PUBLIC FORUM AND WORKSHOP ON SECURING FOOD FUTURES IN THE ASIA-PACIFIC 6–9 October 2010

Organised by the Department of International Relations of the Australian National University and the RSIS Centre for Non-Traditional Security (NTS) Studies

Centre For Non-Traditional Security Studies

PUBLIC FORUM AND WORKSHOP ON SECURING FOOD FUTURES IN THE ASIA-PACIFIC: EVALUATING REGIONAL FRAMEWORKS FOR FOOD SECURITY

REPORT

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This report summarises the proceedings of the public forum and workshop as interpreted by the assigned rapporteurs and editors of the Department of International Relations of ANU and the RSIS Centre for NTS Studies. Participants neither reviewed nor approved this report.

This workshop adhered to Chatham House Rules. Accordingly, no attribution to speakers and attendees has been made.

Executive Summary

Between 2005 and 2008, global food prices increased 83 per cent. The price of wheat rose by 127 per cent, rice by 170 per cent and that of maize tripled. As a result the number of people suffering from chronic hunger reached a historic high of 1.02 billion in 2009, with the Asia-Pacific region accounting for 63 per cent of that total (642 million people). Although the situation improved in 2010 due to a more favourable economic environment and a fall in both international and domestic food prices, the future remains daunting. The Organisation for Economic Co-operation and Development (OECD) and the Food and Agriculture Organization of the United Nations (FAO), for example, forecast that the average wheat and coarse grain prices over the next 10 years will increase by between 15 and 40 per cent in real terms compared to average levels during 1997–2006. These events and projections demonstrate the global nature of the food problem, and underscore the importance of deeper regional cooperation.

To address this growing food problem, the Centre for Non-Traditional Security (NTS) Studies of the S. Rajaratnam School of International Studies (RSIS) and the Department of International Relations of the Australian National University (ANU) jointly organised a Public Forum and Workshop entitled 'Securing Food Futures in the Asia-Pacific: Evaluating Regional Frameworks for Food Security' on 6–8 October 2010 at the ANU in Canberra, Australia. The event is co-funded by the Japan Foundation under its Intellectual Exchange Programme and the MacArthur Foundation's Asia Security Initiative.

Both the Public Forum and the Workshop focused on regional frameworks for addressing food security challenges. In contemporary policy debates, the issue of food security is an increasingly complex, multi-scale and interconnected one. For some, the focus has come to be on the human security of those who are poor, marginalised and most likely to be food insecure. As food insecurities are no longer just local problems, effective policy responses supported by regional governance arrangements are required. The objectives of the Workshop were to:

- explore and evaluate the regional frameworks on food security of multilateral and regional institutions such as the Asia-Pacific Economic Cooperation (APEC) and ASEAN.
- identify best practices and gaps in those arrangements.
- explore ways to strengthen regional cooperation on food security.

The focus of the Workshop was on improving knowledge of the kinds of regional governance arrangements that would be required in order to guarantee a resilient and secure food system and to protect those who are most vulnerable to food scarcity.

The Workshop examined the conceptual framework of food security as well as existing regional initiatives. It also identified a number of key issues such as the impact of climate change on food security, community rights and food security, the relationship between food security and

issues such as gender and health, the challenges of food security faced by fisheries and the various agricultural sectors in the Asia-Pacific region, and the emerging issue of farmland acquisition. The discussion centred on the identification of suitable frameworks for analysing food security, examining issues such as governance and institutions, scale, the concept of food as public goods and the possible areas of intervention.

Participants included representatives from the Asian Development Bank (ADB) and the Commonwealth Scientific and Industrial Research Organisation (CSIRO), scholars from reputable think tanks and universities such as the APEC Study Centre of the University of Auckland, the Crawford Fund for a Food Secure World Australia, the WorldFish Center, the Japan International Research Center for Agricultural Sciences (JIRCAS), Chulalongkorn University and the Asian Institute of Technology (AIT).

This report aims to provide an overview of the diverse presentations and extensive discussions which took place during the Public Forum and Workshop sessions. Notable recommendations emerging from the sessions include the following:

- The establishment of a food security agenda

The identification of specific agendas is important for effective progress on food security issues. It was observed that certain research agendas, such as those related to what it means to be food insecure and who the food insecure are, have already been extensively analysed. Workshop participants therefore identified further research agendas, for instance, the mining of existing knowledge and the identification of gaps as well as the formulation of relevant policies.

- The establishment of a food security knowledge network

The establishment of a food security knowledge network was proposed by participants as a way forward for the strengthening of food security in the Asia-Pacific region. Such a network would enable participants to interact, liaise and work with institutions with similar interests in food security. Examples of such institutions include the Consultative Group on International Agricultural Research (CGIAR), the Pacific Economic Cooperation Council (PECC), APEC and ASEAN. These institutions have already established action plans for food security. The establishment of a food security knowledge network comprising these institutions has the potential to greatly enhance the fight against hunger and food deprivation in the Asia-Pacific region.

Public Forum

The State of Food Security in the Asia-Pacific

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Despite Asia's unprecedented economic growth and advances in science and technology, there has been an increase in poverty, and stagnation in average crop yields. The problem of food security has re-emerged due to destabilising factors such as competition for land, rural-urban migration, rapid urbanisation, population growth, climate change, and the increasing shortages of energy and water. Currently, the region is home to two-thirds of the world's poor, with 947 million living on less that USD1.25 per day according to figures from the United Nations Millennium Development Goals Summit 2010.

The Food and Agriculture Organization of the United Nations (FAO) defines food security as existing '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'. Due to pressures from the global food supply chain, there is an inter-relationship between food supply and demand at the regional and global levels. Food security can be considered from the perspective of the individual, the family unit (households), the community (country) and the region. Threats to food security can be classified as follows:

- Four-dimensional threats
  – Food availability: This involves issues of production, imports and stockpiles.
  – Physical access to food: This involves access to markets and infrastructure.
  – Economic access to food: This involves issues such as employment, overseas remittances, foreign direct investment and trade.
  – Food utilisation: This involves issues of health and nutrition, sanitation or hygiene, storage and processing facilities as well as clean water.

- Transitory threats
  – Natural calamities, policy changes, unseasonal weather patterns, supply disruptions, pest outbreaks, etc.

- Chronic threats
  – Low investment in infrastructure and technology, poverty, climate change, demographic changes, globalisation, etc.

The Asia-Pacific region is food insecure because of a number of factors, including a reliance on food imports, over-fishing and the existence of stress factors impacting its natural resource base such as soil degradation. In facing the challenge of food security, it would be necessary to address issues facing the poor such as food availability and economic access. This could be done by, for instance, empowering small growers through combining science and technology with entrepreneurship to increase average crop yields, thus achieving food surpluses which could in turn be translated into cash.

Japan's Perspective on Regional Food Security

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There is significant concern in Japan over food security, mainly revolving around issues of availability, safety, intake and access. A national poll revealed that 77 per cent of the population are concerned over the country's future food supply, an opinion shaped in part by Japan's experience with food crises – the frequent famines of the 19th century, the rice riot of 1918, the food shortage during the Second World War, the soybean embargo of 1973 and the rice shortage of 1993. The national agricultural policy was previously focused on narrowing the income gap between the rich and the poor; currently, it is focused on ensuring a stable supply of food for the country's population.

Food security in Asia is characterised by diverse food consumption patterns, dependence on food imports, small-scale intensive farming and resource constraints. Asian food markets are linked to the global economy and the region has, in recent years, become a net importer of agricultural products. These commonalities mean that regional cooperation and policy coordination represents possibly the best way forward for tackling the complicated food and agriculture situation in Asia, and Japan is already playing an active role in this regard. It is a participant in regional initiatives such as the ASEAN Food Security Information System (AFSIS), the East Asia Emergency Rice Reserve and the ASEAN Plus Three Emergency Rice Reserve. This is in line with article 20 of Japan's 1999 Basic Law on Food, Agriculture and Rural Areas which states that 'national food security cannot be achieved without regional and global food security', and thus the government should take initiatives to secure a stable world food supply.

The 2007–2008 food crisis taught the region a few lessons. First, low income food-importing countries are vulnerable to price instability. Second, ensuring a stable food supply should be a top priority for policymakers. Third, export restrictions can be an inevitable, and at times acceptable, policy option to safeguard a country's food supply. In order to mitigate the effects of food crises in the future, governments should pursue regional solutions to improve the food system in Asia, bearing in mind the need for differential treatment of the various food sectors, effective price stabilisation and safety net measures, and a transparent, regulated and sustainable food system.

Australia's Perspective on Regional Food Security

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As a result of the rise in global population and the greater demand for food from the emerging economies, food production has to increase or double by 2050 through higher productivity and improved access to more nutritious food. Lessons from history and science offer insights into how this can be achieved.

Wheat production in India increased from 7 million tons per year to 70 million tons per year, a ten-fold increase between 1947 and 1999. However, this rate of growth in production was not seen globally nor replicated elsewhere. In addition, agricultural productivity gains have stagnated since 2000 due to a decline in the growth of agricultural investment and public sector agricultural research. This, together with droughts occurring in major food exporting countries and the diversion of certain food grains to biofuel production, contributed to the food crisis of 2007–2008.

While growth in cereal production could alleviate the situation, it alone would be insufficient to solve the problem. It can be observed that 2 billion hungry people in the world suffer from malnutrition associated with the lack of micronutrients and vitamins. Furthermore, diseases of affluence, such as type 2 diabetes and cardiovascular diseases, are increasing rapidly in developing countries because diets have changed and are lacking in micronutrients. Agricultural biodiversity offers an alternative approach to malnutrition and poor health, along with additional important benefits in terms of productivity, environmental sustainability, and human and economic development. Research is needed to make greater use of agricultural biodiversity to increase dietary diversity; this could be done by including traditional foods.

Regarding Australian policy perspectives on food security, the government has agreed that Australia needs to improve investment in sustainable food security. A task force had stated that bold action by governments is needed to ensure world food security. There is a need for: increased funding for agriculture and for rural development; improvements in public policy and frameworks for food and related knowledge, and technology transfers; investment in rural services; the discovery and delivery of new technologies and improved farming practices; better emergency and post-emergency responses; and the directing of more of Australia's aid and private philanthropy to the world's poorest people.

Private sector participation would be necessary for developing the agricultural products, technologies and services needed in the poorest developing countries. Current genetically modified (GM) food technologies have largely benefited developed countries. However, to make a significant impact, the private sector would require the support of government, which could, for instance, provide increased levels of publicly funded research and appropriate public policy frameworks.

To better meet the need for food which fulfils nutritional requirements, and to do so without irreversible damage to the environment, research must embrace advanced biotechnologies, especially those with the potential for lower water, fertiliser and pesticide use – or those with lower demands on the environment and on natural resources. This, in turn, given the substantial investment costs and the intellectual property (IP) issues involved, may mean a greater role for the private sector and/or substantially increased public sector investment and careful regulation by government that takes into account the genuine concerns of many regarding GM foods.

Discussion

The forum discussed the conceptual framework of food security. The term 'food security' came out of the 1996 World Food Summit and has developed into a concept with more than 200 definitions originating in various disciplines. Initially, food security was primarily discussed in terms of issues of food supply such as production and technology. However, in more modern approaches, food security is seen as multidimensional in nature. Food policies address not only food production but also issues such as access to and utilisation of food, stockpiling, genetic modifications and agricultural investments.

The security perspective presents an analytical challenge for food security. The securitisation concept elevates food security to the level of a national security concern, a threat infringing on the welfare of people and communities. It was discussed that the 'security' in food security needs to manifest the human security aspect. Examples include looking at issues such as malnourishment and access to food. It is also important to ask questions such as who the most hungry in the region are, whether the disadvantaged obtain their food from domestic markets or from imports, and what kinds of structures and supports need to be in place to ensure food security.

On the question of speculation as the primary factor behind the recent increase in food prices, it was argued that the prices of all agricultural commodities are increasingly interconnected with those of other commodities such as oil. For example, an increase in energy prices causes the prices of those cereals used for the manufacture of biofuels to rise. As such, food commodities that are also used in biofuel production, such as maize and sugarcane, become lucrative energy products and the subject of speculative activity. During the recent food crisis, speculation over the future prices of such commodities led to panic buying and selling by investors. This resulted in price instability, with prices rising sharply one moment and decreasing the next. Such price volatility affected many farmers in developing countries. Although speculation was not the primary cause of the recent food crisis, it definitely played a major role.

Next, the relationship between food security and trade liberalisation was explored. It was argued that regulations to ensure food security are necessary as the issue is too important to rely on the market mechanism alone. It was also noted that panic in reaction to increases in food prices or the prospect of a food crisis could only make the situation worse. Therefore, a regional free trade agreement (FTA) should be further explored. This initiative should aim to overcome inconsistencies between global, regional and national food security policies caused by differences in attitudes towards food security.

On the issue of the relationship between food security and environmental security, it was observed that there is a trade-off. Increasing food production in most cases requires farmland expansion which could affect environmental security. However, this can be managed with proper land planning, and through taking advantage of advances in science and technology. Through the use of good farming techniques, GM crops and improved inputs, food production can be increased without the expansion of land area for agriculture. For example, rice is primarily a wetland crop but with the application of the right technology, it can also be cultivated on dry land. Another example is the development of disease-resistant soybeans to avoid having to clear new lands to grow the crop, as has been practised in Brazil. The Asia-Pacific needs to start developing initiatives to sustain food production without harming the environment, and it is necessary that government policies and private investment support such efforts.

Concerns were raised over China's land buying spree in countries where lands are contested. It is clear that there exists a high degree of anxiety over the phenomenon of farmland acquisition, and many misconceptions associated with it. China, one of the largest players, has acquired farmland in Southeast Asia and Africa. There is no denying the fact that unregulated acquisitions can potentially do more harm than good. However, when land acquisition is well-regulated and properly negotiated, it actually benefits all stakeholders. For instance, in an effort to beef up its food security, Singapore participated in the development of a food zone in Jilin Province in northeastern China. The zone covers 1,450 square kilometres, an area roughly 200 times the size of Singapore's indigenous farmland. The deal involves a public-private partnership between the Jilin City municipal government and representatives from Singapore which include members of the food industry.

Workshops
Session 1: Introduction

The session focused on, first, the conceptualisation of food security, and second, food scarcity, within the security discourse. It discussed the complexity of issues related to food security, including the mounting pressure from the increasing impact of climate change. The aim of the session was to arrive at a better understanding of the multidimensional nature of food security.

Conceptualising Regional Food Security

The definition of food security adopted by the FAO goes beyond the conventional, narrow understanding of food security which frames it in terms of the supply and demand of food. It takes a more comprehensive approach, capturing the multiple dimensions of the condition of being food secure. The theoretical framing and inter-linkages of the four dimensions, namely, food availability, physical and economic access to food as well as food utilisation, are important in identifying how to securitise the issue of food at national and regional levels. It thus reflects the need to look at the strong interplay between various levels, from the global to the household level.

The changes seen in the demand for food are crucial to contemporary food security. These changes cut across different dimensions. The increasing consumption of staples, meat, fishes and vegetables, an inevitable result of economic growth, demands increased food production. The changes in people's diets relate not only to economic factors but also socio-cultural ones.

Contemporary food security is complex, requiring the achievement of a balance between demand and supply in both urban and rural areas, which necessitates the management of natural resources such as land and water. Aspects which need to be factored in include environmental degradation and climate change, poverty, science and technology, market supply chain efficiency and management as well as government policies.

As part of the attempt to increase production, new technologies have been developed, such as modern seeds, and GM crops and varieties, to address the gap between actual and potential farm yields. The mainstream science community strongly supports the use of technology to increase productivity, as it offers the possibility of increasing food production without the need to clear new lands.

However, making the best use of these new technologies remains a challenge as it depends on other factors. An example would be the case of rice, which is produced on rain-fed and also irrigated lands. Although rain-fed rice producing areas make up nearly 50 per cent of total rice production, they have not availed themselves of the benefits of modernisation and innovation. Therefore, public investments and improved policies are needed in these areas. Engagement by the public and private sectors is also pertinent in this respect. The superfarm project proposed by Singapore and China in Jilin, China, is an example of a public-private partnership which aims to develop new sources of food supply and at the same time help local communities through technology transfer and development.

Urban and peri-urban agriculture represents a complementary strategy for addressing food insecurity, while at the same time reducing urban poverty and enhancing urban environmental management. It contributes to local economic development and poverty alleviation, as well as the social inclusion of the urban poor, particularly women. It also results in energy savings, through lower transport and storage costs of food products while responding to market demand.

Another multidimensional strategy for increasing food security is the development of secondary agriculture, based on the premise of adding value for small farmers. It helps to find ways for rural farmers to earn extra money which in turn improves their economic access to food.

In responding to food security challenges, the role of a regional framework is also critical. It was argued that the global supply chain is a very fragile system due to the volatility of food prices and also the control of major multinational corporations over the global food commodities trade. Southeast Asia is looking at considerable growth in food exports from countries in the region but, in general, investments in agriculture are declining substantially, the same as elsewhere in the world. Therefore, a regional food security framework needs to incorporate the following elements:

- Channels for the sharing of information and knowledge, including a comprehensive and standardised food information system.
- Assessments, early warning and predictions.
- Response plans.
- Steps to address food insecurities, including: investments in agriculture production capacity, post-harvest infrastructure, and distribution and market systems; poverty and hunger alleviation; and efforts at increasing food safety and ensuring that nutritional needs are met.

A new initiative to assess progress in the agricultural sector is in the process of being developed. As a first step, it will identify indicators of sustainable food production and food security, including aspects such as economic growth and opportunity, food production, nutritional needs, hunger reduction and environmental sustainability. The resulting data, segregated by crop and region, will be used to evaluate the complex food security situation in the region in the short- to medium-term.

Generally, to ensure food security, further actions designed to facilitate an enabling environment at different levels would be needed. In doing so, it is important to note that the relationships between the multiple dimensions of food security are not linear, but closely interlinked.

Food Scarcity and Security: Securitising Food

The issue of food security has become increasingly complex, interconnected and multi-scale, leading to the need to securitise specific issues such as food scarcity. In attempts to contextualise the issue of food scarcity within the security discourse, there are two parallel debates. One is based on a traditional approach to state security and the other on a human security approach.

The traditional approach perceives food scarcity as a threat to national security. Within this approach, food insecurity is perceived as a threat multiplier. Scarcity of resources such as food, land, oil or water will trigger competition, which will lead to social tension and internal conflict, and this will in turn have an impact on national and regional peace and stability. Food scarcity has been linked by some to a chain of effects – competition for land and water leading to riots, increased migration and mounting pressure on governments to accept refugee populations, which would increase public support for extremist groups who may offer other alternatives. It is further argued that this causal chain from food security to migration, conflict and state collapse, though seemingly extreme or 'apocalyptic', is supported by evidence.

Food scarcity also has geopolitical implications. Countries find the need to increase food imports, thus increasing their reliance on regional and global food distribution and market structures.

The destabilising effect of food scarcity has also been linked to the issue of unequal distribution of and access to resources. Where powerful groups control distribution of resources, including food, this could lead to, for instance, ecological marginalisation, a situation where inequitable access to resources force weaker groups to migrate to resource-scarce areas thereby exacerbating their situation. This may lead to violent conflict.

The traditional security approach to food scarcity tends to perceive poor and marginalised segments of society as a source of threat and instability to states and society. They are perceived as the 'dangerous hungry'. Therefore, there is a need to balance the discourse with a human security approach. It is important to recognise the human dimension of food scarcity by looking at it from the perspective of harm and vulnerabilities rather than risk and threat. Food insecurity relates not only to the health and nutrition consequences of diminished availability and access to food but also to the loss of human dignity and welfare. This insecurity is exacerbated by differences in environmental and resource endowment which lead to injustice. Relevant issues include disproportionate vulnerability to environmental degradation and to food scarcity, and unequal control over resource use and the inputs of food production whether they be land, water, fisheries or energy. Moreover, the marginal income of the poor hinders their access to safety nets against food insecurity.

The human security approach seeks to highlight the impact of food insecurity on individuals and communities. The issue is not merely the security of the supply chain but also the security of human access to appropriate and nutritious food. It is linked to other dimensions such as poverty and malnourishment, the impact of changing food patterns for farmers and fishers, food production as a livelihood activity, the reduction of subsistence food related to employment, loss of ownership to food production, and other economic, social and health consequences.

Both approaches use different language within the securitisation discourse. It is important to recognise the difference in language as it could determine policy directions.

Climate Change: Implications for Future Food Production

An increase in food production to meet future demand is inevitable. Population and economic growth accompanied by changes in food consumption patterns have led to the need for the doubling of current food production within the next 40 years. However, there are factors that will continue to exert negative pressure on global production, such as rising production costs; declining availability of key inputs such as energy, nitrogen and phosphorus; growing pest, disease and weed resistance; increases in greenhouse gas (GHG) emissions; climate change and its associated impacts; and decreasing land and water availability.

The attempt to increase food production has become a major food security challenge. This challenge is now compounded by climate change. Similar to food security, climate change is a multidimensional issue. Therefore, the impacts of climate change on the four dimensions of food security, namely, availability, physical and economic access, and utilisation, are complex as these impacts are also linked to other factors influencing the changing climate.

Looking at the historical impacts of climate change on food production, scientific findings have shown that rising temperatures increasingly affect crops. It is projected that, based on a scenario of an increase of 2 degrees Celsius, without taking into account changes in rainfall patterns, production of major crops would decline.

Climate change produces several challenges. First, there will be regional changes in available water and in rainfall patterns. This will cause changes in land productivity due to the reduced availability of both surface water and groundwater for irrigation in some regions as well as increased competition and demand. Second is the competition for land due to biofuel production and products for livestock. The third challenge is the interactive impacts of elevated carbon dioxide (CO2) levels on temperature, rainfall, pollution, pests, diseases and weeds especially for non-key cereal grains and for developing nations. Fourth is the lack of knowledge on available adaptation options and their costs and benefits. Climate change is happening faster than anticipated yet adaptation policies still lack clear directions. The incorporation of basic knowledge and science into adaptation measures for food production, which would likely provide a great return on investment, has not taken place. Fifth, there is a lack of investment in biotechnology and supply chain management. Another challenge is the increasing cost of fossil fuel-based inputs such as fertiliser, herbicides and irrigation pumping. Lastly, it should be anticipated that legislative changes will take place and that these will have an impact on food production.

Session 2: Workshop Discussion I
Revisiting Issues: Identifying Who Are the Food Insecure and the Challenges to Building Regional Food Security and Resilience

The discussion began with a comment on the way food security has been conceptualised in contemporary debates. It was observed that scare tactics are frequently used when describing threats to food security. Such tactics are counterproductive when trying to secure investments or funding for agricultural research or projects. The best way to earn the interest of investors is by focusing on opportunities and offering solutions to problems.

Another comment touched on regional cooperation initiatives in the Asia-Pacific region. It was opined that there are way too many of these initiatives, and that problems are solved not through the creation of more initiatives but by deliberating over why a particular regional cooperation framework is relevant, identifying common goals and then collectively working towards achieving that goal.

The African regional cooperation framework, the Comprehensive Africa Agriculture Development Programme (CAADP), offers a good example. Member states, who have a common interest in improving agriculture, were having difficulty obtaining sufficient funds. Using the CAADP as a cooperative framework, these countries approached donors from rich countries, and were able to make a strong case for funding on the basis that the sector is the primary economic engine for many poor African countries. Investing in Africa's agricultural sector and improving its farming techniques and crop yields will enable many African countries to break out of the poverty trap.

In Asia, such collective efforts are more difficult to achieve because of its diversity – it is home to some of the world's fastest-growing economies as well as the largest number of poor people. As an alternative, one discussant highlighted that rather than making the economy the basis for cooperation, it would be more productive if countries cooperate based on agro-ecological zones. Australia's agro-ecology, for example, has more in common with northern Nigeria than it does with any country in the Asia-Pacific region.

Currently, there are 13 regional arrangements on food security. A similar situation can be observed in Latin America but the regional arrangements there are less successful than those in the Asia-Pacific region. With the Asia-Pacific region becoming more interconnected in areas such as science and technology and business, realising effective cooperation would also become increasingly possible. Another impetus for regional cooperation is the vulnerability of the region to natural disasters. These disasters affect food production and the livelihoods of millions of people. One way forward in this regard is to organise region-wide studies on the impact of natural disasters and climate change. In other words, joint problem-solving will become increasingly vital, and regional organisations are well-placed to facilitate both intra- and inter-regional cooperation towards this end.

A related concern is identifying the kinds of obstacles faced by existing regional frameworks. It was observed that the frameworks faced a number of uncertainties such as whether an impending food crisis can be anticipated or what the potential production of food might be. These would require effective early warning capabilities, which the region currently lacks.

One important point concerns the state of food security at the local level. It was observed that local communities have traditionally had their own way of dealing with and coping with food insecurity. In so doing, they rarely require state intervention. However, these traditional forms of coping strategies are fast disappearing, and preserving and enhancing them should be part of the agenda of any regional framework on food security.

Session 3: Regional Food Security Initiatives

This session discusses how the issue of food security was conceptualised and framed as a policy agenda by key regional institutions such as the Asian Development Bank (ADB) and the Asia-Pacific Economic Cooperation (APEC) forum.

Asian Development Bank (ADB)

Global food prices have been rising over the past decade. By June 2008, it had risen by 83 per cent. The prices of maize had tripled and that of wheat and rice had increased by 127 and 170 per cent respectively. As a result of the food crisis, the number of people who suffer from chronic hunger reached a historic high of 1.02 billion in 2009. The regional distribution of undernourishment is as follows:

- Asia and the Pacific – 642 million (63 per cent).
- Sub-Saharan Africa – 265 million (26 per cent).
- Latin America and the Caribbean – 53 million (5 per cent).
- Near East and North Africa – 42 million (4 per cent).
- Developed countries – 15 million (2 per cent).

Those worst affected by the food crisis are poor communities. In Southeast Asia, more than 40 per cent of the population in Cambodia, Lao PDR and Timor-Leste, and more than 20 per cent of the population of Indonesia, the Philippines and Vietnam live below the USD1.25-a-day international poverty line. Over 70 per cent of the poor in Southeast Asia live in rural areas and food accounts for about 60 per cent of their total expenditures. Food price inflation thus seriously erodes their purchasing power, increasing the severity of food deprivation and malnutrition.

The global food situation improved in 2010 due to a more favourable economic environment and a fall in both international and domestic food prices. However, long-term food security still remains a concern. The Organisation for Economic Co-operation and Development (OECD) and the FAO forecast that average wheat and coarse grain prices over the next 10 years would increase between 15 and 40 per cent in real terms compared to average levels during 1997–2006. Real prices for vegetable oils are expected to be more than 40 per cent higher whereas dairy prices are projected to be on average between 16 to 45 per cent higher.

In light of these events, the ADB adopted a multi-sectoral approach to food security. This approach is reflected in its Strategy 2020 document. The document outlines ADB's three complementary strategic agendas, namely, inclusive growth, environmentally sustainable growth and regional integration. It also reiterates the ADB's commitment to refocusing its operations in five core areas: (i) infrastructure; (ii) environment, including climate change; (iii) regional cooperation and integration; (iv) financial sector development; and (v) education. Multi-sectoral food security investments are calculated at USD2 billion per year.

Regarding its role in strengthening regional food security, it was observed that the ADB supports the ASEAN Integrated Food Security (AIFS) Framework. The AIFS Framework aims to achieve sustainable food security through enhanced rice trade and an emergency rice reserve. The ADB's strategic plan of action in supporting the AIFS Framework includes the following:

- Reserves: Strengthen food security arrangements by establishing the ASEAN Plus Three Emergency Rice Reserve.
- Trade: Promote a stable, well-run food market and trade by implementing the ASEAN Trade in Goods Agreement (ATIGA) for food products.
- Information: Strengthen food security information by reinforcing the AFSIS.
- Production: Increase production through knowledge and technology.

Asia-Pacific Economic Cooperation (APEC)

APEC is the premier forum for facilitating economic growth, cooperation, trade and investment in the Asia-Pacific region. APEC is the only intergovernmental grouping in the world operating on the basis of non-binding commitments, open dialogue and equal respect for the views of all participants. Unlike other multilateral trade bodies, APEC imposes no treaty obligations on its participants. Decisions made within APEC are reached through consensus and commitments are undertaken on a voluntary basis.

APEC was established in 1989 to further enhance economic growth and prosperity in the region and to strengthen the Asia-Pacific community. APEC has 21 members, referred to as Member Economies. These economies account for approximately 40.5 per cent of the world's population, approximately 54.2 per cent of world gross domestic product (GDP) and about 43.7 per cent of world trade. Since its inception, APEC has worked to reduce tariffs and other trade barriers across the Asia-Pacific region, creating efficient domestic economies and dramatically increasing exports.

Key to achieving APEC's vision is the so-called 'Bogor Goals' adopted at APEC's 1994 meeting in Bogor, Indonesia. These goals represent a commitment to achieve free and open trade and investment in the Asia-Pacific — by 2010 for industrialised economies and by 2020 for developing economies. APEC works in three broad areas, known as APEC's 'Three Pillars', to meet the Bogor Goals: trade and investment liberalisation, business facilitation, and economic and technical cooperation. In addition, new issues are periodically added, including: human security (in the aftermath of the Asian crisis); epidemic diseases (after the severe acute respiratory syndrome (SARS) outbreaks); disaster preparedness (after the 2004 tsunami); counter-terrorism (after 9/11); and food security (after the 2008 food crisis).

Currently, APEC has the following working groups on food-related issues:

- Agricultural Technical Cooperation Working Group (ATCWG): The ATCWG focuses on crop management/ harvesting, pest control, food safety standards, traceability, climate change adaptation/mitigation, sustainable biofuels, ease of doing business and food security.
- High Level Policy Dialogue on Agricultural Biotechnology (HLPDAB): The HLPDAB focuses on regulatory frameworks, technology transfer and confidence-building.
- The Sub-Committee on Standards and Conformance (SCSC).
- Food Safety Cooperation Forum (FSCF): The FSCF is concerned with food safety standards/systems.

In 1998, the APEC Business Advisory Council (ABAC) recommended that the forum should build an APEC Food System (AFS) to achieve a more robust regional food system. In 1999, APEC Ministers agreed that the overriding objective in building the AFS would be 'to efficiently link together food production, food processing and consumption to meet the food needs of our people as an essential part of achieving sustainable growth, equitable development and stability in the APEC region'. That same year, APEC leaders adopted the ABAC report on the AFS and endorsed the key recommendations: to address rural infrastructure development, promote trade in food products and disseminate technological advances in food production and processing.

Discussion

On the relationship between the ADB and APEC on food security, it was highlighted that APEC can bring in new forms of partnership in the broader context of economic development. The ADB is already involved in various aspects of food security spending – an estimated USD2 billion annually. In agricultural research alone, it spends USD4–5 million. Partnering with organisations such as APEC can help improve the capacity of the ADB and make its programmes more impactful.

There is also interest among participants on the relationship between smallholder farmers and the ADB, and the nature of the relationship. It was pointed out that the ADB considers smallholder farmers part of the solution rather than a problem. However, more needs to be done as smallholder farmers lack the capacity and the resources to improve their productivity. For example, financial institutions conveniently ignore smallholder farmers because they lack the necessary collateral. To alleviate the plight of smallholder farmers, it was suggested that the ADB take up the role of facilitator of funds.

APEC's role as a driver of food security initiatives in the Asia-Pacific region generates strong interest and also at the same time significant concerns. On the one hand, there are concerns about APEC's relevance. On the other, APEC is seen as a driver of change in certain areas. For example, APEC's utility is seen in its ability to influence national policy debates and help set agendas on important issues. It is imperative that APEC plays a dominant role especially in this age when banks, financial institutions and large companies dictate national policies in developing countries. Regional organisations such as APEC can act as a buffer between developing member countries and institutions such as banks and multinational corporations.

Session 4: Evaluating Food Security Frameworks I
Sectors and Support

This session looks at three primary areas of concern with regard to food security in the Asia-Pacific region, namely, fisheries, agriculture and farmland acquisition. The presentations highlighted significant issues and mapped existing trends in food production, distribution and consumption.

Fisheries – Asia's Fish Bowl

An estimated 80 per cent of the world's 520 million fishery-dependent people live in the Asia-Pacific region. Fish is an important source of nutrition, providing between 30 to 70 per cent of the animal protein consumed by the poorest people in Asia. Moreover, the fishery industry alone is worth around USD86 billion per year, providing lucrative income to millions of households in the Asia-Pacific region. Ensuring a sustainable future for fisheries should therefore be accorded the highest priority.

In order to promote sustainability, a better understanding of the fishery sector would be required. A common mistake is to think of the sector as being homogenous. It is in fact as diverse as can be. The sector represents diverse commodities, not all of which are intended for instant consumption. With the rise of fish farming, there has been a concurrent increase in the demand for fishmeal, which could affect the sustainability of fish stock. This trend also raises ethical concerns, as smaller fish, which the poor subsist on, are being utilised to feed larger and more expensive fish intended for richer markets. This practice also prompts the question of whether fish availability should be considered a social good.

Frameworks for the sustainable management of the fishery industry in Southeast Asia have already been addressed by ASEAN. There have already been attempts to implement the FAO Code of Conduct for Responsible Fisheries. Within the ASEAN Multi-Sectoral Framework on Climate Change (AFCC), fisheries have been mainstreamed as an area of concern. Of note is the fact that this framework considers the particular vulnerability of resource-poor, fish-dependent peoples. Other regional fishery-sector institutions include the FAO Asia-Pacific Fishery Commission (APFIC), the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), the Coral Triangle Initiative, the Oceanic Fisheries Programme (OFP) of the Secretariat of the Pacific Community (SPC), and the ASEAN Network on Fishery Statistics which is a joint effort of the Southeast Asian Fisheries Development Center (SEAFDEC) and ASEAN.

To address the most pressing issues, several regional policy responses were suggested:

- Building the resilience of small-scale fisheries, by upholding preferential rights of access to inshore waters, strengthening participatory governance systems (fisheries co-management), improving access to markets (local, regional or global) and building adaptive capacity for risk management.

- Investing in low-cost, sustainable aquaculture, by improving productivity of lower-value species through selective breeding. The genetically improved farmed tilapia (GIFT) which was developed by the WorldFish Center, for example, enables the rural poor to increase their income as the improved tilapia has higher growth and survival rates making them suitable for sustainable aquaculture.

- Improving the integration of fisheries, aquaculture and food security, by encouraging policy coherence with other sectors – water, health, environment and agriculture. There should also be efforts to build the capacity of the fisheries sector to engage in food security debates and to ensure that fisheries organisations participate in food security dialogues and framework development.

Securing Food Futures in the Asia-Pacific – Agriculture

It is feasible to produce enough food to feed the world's projected 9.2 billion people by 2050. Doing so at an acceptable cost to the environment, however, poses serious challenges. In order for food production and environmental conservation to be in equilibrium, there would have to be significant policy and social changes, including new regulatory regimes circumscribing food production. Scientific and technological advances also need to be achieved to control the environmental impacts of food production.

However, the use of technology can be a double-edged sword. Agricultural intensification, for example, has the benefit of increasing food yield per hectare of land, thus conserving untouched environments from having to be cleared for farming purposes. The costs of this intensification, however, would include increased use of freshwater and adverse impacts from the resulting chemical run-off and soil erosion as well as increased GHG emissions. The delicate balance between intensification and subsequent environmental impact is thus a growing concern.

Another major concern is that despite increased crop yields, production has yet to meet projected demand. This leads to two clear options: yields per unit of land must be increased or areas for agriculture must be expanded. With the current high level of competition for land and water, both of these options have foreseeable problems that need to be carefully addressed. It was argued that policy interventions are needed to support the agricultural sector.

Ensuring Food Security through Land Transfer: Trends in Southeast Asia

The acquisition of farmland in Southeast Asia by countries from other regions has been the focus of much regional and international attention. Following the food crisis of 2007–2008, the trend has grown. The phenomenon, which the Spain-based Genetic Resources Action International (GRAIN) has referred to as 'land grab', is defined as the acquisition (through lease, concession or outright purchase) by corporations or states of large farmland (over 10,000 hectares) in another country and on a long-term basis (often from 30 to 99 years), for the production of basic foods that will then be exported. This is a controversial concept, and has been variously criticised as 'neo-colonialism' (FAO), 'farming abroad' (GRAIN), 'commercial pressures on land' (International Land Coalition); 'outsourcing's third wave' (The Economist), 'the great land giveaway' (Global Research) and 'the 21st-century land rush' (The American).

Arguments against farmland acquisitions include concerns related to the displacement of small farmers, the removal of land reform from the domestic policy agenda and diminishing access to local food resources.

Arguments in favour of farmland acquisitions highlight the benefits to host countries: the investments could support social infrastructure and land compensation could be used for community development funds; local employment would be generated; local producers would have access to markets and technology; and there would be an increase in local and national tax revenue.

In Southeast Asia, Indonesia, Cambodia, the Philippines and Lao PDR have all seen an increase in the acquisition of land for agricultural purposes. There have been attempts at regulating this trend by both the World Bank and the International Food Policy Research Institute (IFPRI), with the aim of introducing policies that will advantage all stakeholders involved in the process. The World Bank has outlined seven principles of responsible agricultural investment, namely: (i) respecting land and resource rights; (ii) ensuring food security; (iii) ensuring transparency, good governance and a proper enabling environment; (iv) consultation and participation; (v) social sustainability; (vi) environmental sustainability; and (vii) responsible agro-enterprise investing. The IFPRI has produced a code of conduct, which calls for: (i) transparency in negotiations; (ii) respect for existing land rights, including customary and common property rights; (iii) sharing of benefits; (iv) environmental sustainability; and (v) adherence to national trade policies.


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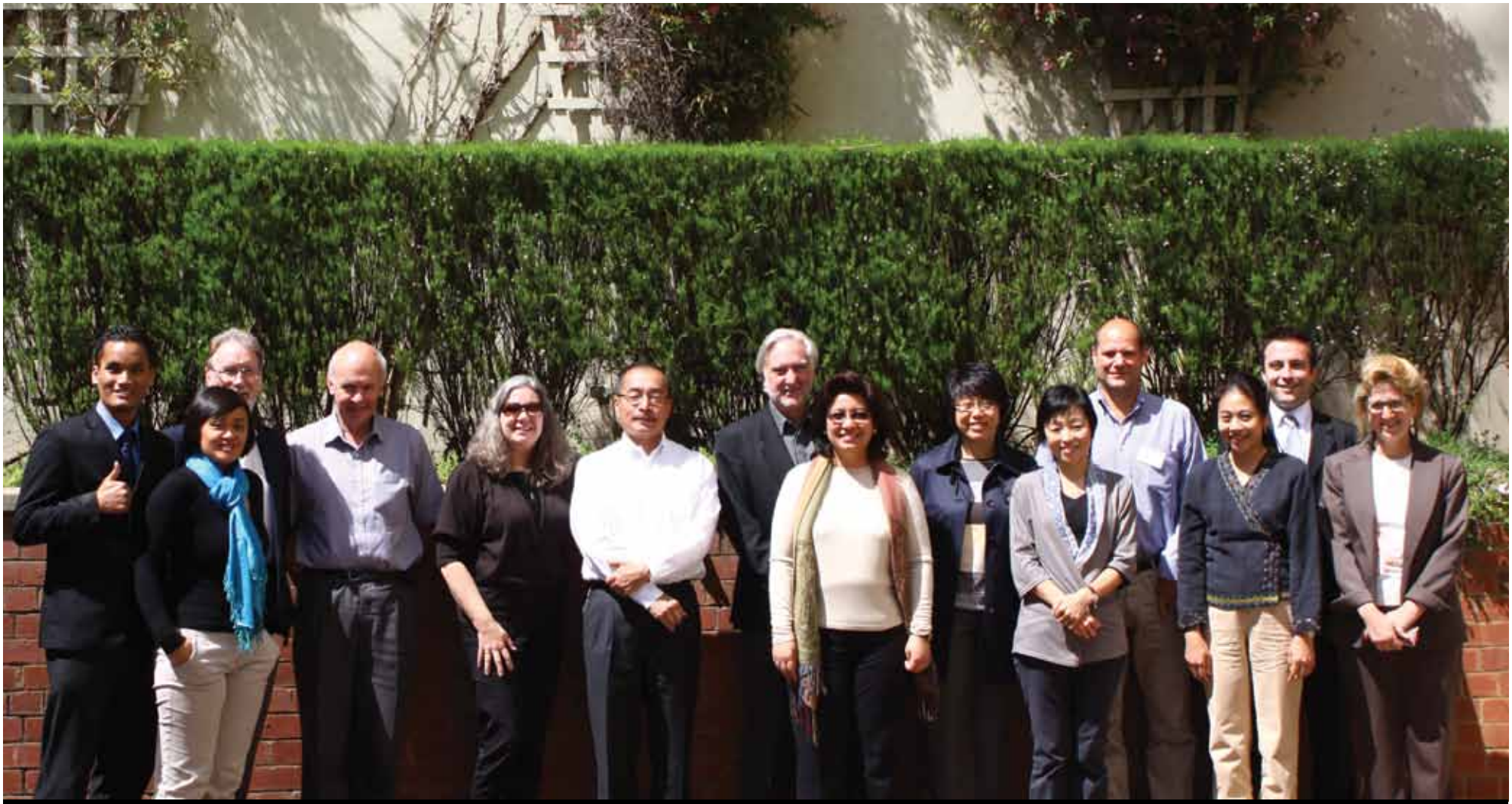

From left to right: *Mr Pau Khan Khup Hangzo, Ms Irene A. Kuntjoro, Dr T.J. Higgins, Associate Professor Robert Scollay, Professor Lorraine Elliott, Mr Katsuji Matsunami, Dr Denis Blight, Associate Professor Mely Caballero-Anthony, Ms Belinda Chng, Associate Professor Kyoko Kusakabe, Dr Edward Hugh Allison, Dr Keokam Kraisoraphong, Mr Gregory Collins, Associate Professor Jane Dixon.*

Discussion

In relation to the fisheries sector, it was observed that a large amount of fish is not consumed directly by humans but used as feed. In fact, nearly one-third of the world's wild-caught fish are 'reduced' to fishmeal and fish oil, which are then used in feeds for terrestrial livestock and farmed carnivorous fish. Aquaculture's share of demand for fishmeal has grown significantly over the past decade and a half. With aquaculture likely to grow quickly over the next 20 years, participants expressed concerns that rising demand for fishmeal and fish oil could place heavier pressure on already threatened stocks of fish.

Concerns were also expressed over the quantity of fish produced for the production of pet food for rich nations, which could further exacerbate the pressure on fish stocks. This prompted the ethical concern that pets in richer nations receive higher levels of protein from fish than many people in the developing world. Another ethical concern was the growing use of land for biofuel crops, and the policies, such as subsidies, that support the practice.

On the issue of land acquisition, there was consensus among the participants that it is the lack of trust in the global food market that is driving the growth of the trend. Countries are trying to secure access to affordable food in the future by bypassing the market. However, in the process, there is potential for injustices to occur, hence the need to formulate policies and regulations that would not only guard against the negative impacts of land acquisitions, but also protect the interests of both investors and local communities. The strengthening of governance in host countries, and the stabilisation of land possession and ownership, should be prioritised. Other problems that may arise in land acquisition deals include the demand by host countries for financial support to build local infrastructure, and conversely, the lack of willingness on the part of investors to invest in local labour. In addition, there are issues such as the types of crops being grown on the acquired land being of little practical value to local communities (the crops grown are based on demand in the investors' countries), possible social tension arising from incoming migrant workers, and the large-scale displacement of local communities and the consequent loss of social capital due to the migration of people from local communities to urban centres.

In addressing the relative decline in yield per hectare, the lack of investment in R&D by both government and the private sector was cited as a contributing factor. Besides increasing R&D investment, there is also a need to ensure that small-scale farmers have access to the advanced technology. Technology sharing among nations is occurring but the degree to which this occurs is uncertain. While there are publicly funded organisations focused on R&D, efforts should also be made to work with the private sector on issues such as IP rights as private companies often hold useful agriculture-related patents. There is a need to identify ways to collaborate with the private sector on new technology while maintaining the access of small-scale farmers to advances which could benefit them.

Soil degradation as a result of the overuse of phosphorous and nitrogen was raised as another factor affecting the production of food. While this may be the case, there has been an increase in the awareness of this damage and, as a result, farmers are becoming better stewards of the land. The effort to address the damage needs to continue, as part of the balancing act between food production and environmental preservation.

Session 5: Evaluating Food Security Frameworks II
Enabling Environments for Local Food Security

This session sought to evaluate the relevance of regional food security frameworks in relation to the issues of community rights, gender and health, and how the frameworks may contribute to addressing the problem of food insecurity in the region.

Community Rights

An increase in the output of food per head does not necessarily equate to food security. Rather, it is the entitlement or rights of individuals and groups that often determine food security. However, most of the existing regional frameworks on food security do not incorporate a rights-based approach and are largely focused on the livelihood security of the agricultural sector, with some attention given to the need to provide for alternative livelihoods. For instance, the FAO identifies property rights and vague institutional arrangements as a significant food security challenge and focuses on addressing issues of rural livelihoods and equitable access to resources. An exception is the AIFS Framework which incorporates the concept of entitlement, defined as the set of all commodity bundles that a person can command, given the legal, political, economic and social arrangements of the community in which he or she lives. In other words, the AIFS Framework takes into account access by individuals to adequate resources required for a nutritious diet.

Existing regional frameworks could be strengthened by rights-based approaches that build upon social structures, norms and existing rights legitimised by international law, using these to defend against corruption and to resist being held captive by political interests. Such rights-based approaches offer insights into the distribution of power and could help to ensure that resources and services deemed critical to livelihood security are clearly established. In particular, the alternative livelihood strategy can help to reduce the dependence of communities on states and allow for a more effective contestation of existing but unrealised rights.

The Greater Mekong Subregion (GMS), with its five agro-ecological zones of common farming systems subject to similar geographical constraints and risks, provides a useful basis for discussing agricultural systems in terms of livelihood security on a regional scale. The future food needs of the GMS can be met only if agriculture within that region is transformed by innovations in governance and institutional arrangements which span diverse government agencies and are able to mediate between the competing goals of different resource users in order to achieve equitable management within the region.

Gender

A review of existing regional frameworks shows that most do not take into account gender equality. The exception is the ADB whose operational plan states that 'gender equity will be promoted, particularly in ensuring access to resources, technologies and other services for farm households headed by women and improving women's access to safe and adequate food and nutrition'. However, this is insufficient, considering that 'women' are not a monolithic entity and may comprise poor women in urban areas, poor women in rural areas living in patriarchal households, women suffering from domestic violence, women with small children or disabled husbands, matriarchal households, indigenous women, landless women, etc.

Women are vulnerable to food insecurity for various reasons. First, the division of labour often means women take up the responsibility of feeding the family. Second, they are dependent on social networks for information and support. Third, household improvements may not necessarily benefit women and children. Research by IFPRI shows despite an increase in aggregate nutrition availability, the body mass index (BMI) of women and children had fallen. Further, women's lack of access to resources, education, land, credit, information, technology and labour contributes significantly to malnutrition in

children. Conversely, child malnutrition improves when women have greater access to such resources. This was reinforced by a 2010 IFPRI study which found that 43 per cent of the reduction in child malnutrition was attributed to improved education among women.

The following considerations arise when production, trade and value chain issues, and information access, are seen from a gendered perspective. First, food production would be of more benefit if focus is placed on backyard vegetable production, and small livestock and fish that provide micronutrients for women and children, rather than cash crops such as rice, maize, soybean, sugar and cassava. Second, when considering an increase in agriculture production, questions such as the following would arise: Will the increased workload become the responsibility of the women without any social, political or economic reward? How will households cope with the need for increased labour given that members of the family may have migrated to the cities? Will an increase in production lead to a decrease in social cohesion and social networks? Third, women tend to be in the value chain where returns are low and where they are more vulnerable to informal payments. Fourth, when considering access to markets, policymakers should note that improvements to road infrastructure need not necessarily lead to access to market for poor women, as safety could become a concern when their homes become more accessible to strangers and this may cause them to become housebound. Lastly, there is a lack of gender disaggregated data and more effort should be made to gather such data and organise women.

Addressing these challenges requires that greater focus be given to gender analyses, including the collection and reporting of disaggregated data on gender, and the monitoring and analysis of intra-household resource allocation and decision-making. There is also a need to increase the production of livestock, fish and vegetables. In addition, there should be efforts to ensure that poor women and men have access to resources (such as land, information and mobility).

Health

Existing frameworks and documents on food security contain references to health that tend to assume metabolic energy security rather than macro- and micronutrient security. The default focus is on having sufficient food, and the food industry points to consumer purchasing patterns to justify the production of high fat, high sugar and salt-laden products. The global food system thus contributes to the increase of diseases worldwide, endangering overall productivity and the sustainability of health systems. In what is referred to as the 'nutrition transition', people in emerging economies are experiencing rapid changes in their diets due to greater disposable incomes. The choices of foods and diet have moved away from basic staples and vegetables to processed foods which are high in protein and fats. Taken in moderation, such foods can make one healthier. However, the increasing reliance on them coupled with the lack of diversification beyond those types of food pose several health risks, the most obvious one being obesity. It is no coincidence that 'diseases of affluence' such as diabetes and obesity are on the rise in Asia, in tandem with rapid economic growth and the increasing wealth of its people. In light of this, it is increasingly important to promote healthy eating habits.

The insecurity of food systems is fuelled by three dynamics: (i) depleted agro-ecological situations caused by unsustainable production and distribution systems; (ii) the erosion of national food sovereignty as a result of global free trade rules which privilege competitive

advantage and governance via corporate supply chains; and (iii) the poor health and well-being of farmers as a result of poverty caused by low terms of trade, insecure land tenure and supply chain insecurity.

In working towards a secure food system, the goal should no longer just be the maximisation of productivity. Instead, focus should also be placed on optimising across a complex landscape of production, environmental, health and social justice outcomes. There is a need to distinguish between energy or kilocalorie sufficiency and micronutrient sufficiency. This raises agricultural and trade planning concerns related to, first, staple food production to supply energy needs, and second, dietary diversity production to supply micronutrients. Issues of access and equitable distribution of food also need to be considered because even where there is enough food, the poor may not have insufficient income to gain access to it. The question then becomes whether food security is a matter for a food system dominated by cash markets or whether other systems – for instance, a mixed market cum self-sufficiency system, or a social policy and labour market system – should be considered. An agri-health approach is necessary to capture the critical linkages between the health of food systems and human health.

Discussion

In discussing a community-based approach to food security, it was noted that that may be the only option available to fragile states without a functioning government, whereas a state with a functioning government could consider creating and strengthening safety nets for the community. In response to this, it was noted that the governments of many developing countries may not in fact be functioning well, hence a community-based approach which is not reliant on the government is important.

On the topic of balancing basic foods and nutritious foods, several questions were raised from a policy perspective. The provision of the basic needs of the poor and hungry is an immediate and urgent priority in developing countries. Thus there is a need to convince policymakers of the need for nutritious food. In a similar vein, as international agricultural research is focused on major food crops, is there an appropriate policy intervention that may lead towards achieving a balance between caloric fulfilment and nutritional needs? It was noted that the key to improving the current situation is in governments encouraging the population to keep to their local or traditional cuisine which tends to be healthier and tends to be less reliant on imports. However, a certain degree of difficulty is expected, given the perception that dietary changes or a shift to a more 'cosmopolitan' diet is a sign of social progress.

Regarding the usefulness of value-chain integration from a nutritional perspective, the point was made that it is the same food system that is causing both the problem of hunger and malnutrition. The food system should provide adequate access to both basic foods and nutritious food, without compromising on either front. However, it is necessary to note that dietary diversity also requires diversity in the management of land. On the question of the impact of infrastructure-building on women, it was noted that the full impact is unclear and would require gender analysis.

Session 6: Workshop Discussions II–III
Best Practices, Gaps and Implementation of Regional Cooperation Mechanisms for Food Security and Recommendations on Ways Forward

This final session comprised a presentation summarising the issues raised during the two-day workshop. Following this, there was a concluding discussion.

Summary of Issues

The session opened with the classification of the issues discussed in the workshop along the lines of first- and second-order questions. First-order questions dealt with empirical aspects of food security, namely, 'What does it mean to be "food insecure"?' and 'Who are the food insecure?' Second-order questions, on the other hand, were aimed at a higher level of evaluation and include 'What do we know and not know about food security?' and 'What can be done about food security and what are the available policy options?' In addressing these questions, the discussion fell under two overarching themes, namely, the analytical and the normative.

Analytical themes

There are different analytical frameworks available for the analysis of food security. An analytical framework may be focused on governance and institutions, scale, food as public goods, security framing and the identification of possible areas for interventions, as explained in greater detail below.

Governance and institutions

During the previous two days, discussions on the drivers of regional initiatives by institutions and the possibility of collective action on food security governance elicited concerns such as the threat of institutional path-dependency (that is, the possible ramifications of any decisions made at the current time) and the existence of problems of a systemic nature (which require systemic solutions and thus a larger degree of cooperation on the part of various individual actors).

It had been suggested that the relevant actors, which include regional bodies, states and the scientific community, could contribute to food security governance in various ways. These actors could act as enablers or agents of change, supporting policy formulation and implementation as well as introducing and promoting innovation, and facilitating knowledge transfer among the various nations in the region.

It was noted that governance in relation to food security is currently the province of a labyrinth of authorities spanning a multitude of sectors, and integrating these bodies, as well as promoting cooperation among them, would be a great challenge.

Scale

The issue of scale – that is, the level or unit of analysis – was another important issue discussed in the workshop. Possible levels of analysis identified are the region, the state, the community, the household and the individual. It was observed that any one level of analysis cannot be studied in isolation as the levels are inter-related and interdependent. Linked to the level of analysis are the markets and the various stakeholders such as the government and civil society organisations. The various levels of analysis as well as the numerous variables that affect them highlight the complicated nature of food security conceptualisation. The best way to go about the analysis is to understand all the levels and units of analysis in order to arrive at a comprehensive and holistic understanding of the concept of food security.

Food security as a public good

The question of whether food security really is a public good was the subject of intense debate among participants. In economics, a public good is a good that is non-rival and non-excludable. Non-rivalry means that the consumption of the good by one individual does

not reduce the availability of the good for consumption by others; and non-excludability means that no one can be effectively excluded from using the good. In the real world, there may be no such thing as an absolutely non-rival and non-excludable good; but economists think that some goods approximate the concept closely enough for the analysis to be economically useful. After much deliberation, a certain level of consensus emerged among participants that food security could indeed be considered a public good because the production of food results from collective choices (when the market cannot produce the food, public intervention would be needed to stimulate production), and because their externalities are so far-reaching.

Security framing

The use of the word 'security' as a framework to analyse issues of food deprivation and hunger (such as undernourishment, malnourishment, food availability, food access, the food supply chain, etc.) was questioned. Does associating security with food in fact offer any analytical leverage?

It was observed that semantically framing the issue of food deprivation and hunger as a security issue privileges certain approaches which may or may not produce desirable results. As important as it is to consider food as a security issue, it is also equally important to look at the issue of food deprivation and hunger as a social issue, a gender issue, an economic issue and so on. Thus the framing of issues related to food must be inclusive and comprehensive and not limited to one particular line of thinking.

Areas of intervention

Workshop participants had highlighted a number of possible areas for intervention including encouraging investment in R&D to increase yields, improving trade practices to ensure more equitable access and distribution of food, instituting social safety nets to help those affected by crises such as the global financial crisis and the rise of food prices, etc.

Normative Themes

Concerns related to norms such as rights, justice and fairness were also widely discussed. It was observed that food security is much more than increased food production and availability. Access is equally important. However, access to food is determined by a number of socioeconomic factors, as elaborated below.

Power(lessness)

One of the main causes of hunger is poverty – the lack of purchasing power and access to resources. Hunger is intricately linked to global economic, political and social power structures; modes of development and consumption; population dynamics; and social biases based on race, ethnicity, gender and age. In many parts of the world, it is the poor who are the most vulnerable to hunger. Poverty is linked not only with poor national economic performance but also with an unequal distribution of income and a political structure that renders poor people powerless. Mustering the political will to make policies that fight hunger and favour a more equitable distribution of income a top government priority requires a strong public constituency.

Legitimacy and Authority, Rights and Entitlements, Justice and Fairness

Throughout the workshop, issues of legitimacy and authority, rights and entitlements, and justice and fairness were repeatedly raised in varying forms, highlighting how critical and closely linked they are. Key questions included: Under whose authority and with what legitimacy is food security being pursued? Whose rights and entitlements are being met in the course of processes involved in the production and distribution of food, and whose are not? Are these processes fair and can more justice be brought to the production and distribution of food throughout the region?

Discussion

The ensuing discussion reflected the presence of diverging views on the subject of food security as a public good. One participant opined that food security can best be achieved if it is left to market forces with the government interfering only during critical moments.

There was general acknowledgement that participants of the workshop could contribute more significantly to the second-order questions of 'What do we know and not know about food security' and 'What can be done about food security and what are the available policy options?' It was observed that the first-order questions – what it means to be food insecure, and who the food insecure or food vulnerable people are – have already been addressed. It is therefore the second-order questions which still remain under-addressed and this is an area where workshop participants can make valuable contributions.

The workshop also allowed participants to reflect on what they themselves aimed to achieve in relation to food security and the specific actors they seek to influence. In answering these concerns, participants identified various actors/institutions. One such institution is the Consultative Group on International Agricultural Research (CGIAR). CGIAR has arguably the best technical capacity to help address some of the most pressing concerns related to food security.

To capitalise on the momentum generated by the workshop, it was suggested that a 'food security knowledge network' be established. Such a network could interact, liaise and work with institutions with similar interests in food security such as the APEC forum, the Pacific Economic Cooperation Council (PECC) and ASEAN.

APEC has established an Action Plan for expanding food supply capacity, enhancing disaster preparedness in agriculture, developing rural communities and confronting challenges in climate change and natural resource management.

The PECC has already instituted the Pacific Food System Outlook. The Pacific Food System Outlook represents the first region-wide coordinated effort to provide the outlook for the Pacific food system. The food system includes not just agricultural production, but also the whole complex of economic relationships and linkages that tie the region's food consumers to producers. The goal of the Pacific Food System Outlook is to help increase knowledge about the diverse components of this vital segment of the global economy.

ASEAN has developed the AIFS Framework which is aimed at establishing joint pragmatic approaches for cooperation among ASEAN member states. ASEAN has also introduced the Strategic Plan of Action on Food Security in the ASEAN Region (SPA-FS). The goal of SPA-FS is to ensure long-term food security and to improve the livelihoods of farmers in the ASEAN region by increasing food production, reducing post-harvest losses, promoting a conducive market and trade for agricultural commodities and inputs, ensuring food stability, promoting availability and accessibility of agricultural inputs, and operationalising regional food emergency relief arrangements.

The establishment of a food security knowledge network comprising the aforementioned institutions as well as other relevant institutions will greatly enhance the efforts against hunger and food deprivation in the Asia-Pacific region.

At the conclusion of the session, participants were asked what food security means to each of them as individuals. The diverse answers were a reflection of the multidimensional nature of food security.

Programme

Day 1
6 October 2010 (Wednesday)

PUBLIC FORUM

09:30 – 10:30 **The State of Food Security in the Asia-Pacific**
Professor Paul Teng
Dean, Graduate Programmes and Research
National Institute of Education (NIE)
and
Senior Fellow and Advisor to Food Security Programme
Centre for Non-Traditional Security (NTS) Studies
S. Rajaratnam School of International Studies (RSIS)
Nanyang Technological University (NTU)
Singapore

Japan's Perspective on Regional Food Security
Dr Osamu Koyama
Director, Research Strategy Office
Japan International Research Center for Agricultural Sciences (JIRCAS)
Japan

Australia's Perspective on Regional Food Security
Dr Denis Blight AO FRSA
Executive Director,
The Crawford Fund for a Food Secure World
The Australian Academy of Technological Sciences and Engineering
Australia

10:30 – 11:00 **Photo Opportunity and Coffee Break**

11:00 – 12:00 **Discussion**

12:00 – 13:00 **Lunch**

WORKSHOP

13:30 – 15:00 **Session 1: Introduction**
Conceptualising Regional Food Security
Professor Paul Teng
Dean, Graduate Programmes and Research
National Institute of Education (NIE)
and
Senior Fellow and Advisor to Food Security Programme
Centre for Non-Traditional Security (NTS) Studies
S. Rajaratnam School of International Studies (RSIS)
Nanyang Technological University (NTU)
Singapore

Food Scarcity and Security
Professor Lorraine Elliott
Senior Fellow
Department of International Relations
Australia National University
and
Senior Fellow and Advisor to Climate Change and Environmental Security Programme
Centre for Non-Traditional Security (NTS) Studies
S. Rajaratnam School of International Studies (RSIS)
Nanyang Technological University (NTU)
Singapore

Climate Change and Food Security
Mr Steven Crimp
Senior Research Scientist
Climate Impacts Analyst
Sustainable Ecosystems
Commonwealth Scientific
and Industrial Research Organisation
(CSIRO)
Australia

15:45 – 16:00 **Coffee Break**

16:00 – 17:30 **Session 2: Workshop Discussion I**
Revisiting Issues:
Identifying Who Are the Food Insecure and the Challenges to Building Regional Food Security and Resilience
Moderated by
Associate Professor
Mely Caballero-Anthony
Head
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(NTS) Studies
S. Rajaratnam School of International
Studies (RSIS)
Nanyang Technological University
(NTU)
Singapore

End of Day 1

Day 2
7 October 2010 (Thursday)

09:30 – 10:30 **Session 3: Regional Food Security Initiatives**
Asian Development Bank (ADB)
Mr Katsuji Matsunami
Advisor to Director General
Practice Leader
Regional and Sustainable
Development Department
Agriculture, Rural Development and
Food Security Unit
Asian Development Bank (ADB)
Philippines

Asia Pacific Economic Cooperation (APEC)
Associate Professor Robert Scollay
Director of APEC Study Centre
Business School
The University of Auckland
New Zealand

10:30 – 11:00 **Break**

11:00 – 12:00 **Session 3** ***(continued)***
Discussion

12:00 – 13:30 **Lunch**

13:30 – 15:00 **Session 4: Evaluating Food Security Frameworks I**
Sectors and Support
Fisheries
Dr Edward Hugh Allison
Director, Policy, Economics and Social
Science
The Worldfish Center
Malaysia

Agriculture
Dr T.J. Higgins
Honorary Fellow, Plant Industry
Commonwealth Scientific and
Industrial Research Organisation
(CSIRO)
Australia

Ensuring Food Security through Land Transfer
Mr P.K. Hangzo
Associate Research Fellow
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(NTS) Studies
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Studies (RSIS)
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Singapore
and
Ms Irene A. Kuntjoro
Associate Research Fellow
and Centre Event Manager

Centre for Non-Traditional Security (NTS) Studies
S. Rajaratnam School of International Studies (RSIS)
Nanyang Technological University (NTU)
Singapore

Discussion

15:00 – 15:30 **Break**

15:30 – 17:00 **Session 5: Evaluating Food Security Frameworks II**
Enabling Environments for Local Food Security
Community Rights
Dr Keokam Kraisoraphong
Assistant Professor
Faculty of Political Science
Chulalongkorn University
Thailand

Gender
Associate Professor Kyoko Kusakabe
Gender and Development Studies
Asian Institute of Technology
Thailand

Health
Associate Professor Jane Dixon
National Centre for Epidemiology and Population Health
The Australian National University (ANU)
Australia

Discussion

End of Day 2

Day 3
8 October 2010 (Friday)

09:30 – 10:30 **Session 6: Workshop Discussion II**
Best Practices, Gaps and Implementation of Regional Cooperation Mechanisms for Food Security
Moderated by
Professor Lorraine Elliott
Senior Fellow
Department of International Relations
Australia National University
and
Senior Fellow and Advisor to Climate Change and Environmental Security Programme
Centre for Non-Traditional Security (NTS) Studies
S. Rajaratnam School of International Studies (RSIS)
Nanyang Technological University (NTU)
Singapore

10:30 – 11:00 **Break**

11:0 – 12:00 **Session 6 (continued): Workshop Discussion III**
Recommendations on Ways Forward
Moderated by
Professor Lorraine Elliott
Senior Fellow
Department of International Relations
Australia National University
and
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12:00 – 13:00 **Lunch**

End of Workshop

List of Public Forum and Workshop Speakers

*in alphabetical order according to first names

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List of Workshop Participants

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About the Department of International Relations, School of International, Political & Strategic Studies, College of Asia and the Pacific, the Australian National University (ANU)

The **Department of International Relations** is one of the leading centres for the study of international and global politics in the world, and the only department of its kind in Australia. Consistent with the mission of the Australian National University, the Department plays a national role in advancing the study of international relations in Australia. The Department has a strong commitment to public engagement, in Australia, in the Asia-Pacific, and globally, on issues of national and international importance.

A Vibrant Research Programme

The Department is dedicated to research of internationally respected quality. Staff expertise covers core areas of the field, particularly international theory, international security, international political economy, as well as a broad range of other issue areas, including human rights, the environment, people movements, state formation, indigenous peoples, culture and civilisation, global civil society, international institutions and organisations, regionalism, human security, alliance politics and Australian foreign policy. In all of its research, the Department seeks to integrate general international theory and the study of global politics with a focus on the international relations of the Asia-Pacific region.

A Commitment to Excellence in PhD and Graduate Education

The Department is committed to excellence in graduate training. It has long been the premier site in Australia, and one of the leading in the world, for the education of PhD students in international relations, and its graduates have gone on to academic positions around the world. The Department's commitment to graduate training is pursued through its internationally regarded Graduate Studies in International Affairs (GSIA) programme, which offers a Graduate Diploma in International Affairs, a Master of International Affairs and the long-established Master of Arts in International Relations. The GSIA programme is distinguished by research-led teaching with internationally recognised experts in the field.

To find out more about the **Department of International Relations**, visit http://ips.cap.anu.edu.au/ir/ .

About the RSIS Centre for Non-Traditional Security (NTS) Studies

The **RSIS Centre for Non-Traditional Security (NTS) Studies** conducts research and produces policy-relevant analyses aimed at furthering awareness and building capacity to address NTS issues and challenges in the Asia-Pacific region and beyond.

To fulfil this mission, the Centre aims to:

- Advance the understanding of NTS issues and challenges in the Asia-Pacific by highlighting gaps in knowledge and policy, and identifying best practices among state and non-state actors in responding to these challenges
- Provide a platform for scholars and policymakers within and outside Asia to discuss and analyse NTS issues in the region
- Network with institutions and organisations worldwide to exchange information, insights and experiences in the area of NTS
- Engage policymakers on the importance of NTS in guiding political responses to NTS emergencies and develop strategies to mitigate the risks to state and human security
- Contribute to building the institutional capacity of governments, and regional and international organisations to respond to NTS challenges

Our Research

The key programmes at the **RSIS Centre for NTS Studies** include:

1) Internal and Cross-Border Conflict
   - Dynamics of Internal Conflicts
   - Multi-level and Multilateral Approaches to Internal Conflict
   - Responsibility to Protect (RtoP) in Asia
   - Peacebuilding

2) Climate Change, Environmental Security and Natural Disasters
   - Mitigation and Adaptation Policy Studies
   - The Politics and Diplomacy of Climate Change

3) Energy and Human Security
   - Security and Safety of Energy Infrastructure
   - Stability of Energy Markets
   - Energy Sustainability
   - Nuclear Energy and Security

4) Food Security
   - Regional Cooperation
   - Food Security Indicators
   - Food Production and Human Security

5) Health and Human Security
   - Health and Human Security
   - Global Health Governance
   - Pandemic Preparedness and Global Response Networks

The first three programmes received a boost from the John D. and Catherine T. MacArthur Foundation when the RSIS Centre for NTS Studies was selected as one of three core institutions leading the MacArthur Asia Security Initiative in 2009.*

Our Output

Policy Relevant Publications

The **RSIS Centre for NTS Studies** produces a range of output such as research reports, books, monographs, policy briefs and conference proceedings.

Training

Based in RSIS, which has an excellent record of post-graduate teaching, an international faculty, and an extensive network of policy institutes worldwide, the Centre is well-placed to develop robust research capabilities, conduct training courses and facilitate advanced education on NTS. These are aimed at, but not limited to, academics, analysts, policymakers and non-governmental organisations (NGOs).

Networking and Outreach

The Centre serves as a networking hub for researchers, policy analysts, policymakers, NGOs and media from across Asia and farther afield interested in NTS issues and challenges.

The **RSIS Centre for NTS Studies** is also the Secretariat of the Consortium of Non-Traditional Security Studies in Asia (NTS-Asia), which brings together 20 research institutes and think tanks from across Asia, and strives to develop the process of networking, consolidate existing research on NTS-related issues, and mainstream NTS studies in Asia.

More information on our Centre is available at www.rsis.edu.sg/nts

** The Asia Security Initiative was launched by the John D. and Catherine T. MacArthur Foundation in January 2009, through which approximately US$68 million in grants will be made to policy research institutions over seven years to help raise the effectiveness of international cooperation in preventing conflict and promoting peace and security in Asia.*

NOTES

NOTES

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