role in national discussions of agriculture. But medium-sized as well as large companies consulted for the RATE assessment say that their opinions do not seem to be taken into account in actual policies. For example, strong opposition to Thailand's rice-pledging scheme among the private sector constituencies that do not profit from the scheme has not changed the government's position. The experiences of Thailand's farmer organizations and cooperatives vary with respect to their participation in national discussions. Some say that they can communicate with the government on capacity and productivity issues and that the government is responsive. Other representatives of the agricultural sector contend that farmers are minimally involved in food security discussions, chiefly because they are engrossed in their day-to-day work. The government sometimes tries to facilitate dialogue but for a variety of reasons—cultural, social, educational, etc.,—farmers' groups are not especially active in discussions of policy.

OPPORTUNITIES FOR ACTION

There are many pathways to change in ASEAN and its Member States. Reforms can be advanced by a single, visionary champion or a by a groundswell of influential stakeholders. Some reforms take root after many years, while others happen quickly once empowered people act quickly and decisively in a way that reflects public demand and best practice. In most cases, a "big idea"—including the type often promoted by the FAO—can be broken down into many smaller tasks that can be executed by a variety of public and private actors. Accordingly, the Opportunities for Action set forth below are multifaceted. They may be viewed as a foundation for regional or domestic policy development, as a resource for private sector initiatives, as a benchmark for tracking change, as a reference for academic instruction, and, most immediately, as a "jumping off point" for stakeholder discussion and consensus-building.

Opportunities for ASEAN and Regional Entities

To improve food security planning in the ASEAN region, “multitiered” approaches that are interministerial in nature are needed at the regional as well as the Member State level. Farmers’ interests need to be balanced against consumers’ interests; the interests of the agricultural sector need to be balanced against the interests of agro-industries, traders, and retail firms. This is why reliance on a single ministerial meeting weakens the likelihood of achieving true food security for all.

Address Food Affordability

Improving the flow of trade in food and agriculture products could boost food security in the ASEAN region by raising export-based income, fostering access to productivity advancements, lowering food prices, and making nutritionally varied diets possible. ASEAN leaders have committed to free trade principles and to promoting food trade as part of its SPA-FS, but many Member States continue to focus on domestic food production rather than agricultural trade. In some Member States food is less affordable than it would be otherwise. ASEAN’s commitments to regionally integrated trade by 2015 under the Trade in Goods Agreement and to food trade under the AIFS/SPA-FS are significant; however, cooperation between ASEAN Economic Ministers (AEM) and AMAF ministerial meetings on these issues would be beneficial. Opportunities for dialogue and cooperation between AMAF and other bodies engaged in promoting free trade include the following:

- Have AEM and AMAF prepare a joint statement on how regional trade integration objectives will be achieved while food sovereignty, security, and self-sufficiency objectives are respected.
- Have companies participating in private sector consultations on the ASEAN Single Window (ASW) identify and begin to address constraints on food trade facilitation, such as lack of harmonization of food safety standards, conformity assessment procedures, and certifications.
- Institute quarterly or semiannual progress briefings between representatives of trade facilitation activities. These representatives should be from the ASW initiative and from ASEAN committees promoting food security, especially working groups on harmonization of commodity standards, testing, and mutual recognition.
- Establish a joint meeting of working groups or committees to share knowledge, processes, and progress on accomplishing both ATIGA integration and food security goals. For example, the Coordinating Committee on ATIGA could meet with the ASEAN Food Security Reserve Board, to outline how regional trade integration can support food security.
- Share more information—via ASEAN, NGO, university, or private-sector websites—about reforms affecting regional trade in food products, inviting comments from stakeholders in the regional trade in agri-food products.
- Continue SOM-AMAF’s and AMAF’s regular consultations with regional and Member State-based private sector associations on strengthening and streamlining trade in agricultural and food products.
- Create and monitor benchmarks for integration of trade improvement initiatives with food security objectives, including improvements in affordability of food.

Address Food Availability

policy institutes One way to improve food security in ASEAN is share more information. ASEAN agricultural leaders would benefit from a regular briefing note that synthesizes the monitoring data collected by national and international think tanks. With timely information on domestic and at-the-border prices for producers and consumers, on domestic supplies, on trade flows, and on trends in diet and hunger indicators (especially of the poorest quintile of the population in each Member State and disaggregated by gender, where appropriate) policymakers will be better able to foresee, prepare for, and react to food emergencies. The SPA-FS calls for reinforcing the ASEAN Food Security Information System to better forecast, plan, and monitor food supply and utilization in the region, but that system remains weak (its adoption by the “Plus Three” countries may bring more resources and direction). As detailed earlier in this report, multicountry benchmarking of food balances, food security, hunger, and agricultural transformation indicators is underway globally. ASEAN’s contributions to benchmarking and the insights it gains from benchmarking should help focus regional policymaking on all four dimensions of food security. To promote these goals, the AMAF can

- Request a quarterly or semiannual synthesis of food security information for Member States, possibly modeled on the FAO/GIEWS, USAID’s Famine Early Warning System news briefs, IFPRI’s Food Security Portal, or other timely economic news trackers. The ASEAN Secretariat’s Agriculture Industries Division could distribute the results electronically to the SOM-AMAF and other interested parties.
- Engage in information sharing with networks of agricultural universities throughout ASEAN, since many universities in the region are involved in some way in analyzing food security issues on behalf of national governments.

Harmonize Food Quality and Safety Standards by 2015

Through the Socio-Cultural Community Blueprint, ASEAN Member States committed in 2009 to harmonizing their standards for food safety. Doing so will go a long way toward reducing NTBs. As ASEAN moves closer to the establishment of its formal communities in 2015, however, that ideal is a long way from being achieved.

Member states can support continued economic integration by harmonizing more of their standards for food safety, testing, labeling, plant health, SPS, etc. International standards, such as those set forth through in WTO SPS Agreement, the Codex Alimentarius, the World Animal Health Organization, and the International Plant Health Convention, can provide a threshold for harmonization, and gradual phase-ins can account for the wide variety of production and testing capacities across Member States. Initial efforts could focus on a few industries, such as aquaculture and livestock.

policy institutes Mutual recognition agreements pertaining to food standards and conformity assessment would achieve the same goal and support intra-ASEAN trade. The institutional framework for much of this work is already in place. The remaining challenge is to develop consensus among Member States and continually report progress via shared information platforms. An ASEAN Food Safety Network exists online, an ASEAN Expert Group on Food Safety has been established under the health ministers’ senior officials, and an ASEAN Food Safety Improvement Plan has been formulated.²⁴ Coordination of work and progress reporting between these groups and ministers of trade and of agriculture is essential for establishment of the AEC in 2015.

Create an ASEAN Farmer's Association

At the national level, ASEAN Member States do not sufficiently engage with farmers organizations in dialogue on food security issues. As a result, many national food policies do not reflect the needs of smallholders and SMEs. ASEAN can promote public-private dialogue at the regional level by creating an ASEAN farmer's association.

Integrate Consideration of Gender Issues into Regional Food-security Planning

As detailed in a USAID/MARKET-sponsored policy paper on gender and food security, trade liberalization encourages production of export (cash) crops, while tending to increase imports of food crops that compete with locally produced crops. These trends affect men and women differently. Women are usually small-scale food-crop farmers, while men are usually producers and sellers of agricultural commodities traded in regional and international markets.²⁵ This research complements gender-related findings in food security generally. Namely, that addressing gender in the context of food security can reduce hunger, improve food security and nutrition, and reduce poverty.²⁶ For example, in 2011 the FAO found that “giving women the same access as men to agricultural resources could increase production on women's farms in developing countries by 20 to 30%,” thereby raising total agricultural production in developing countries by 2.5 to 4 percent, which could in turn reduce the number of hungry people in the world by 12 to 17 percent, or 100 to 150 million people.²⁷

There are many opportunities for ASEAN and other institutions to mainstream gender into policy planning on food security:

- Include a gender specialist or gender discussion in all meetings and conferences on food security.
- Through small changes in routine and practice, take into account the needs and preferences of both men and women when examining or promoting new agricultural varieties and technologies.
- Encourage university, think tank, and private-sector research on gender and trade in Southeast Asia, in particular the impact of trade on women's economic participation and women's contributions to household budgets.
- Invite Member States to discuss what kind of gender interventions may produce the most value, and what statistics on gender would be most useful in meeting their objectives.

Opportunities for Member States

Refocus National Food Security Policies on Access, Affordability, and Distribution

Despite ASEAN's commitment to promoting regional food trade, many Member States continue to define food security as self-sufficiency. Member states should revise policies to align with ASEAN's definition of food security and to meet their obligations to ASEAN free trade agreements and realization of the AEC in 2015. Some Member States are moving in this direction through policy reform, but reforms are not yet complete. National food security policies should aim to make food more affordable by promoting competition and trade, and to improve distribution and access by strengthening infrastructure and reducing postharvest loss.

Appoint Lead Agencies for Interministerial Coordination of Food Security Approaches

Lack of coordination between ministries and agencies on food security policy is a significant problem across ASEAN Member States. Governments can reform various food security-related agencies by having a single body at a high level coordinate policymaking across agencies. Here, Malaysia's well-placed and well-coordinated food security agency is a model. If current efforts at reform and coordination in the Philippines and Vietnam prove successful, they too can be models for other Member States.

Create National Institutions for Responding to Food Security Crises

ASEAN now has a regional response mechanism for regional rice emergencies, and all Member States could establish similar national mechanisms to mitigate the effects of food-related shocks. Laos and Cambodia need stronger capacity to respond to food crises, considering that they have been donor-dependent in such situations in the past.²⁸ Capacity is needed in many areas: frameworks for understanding food security and the role of private food markets in responding to supply shocks; data collection on indicators necessary to monitor food security in subregions and among the poorest; building a network of government, civil society, and private responders to food emergencies; and implementing best practices in emergency food relief.

Thailand's Department of Disaster Prevention and Mitigation and Vietnam's Natural Disaster Committee are models institutions. Earlier capacity building in disaster management and emergency response by the U.S.-ASEAN Technical Assistance and Training Facility may also provide lessons on developing a common conceptual approach to data collection, monitoring, and resource mobilization for food security. This work at the national level is distinct from joint activities by APTERR. A third model of potential interest is the Famine Early Warning System project supported since 1985 by USAID.

Endnotes

¹ Consumption of 2,100 calories per day is considered the minimum by international organizations, though age, gender, childbearing status, and climate will each affect this reference. See <http://faostat3.fao.org/home/index.html>.

² See <http://foodsecurityindex.eiu.com>.

³ See <http://www.ifpri.org/publication/2012-global-hunger-index>.

⁴ See <http://afsis.oae.go.th/>. The midterm evaluation identified multiple opportunities for strengthening what is still a very basic information source. USAID's Famine Early Warning System project, which focuses on famine-prone countries in sub-Saharan Africa, is one model of a comprehensive food crisis monitoring system, including evaluation of weather, production, markets and trade, and livelihoods trends. See www.fews.net.

⁵ The Rice Bowl Index presents trends rather than individual country for composite groups of factors. See <http://www.ricebowlindex.com>.

⁶ See http://um.dk/en/~media/UM/English-site/Documents/Danida/Activities/TAS/Events/Agricultural%20Index/CopenhagenConsultationDraftReport_FINAL.jpg.

⁷ Tom Slayton. 2009. Rice Crisis Forensics: How Asian Governments Carelessly Set the World Rice Market on Fire. Working Paper Number 163. Washington, DC: Center for Global Development.

- ⁸ Hamid R. Alavi with Aira Htenas, Ron Kopicki, Andrew W. Shepherd, and Ramon Clarete. 2012, *Trusting Trade and the Private Sector for Food Security in Southeast Asia*. Washington, D.C.: The World Bank.
- ⁹ Committee on World Food Security, Global Strategic Framework for Food Security and Nutrition, October 2012, available at <http://www.fao.org/docrep/meeting/026/ME498E.pdf>.
- ¹⁰ See <http://www.asean.org/communities/asean-economic-community/category/asean-ministerial-meeting-on-agriculture-and-forestry-amaf>.
- ¹¹ ASEAN Integrated Food Security Framework and Strategic Plan of Action on Food Security in the ASEAN Region 2009-2013, available at <http://cil.nus.edu.sg/rp/pdf/2009%20AIFS%20Framework%20and%20Strategic%20Plan%20of%20Action%20on%20Food%20Security%20in%20the%20ASEAN%20Region-pdf.pdf>.
- ¹² ASEAN Secretariat. 2012. *ASEAN Economic Community: Handbook for Business 2012*. Jakarta: ASEAN Secretariat, pp. 23-24.
- ¹³ For a full description of the methodology, see the RATE methodology document.
- ¹⁴ Alavi et al., op.cit.
- ¹⁵ Philippine Development Plan 2011-2016, Chapter 4 Competitive & Sustainable Agriculture & Fisheries Sector, available at <http://www.neda.gov.ph/PDP/2011-2016/CHAPTER%204.pdf>.
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- ¹⁸ C. Peter Timmer, “Food Security and the Changing Role of Rice in Indonesia: An Historical Perspective on Food Policy,” paper prepared for USAID/Indonesia under the Support for Economic Analysis Development in Indonesia project (Jakarta: Nathan Associates, September 2012).
- ¹⁹ An unofficial English-language translation of the Indonesian Food Law is available from the U.S. Department of Agriculture’s Indonesia mission’s website, see <http://usdaindonesia.org/?p=1195>.
- ²⁰ The latter condition is included in the 2012 Food Law, Chapter 1, Article 1; see also Jakarta Post, “Logistics Agency to Control More Commodities,” August 7, 2012
- ²¹ See <http://www.na.gov.la/docs/eng/laws/econ/Agriculture%20%281998%29%20Eng.pdf>.
- ²² See <http://www.asean.org/images/2012/Economic/AMAF/Agreements/ASEAN%20Plus%20Three%20Emergency%20Rice%20Reserve%20Agreement%2022.pdf>.
- ²³ World Economic Forum and McKinsey & Company. 2012. Putting the New Vision for Agriculture into Action: A Transformation Is Happening. Geneva.
- ²⁴ ASEAN Secretariat.
- ²⁵ Gender and Food Security: Best Practice Guidelines (February 2012) at 12 (citing UN Inter-Agency Network on Women and Gender Equality, *Gender Equality and Trade Policy* (New York, NY: Women Watch, 2011).
- ²⁶ See USAID/MARKET, “Gender and Food Security: Best Practice Guidelines” (February 2012).

²⁷ Food and Agriculture Organization, The State of Food and Agriculture 2010-2011: Women in Agriculture: Closing the gender gap for development (2011).

²⁸ Burma is undoubtedly also in need of capacity building assistance, but RATE's exploration of food security issues there was limited to a literature review.