Greater Mekong Subregion Economic Cooperation Program

SEVENTH MEETING OF GMS WORKING GROUP ON AGRICULTURE (WGA-7)
Ha Noi, Viet Nam, 15-16 November 2010

Summary of Proceedings

Introduction

1. The Seventh Meeting of the GMS Working Group on Agriculture (WGA-7) was held in Ha Noi, Viet Nam, on 15-16 November 2010, with the theme *"Modernizing the Greater Mekong Subregion through Improved Food Safety and Traceability Systems in the Context of Regional Trade."*

2. The Meeting was organized and sponsored by the Asian Development Bank (ADB) with the cooperation of the Ministry of Agriculture and Rural Development of the Republic of Viet Nam, and attended by participants from the six GMS countries: Cambodia, People"s Republic of China, Lao PDR, Myanmar, Thailand, and Viet Nam. Resource speakers from the public, private, and academic sectors, institutions belonging to the Consultative Group on International Agricultural Research (CGIAR), UN specialized agencies, and non-profit organizations, as well as observers from other development partners, and individual experts also attended. ADB provided secretariat support. A list of participants is in Appendix 1 and a copy of the Meeting Program and Agenda is in Appendix 2.

Opening Session

3. Ms. Nguyen Thi Tuyet Hoa, Deputy Director General, International Cooperation Department, Ministry of Agriculture and Rural Development of Viet Nam, extended her warm welcome to all the participants to Ha Noi which recently celebrated its 1,000th year anniversary. She noted the importance of WGA-7 and its focus on food safety issues and stressed that, in line with the endorsement of Phase II of the Core Agriculture Support Program (CASP II) by the 16th GMS Ministerial Meeting held in August 2010 in Ha Noi, WGA should look at the next 5 years on how to achieve the goals of the program through a realistic work program. Agriculture is a priority area due to its contribution to the GDP of GMS countries, and joint efforts in CASP II implementation will help improve the livelihood of farmers and contribute to the achievement of MDGs as well. She invited participants to participate actively in the discussions and expressed thanks to ADB for its continued support to GMS countries through CASP I and II. She wished the delegates a successful meeting and a nice stay in Ha Noi.

4. Mr. Javed Mir, Director, Agriculture, Environment and Natural Resources Division Southeast Asia Department, ADB, noted that the GMS, like the rest of Asia, is witnessing unprecedented economic transformation, millions have been and are being pulled out of poverty, and the subregion is on track to greater economic prosperity. However, the economic momentum underpinning the economic transformation of the subregion, coupled with the demographic and dietary shifts, are giving rise to new challenges as well as opportunities in the agriculture sector, hence the need to deepen and broaden partnerships across line and development agencies, and across countries.

The CASP provides a unique platform for the GMS countries and development partners to address the continuing challenges of food security, poverty, malnutrition, and depletion of the ecological infrastructure that underpins agriculture and other productive sectors. CASP II envisions the GMS to be recognized as the leading producer of safe food, using climate-friendly agricultural practices and integrated into global markets through regional economic corridors, and will focus on food safety and security, climate-friendly agriculture, and bioenergy. The meeting provides the working group the opportunity to interact and share knowledge, experiences and advice with some of the best practitioners in the business on the issues that surround paper free trade, food safety, IT food traceability, and bioenergy. The wealth of collective experience and wisdom from this engagement with development/cofinancing partners and the private sector would help WGA have a clear and time bound operational plan for CASP II.

5. Copies of the welcome remarks are in Appendix 3.

6. Ms. Nguyen Thi Tuyet Hoa and Mr. Mir chaired and co-chaired the Meeting, respectively.

Session I: GMS Program and Core Agriculture Support Program (CASP)

I.1. Core Agriculture Support Program Phase II (CASP II)

7. Ms. Sununtar Setboonsarng, Principal Natural Resources Economist, Agriculture, Environment and Natural Resources Division, Southeast Asia Department, ADB, gave an overview of the GMS Economic Cooperation Program in the context of the overall Regional Cooperation and Integration Strategy of the ADB and other regional cooperation programs e.g. BIMP-EAGA, IMT-GT, Central Asia Regional Economic Cooperation, and South Asia Subregional Economic Cooperation. She recalled the directive of the last GMS Leaders‟ Summit that called for increased focus on “softer aspects of connectivity to transform the transport corridors into economic corridors.” ADB has financed 3 regional technical assistance projects (RETA 6110, 6324, and 6521) which have supported WGA meetings and workshops, selected studies and capacity building initiatives, the establishment of the Agricultural Information Network Service (AINS), and developed the Core Agriculture Support Program (Phases I and II). Emerging issues in new agriculture development and new opportunities for the GMS have been important considerations in the preparation of CASP II which envisions the GMS to be recognized globally as the leading producer of safe food, using climate friendly agricultural practices and integrated into global markets through regional economic corridors. CASP II is built on 3 pillars: (i) Building global competitiveness by promoting food safety through trade; (ii) Promoting climate-friendly agriculture and natural resource management; and (iii) Promoting agriculture as leader in providing biomass-based rural renewable energy. Moving forward to implement CASP II, WGA will be working with other GMS working groups such as those on Environment, Tourism, and Transport and Trade Facilitation. For example, the program of actions for Transport and Trade Facilitation in the GMS will need to ensure close coordination and synergy of activities to achieve enhanced SPS regime to boost GMS agricultural trade. Safe food production is also important in improving competitiveness of the GMS as a tourist destination. A copy of her presentation is in Appendix 4.

Session II: Food Safety and Food Traceability, and Paper Free Trade

II.1. Rethinking Agriculture in GMS – Food Safety and Climate Change

8. Dr. Andrew D. Noble, Regional Director, International Water Management Institute (IWMI) Southeast Asia and Central Asia, discussed the major drivers of change -water scarcity and food security and climate change- and their implications for the GMS. Projections of changes in rainfall and runoff/water availability due to climate change show high uncertainty. Agriculture already functions in a variable context with respect to droughts, floods, storms, markets, political and policy environment, and oil prices, hence the need for a "no-regrets approach" to build resilience regardless of the direction of change. With limited irrigated areas in the GMS, a key focal area for building resilience and adaptation for enhanced productivity is rain-fed agriculture where there is an urgent need to diversify from monocrop rice production to integrated farming systems, and aquaculture/fisheries and/or livestock are promoted to enhance ecosystem health. Climate change has serious impacts on food safety (contaminated water and decline in global freshwater quality and quantity, temperature effects like harmful algal bloom, accumulation of toxins with serious human health risk), fisheries (growth of *Vibrio vulnificus* and increased risk from fish handling and consumption, methylation of mercury), and crops (growth of mycotoxin-producing fungi, increase in *Aspergillus flavus,* aflatoxin contamination*).*

II.2. Community Based Food Safety Improvement: Participatory Guarantee Systems for Smallholder Producers

9. Mr. Christopher John May, Managing Director, Biological Consultancy Ltd., discussed how participatory guarantee systems (PGS) can be applied to community development, trust building and linking smallholders to markets. Smallholder farmers in the value chain around the world share similar challenges including bureaucratic requirements and regulations on food safety certificates, technical assistance, market opportunity incentives, resources to meet skills and capital requirements, marginalization and lack of representation in national and industrial bodies. PGS serves as a catalyst for advancing smallholders‟ engagement in the value chain and for meeting consumer expectations through labeling and logos. The key components of PGS are recognized production standards, rules (norms), documented management systems and procedures, mechanism for verifying farmers‟ compliance with the rules, technical development for farmers, farmers‟ pledge/contract, seals or labels, and clear and previously defined consequences for non-compliance. Compliance is internalized and appropriate to the smallholders‟ situation without having to rely on external or third party audits. Benefits include enhanced group capacity (collective decision making, financial management, individual and collective accountability), group certificate controlled by farmers themselves, micro loans from group funds, investment in own infrastructure, and new employment opportunities e.g., in village processing plants. He cited the experience of VietGap in the production of fresh fruits and vegetables in Viet Nam and the application of PGS as a tool for implementing safe vegetable certification to ensure consumer confidence.

Open Forum:

10. Thailand thanked ADB for its efforts leading to the endorsement of CASP II by the 16th GMS Ministerial Meeting and urged all concerned parties to redouble their

commitment to effectively implement and translate the CASP into concrete measures and practical activities, with emphasis on the impacts of climate change that threaten agricultural productivity. Thailand shared information on the thrusts of the draft 11th National Economic and Social Development Plan aimed at addressing the threat of climate change. With regard to PGS, Thailand stressed the importance of linking NGOs and other community organizations with concerned government agencies to ensure transparency and traceability for regulation purposes.

11. On the question of whether the state has a role to play in promoting PGS, it was clarified that although PGS is mainly a grassroots initiative, it is important to secure legitimacy through the adoption of national organic standards recognized by the government. In the experience of Brazil and India, the engagement of PGS has strong relationship with the government. The state has an important role to play in recognizing the capacity of smallholders to participate in the value chain.

12. On the issue of improving rice production in order to improve food security, several approaches were suggested, including use of new cultivars, fertilizers, herbicides and insecticides which help increase productivity. However, one has to question whether there are in fact improvements in poverty level among smallholders, given political considerations for keeping the price of rice low, and the only way out is to go into large scale commercial production. One divergent view put forward is to diversify out of rice and look at it as an opportunistic crop that provides only a subsistence level of production, and that rice production alone does not pull people out of poverty, hence the need to think about diversifying into alternative crops like vegetables and other market-based commodities, and high quality livestock. Another view was that the subregion cannot depend on the international market to ensure rice sufficiency, hence the need to continue rice production to ensure food security.

II.3.a. Paper Free Trade: Overview of IT Food Traceability

13. Mr. John Cann, APAC Senior Regional Manager, Global Strategic Accounts, (GSA), Microsoft Operations Pte. Ltd., Singapore, discussed public-private partnerships and ICT for sustainable agriculture, the role of paper free trade in food traceability, and what is possible for the GMS Program. GSA partners with various intergovernmental organizations (Ex: UNDP, UNEP, UNESCO, UNHCR, UNIDO, ITU, WHO, ASEAN, and ADB) in applying Microsoft"s ICT expertise in addressing global and local development challenges, for example in e-government, e-health, e-agriculture, e-trade, e-environment, e-tourism, and e-education. Agriculture is increasingly becoming a business of information and ICT is being applied in various aspects. For example, ICT is used in fishery market information and trading system (where field market prices/data are collected by field agents, fed via SMS to a server, then checked and approved as market data for access by business users via the internet, or queried via SMS). Another example is in direct sugar cane selling transaction between farmers and sugar factories using SMS. Other possible applications for the GMS Program include the use of ICT platform for farmers to post harvest/produce data at farm gate via SMS and the use of the TradeFacilitate system for producers, importers and exporters to exchange information and orders electronically. (Note: Videos were shown on experiences with TradeFacilitate"s supply-chain technology for paper free trade of countries like Ethiopia, Senegal, and Kenya involving exports of agriculture products like cutflowers and livestock to EU markets. Another video shown was sugarcane trading between farmer producers and sugar factories in Viet Nam.)

II.3.b. Paper Free Cross Border Trade Facilitation delivered on the Microsoft Azure 'Cloud' Platform

14. Mr. Ian Watt, Managing Director, Asia Pacific Region, TradeFacilitate Ltd., presented a demonstration of paper free cross border trade facilitation delivered on the Microsoft Azure „Cloud" Platform. He noted that a global paradigm shift beginning January 2011 under the World Customs Organization SAFE Framework of Standards signed by 164 member countries in 2005 will be using one common set of international standards for e-trade, harmonized advance electronic cargo information, customs-to-customs and customs-to-business application, and recognition of e-signature. Enforcement of electronic customs legislations taking effect in January 2011 in the EU and U.S.A. requires that electronic information precede planned exports/shipments of goods for greater transparency and security. The enforcement of these new legislations is expected to marginalize smallholder producers in the GMS countries if the adoption of electronic trading is not properly facilitated. He noted the new thrusts under CASP II for regional cooperation to enhance the international competitiveness of GMS agri-food sector through improved food safety and traceability systems and the opportunities presented by TradeFacilitate for addressing traceability of paper free cross border trade transactions from order to international delivery, thus avoiding the costs associated with traditional paper driven supply chains. He mentioned that ADB, Microsoft and TradeFacilitate have developed a proposal for pilot projects to be executed in 5 GMS countries in Q1, 2011 to implement Tradefacilitate paper free trade facilitation service into the EU, starting with one product, and the plan is to expand to regional trade of two eco products per GMS country.

Open Forum:

15. Mr. Javed Mir noted that the TradeFacilitate technology is very relevant to GMS intra-regional trade which is currently bogged down by cumbersome cross-border customs clearance procedures. The bottom line is how the technology could impact on the income and profitability of small farmholders. On the other hand, there is the question of the costs of hardware and software requirements.

16. Regarding the issue of interface with traditional management procedures in the EU and US where authorities still require original animal certificates as SPS requirement, it was clarified that moving from paper with physical signatures to secure electronic data in paper free trade is not going to happen instantly. Original documents still form part of the inspection regime, although things are moving in the direction of paper free transaction.

17. It was clarified that the same principles that apply involving trade with the EU and the US can also apply to GMS regional trade such as export to PRC; the technology can be modified and customized, but impediments may come at the non-technology level.

II.4. Solutions on Food Traceability and Agricultural Productivity Improvement

18. Ms. Annie Pang Cheung, Vice President, Smarter Planet Initiative, IBM ASEAN, stated that urbanization is putting stress on city infrastructures and challenging the

planet‟s sustainability. Cities increasingly serve as the crucibles where the success or failure of the planet is determined, and smarter cities are working to infuse intelligence into their core systems for government services, transportation, energy and utilities, healthcare, public safety, and education. She showed the application of analytics and advanced technology for smarter agriculture (i.e., for analyzing farming data, including root stock, timing, location, irrigation and crop type to predict which combinations of elements will bring the best crop yield at least cost), smarter food (for full chain traceability and visibility across the total supply chain to ensure food safety), smarter water (for addressing industrial waste water compliance), and smarter banking (for providing microfinancing for the poor). She mentioned 3 elements required in building a smarter planet and which are also key for achieving WGA‟s vision: collaboration among different constituents, standards for systems thinking, and openness and innovation. She stressed that collaboration among GMS countries will increase competitiveness of the region, making the pie bigger for the benefit of all countries.

II.5. Private Sector Experience on IT Food Traceability Systems

19. Mr. Sahas Ratanasoponchai, Director, Food Safety and Quality Assurance, Betagro Co., described his company‟s e-traceability system that is capable of tracing back farm animal, feed, and human foods or chemicals used in animal and feed production and all the process steps of human food production and distribution chain. The computerized trace back system allows for quick response to food safety issues (e.g., disease outbreak or animal chemical residue) and product recall, alignment of standard work procedure in food processing to enhance food safety, and building the planning and monitoring database to boost up the supply chain integration management efficiency. He cited the benefits to consumers (ensured quality and food safety, effective and prompt product recall, and access by customers to production information) and to companies (immediate and accurate product recall, customers access to production information, improved productivity, ability to attend to new customers, access new markets, and retain existing customers). He stressed the high return of investment and that the system can be inclusive of smallholder farmers through contract farming arrangements.

Open Forum:

20. Thailand shared information about their current traceability systems for food safety including radio frequency identification tags (RFID) and Electronic Product Trade Information System (EPTIS) being implemented by big companies like Betagro. Small producers, however, face obstacles including lack of knowledge, technology and financial resources. Thailand stressed the need for closer cooperation among GMS countries for the development of traceability system to help ensure the high standard of food safety, and would be willing to share their experience with the other GMS countries.

21. Betagro confirmed their close cooperation with the Thai government on food traceability.

22. IBM is in discussions with the US government regarding customs transit requirements for food traceability.

23. Myanmar suggested implementing food traceability for certain items as pilot projects first before moving into regional e-trade forum.

24. Government has a key and active role to play by way of collaborating with the private sector to help promote awareness and adoption of food traceability systems. Associations also have a role to play in providing the infrastructure for standards setting, and promoting education for adherence to those standards.

25. Cambodia imports livestock from Thailand and Viet Nam, fruits from Thailand, and vegetables from Viet Nam, and agrees with Myanmar"s views to focus on traceability studies for specific items to ensure that imported products are safe. Cambodia emphasized the importance of having appropriate mechanisms for information sharing among the countries.

II.6. Improving Competitiveness of Regional Cooperation: GS1 Food Safety and Traceability Standards

26. Mr. Tan Jin Soon, Advisor, GS1 Singapore/EPCglobal Singapore, and Chairman, Automatic Data Capture, Singapore, gave a presentation on Improving Competitiveness of Regional Cooperation: GS1 Food Safety and Traceability Standards. He noted that food safety is a major international concern in light of the global increase in incidence of food-borne diseases, emergence of new pathogens and increasing virulence of old ones. He cited the need to promote regional cooperation in order to address common challenges in food safety through sharing of knowledge and experiences, and development of common platform and standards for food safety best practices and technology with support from ADB to enhance the competitiveness of the GMS countries. He emphasized the need for collaboration among GMS countries, and between government regulatory bodies working closely with the private sector to ensure that food processed in the GMS countries are safe to eat, fresh and wholesome, and free from pesticides and diseases. Food safety can be achieved through implementation of cold chain management for vegetables, milk products and chilled meat, and implementation of GS1 (Global System, Global Standards and Global Solutions) Food Safety & Traceability Standards. He briefed the working group about how GS1 Traceability Standards works as a business process to meet business needs concerning visibility, transparency, food safety, sustainability, recalls and withdrawal, efficient logistics, regulatory requirements, consumer safety, product quality management, patient safety in the healthcare sector, product authentication, anti-counterfeiting policies, waste management, and brand protection. GS1 food traceability standard helps to ensure interoperability within and across organizations and across borders; eliminate trade barriers associated with product identification; reduce production and supply chain costs; reduce the risk associated with the adoption of new systems; and ensure longevity of investments.

II.7. Developing and Promoting Critical Mass of High Value Eco-products from GMS Countries

27. Dr. Chayan Picheansoonthon, Associate Professor, The Academy of Science, The Royal Institute of Thailand, gave a presentation on Developing and Promoting Critical Mass Production of High Value Herbal Products (herbal drugs, food supplements, beverages, cosmetics and toiletries, and spa products). He presented the criteria applied in evaluating herbal health products (safety, efficacy, and quality assessment) and the processes involved. He illustrated the application of evaluation

criteria and product development in the case of turmeric (*Curcuma longa L.)* popularly used in food, medicine and cosmetics. Turmeric products available in the market are in the form of turmeric powder, capsules, cream, and soap. It is one of 12 herbs/herbal products being promoted as product champions of Thailand to be moved to international markets. He proposed turmeric as a possible high-value product for collaboration among GMS countries to attain critical mass required in processing for export markets.

II.8. Implementing Food Safety with Livestock Smallholders: Experiences in Southeast Asia

28. M. Patrice Gautlier, Dr. Vet, ASVELIS, presented his company‟s experience in working in the livestock sector in Europe and the GMS. He noted that there are major discrepancies in the availability and quality of input and service providers and farmers organizations between Europe and the GMS and that these have major implications on the capacity of GMS livestock smallholders to upgrade. In Europe, food safety is not the monopoly of large-scale enterprises and supermarkets. The company‟s field experience in Thailand and Viet Nam shows that smallholders, as long as they are organized and have access to adequate inputs and services, can do it too. He mentioned veterinary public health risks in the GMS including issues associated with live animals (viruses, bacteria, parasites, and environmental pollution), collection and processing stages, and feed and veterinary products. He shared his experience in Viet Nam(the USAID-funded STOP AI Project), involving 9 farmer organizations, the design of farming and slaughtering standards, grant support for equipment and slaughterhouses, training for implementation of standards, inspection visits to verify compliance, support to marketing of poultry products, and final project events to disseminate experiences and convince policy makers. The project has served as a model for restructuring of the poultry sector in Viet Nam, improving veterinary public health, and upgrading of farmers‟ organizations as input and service providers. He concluded that there are many opportunities in the GMS countries to link livestock smallholders and food safety but that smallholders do not have the investment capacity and access to knowledge that large companies have. The increasing awareness of consumers in food safety presents both an opportunity and a threat for smallholders.

II.9. Pilot Project on Paper Free Trade for GMS: Case of Organic and Fairtrade Coffee from Lao PDR

29. Mr. Christopher John May, Bioglobal Consultancy Ltd., Mr. Ian Watt, TradeFacilitate Ltd, and Mr. John Cann, Microsoft Pte. Ltd., jointly presented a proposed pilot on Lao organic and Fairtrade coffee in the context of Microsoft Azure „Cloud‟ Platform. Coffee is the 5th biggest export earner of Lao PDR, with current production at .25% of the world‟s production with potential for significant expansion. 80% of coffee crop is lower-value Robusta but Arabica is now the main crop planted by about 23,000 small holders of several ethnicities in 250 villages, who mostly depend on coffee. Until recently, smallholder coffee produced was of low quality and sold to traders for low prices; processing methods were poor and market was geared to low-end buyers, so much so that farmers were trapped by debt to traders. Project interventions between 2006-2010 by AGPC and New Zealand have helped develop the capacity of small holders to produce and sell quality coffee through centralized processing and product control. The Lao government aims to strengthen the coffee sector and is creating a Coffee Board to cover export standards and procedures. Lao PDR could realize the potentials of small holder coffee producers through ideal production conditions, and

improved quality of processing methods to meet the demands of high end markets. They stated that TradeFacilitate and Microsoft are jointly committed to foster and modernize trade in the GMS sector through paper free trade, and suggested for WGA to consider endorsing the Lao coffee pilot initially and moving it forward to cover other GMS countries and products/commodities that they may eventually identify.

30. Open Forum

31. Representative of CIRAD mentioned additional background details regarding the Lao coffee project that is partly founded by the French government. He emphasized the need to produce data upstream, the need for background work and data required to produce certification, and the strengthening of capacity to produce the required data and information.

32. Mr. Ian Watt agreed that the pilot should be structured to be able to address the particular need for information content to fill in the gaps.

33. Mr. Tan Jin Soon suggested that methodologies for structuring the pilot could look at the experience of other countries.

34. Lao PDR inquired about how to secure GS1 membership. Mr. Tan Jin Soon mentioned about a regional training done in Thailand, and that guidelines have been developed that are easy to follow step-by-step.

II.10. Sustainable Agriculture through Application of Nuclear Technologies

35. Dr. Josef Brodesser, Food Safety Specialist, Joint Division of Nuclear Technologies in Food and Agriculture, International Atomic Energy Agency, discussed Nuclear Applications for Food Safety and Security. He mentioned several nuclear techniques applications in food and agriculture including insect pest control, plant breeding and genetics, food and environmental protection, soil and water management and crop nutrition, and animal production and health. A Joint FAO/IAEA Programme assists Member States on the use of nuclear techniques and related biotechnologies for sustainable agriculture development through coordinated research projects, technical support and services, laboratory support and training, and collection, analysis, and dissemination of information. With regard to food safety and traceability, IAEA has a program on Implementation of Nuclear Techniques to Improve Food Traceability – CRP D5.20.37 (2011-2015) aimed at enhancing the capabilities of Member States to reduce food safety hazards and protect the environment through nuclear and related techniques.[1] He made the following suggestions for future cooperation: (i) setting up/strengthening of sustainable global and regional networks; (ii) establishment of broader partnerships; (iii) support for R & D for food and agriculture from international organizations; (iv) flexible delivery mechanisms; and (v) increased investment in R & D for food and agriculture.

II.11. Initiatives of the Working Group on Environment (WGE) on Agriculture and Climate Change

[1] PRC, one of the countries covered under the program, has a research proposal on traceability/authenticity of beef, apple, and orange juice, tea, honey, soya protein in milk by stable isotope analysis.

36. Mr. James R. Peters, Chief Technical Adviser, GMS Environment Operations Center, stated that land use competition is increasing and putting pressure on traditional agriculture and communities, and likely to negatively affect food security. Climate change will likely exacerbate impacts on the GMS, hence, the importance of looking at planning scenarios under these changing conditions. He confirmed that WGA and WGE have shared objectives and mentioned climate change work on agriculture under the Core Environment Program-Biodiversity Corridor Initiative focusing on developing information on how agriculture based communities can adapt to climate change in the GMS, building a replicable framework for adaptation (pilot sites in Thailand, Laos and Viet Nam) to establish rice production baseline, biophysical conditions to assess future yield of rice production and climate change impacts, assessment of local vulnerability, and development of community-based adaptation options. He mentioned opportunities for collaboration including development of planning and decision support tools; innovative financing tools and approaches; knowledge and information sharing; and international capacity building. He cited the example of carbon neutral transportation corridors (initially covering Thailand, but may be expanded to cover other GMS countries as well) to evaluate potential opportunities for agricultural development and complete cost-benefit analysis of competing alternatives along newly constructed or planned roads.

Open Forum

37. In response to an observation from JIRCAS regarding constraint in accessing IAEA"s research fund, Dr. Brodesser clarified that joint research projects under their coordinated research program are done on a cost-sharing basis, with IAEA funding serving as seed money. Technical cooperation projects are done on a bilateral and fully financed basis, and difficult to do with other donor agencies because of constraints posed by the UN structure. He also mentioned that IAEA technical and research reports may be accessed from their website.

38. In response to an observation from SIDA that there are many factors that come into the climate change equation, Mr. Peters stated that their project will take into account previous studies and try, in consultation with various stakeholders, to study and understand the continuum of communities – from traditional to commercial, and will be looking at opportunities to shift production to other types of agricultural commodities and whatever opportunities there may be to increase yields and income, the impact of education, the way people use available resources, etc., within the context of climate change. He invited all those interested to contribute to this effort.

39. CIRAD noted that environmental issues also involve marketing.

40. Copies of presentations for Session II are in Appendix 5.

SESSION III. Updates on Initiatives Supporting CASP

III.1. GMS National Reports

41. Representatives of GMS Countries presented national reports on various projects and activities in support of CASP I and II.

- ***Cambodia***

42. Cambodia"s national report mentioned several regional cooperation projects/activities - a number of which are directly under the CASP, as well as country cooperation activities in the agriculture sector. These projects/activities are funded by various donors and development partners. CASP has contributed mainly to supporting policies and strategies of the government with regard to facilitating cross-border agricultural trade; promoting public-private partnership in sharing agricultural information, enhancing capacity in agricultural science and technology, and establishing emergency response mechanisms for agricultural and natural resource crises. Cambodia cited some issues and challenges in the implementation of the CASP, including (i) lack of consultation with MAFF during project formulation and implementation, need to ensure strong country ownership; and (ii) slow mobilization of resources and need to ensure availability of funds for project implementation. On emerging issues for future cooperation, Cambodia mentioned the threat of climate change, transboundary animal disease and plant pest, biosecurity and food safety, human resource development, information sharing across sectors, access to new and emerging technologies, sustainable use of natural resources, and institutional and program-related issues to improve complementation and ensure synergy.

- ***PRC***

43. PRC"s country report mentioned several agricultural cooperation activities in the GMS covering food security, prevention and control of cross border animal and plant disease; rural renewable energy development and utilization (including provision of biogas digesters to neighboring countries), agricultural information application (establishment of AINS), and technical exchange and demonstration (livestock production with Cambodia and Viet Nam, rural development workshop for GMS countries, sustainable development technology demonstration and training, and collaboration between Yunnan agricultural academy of science and counterparts in GMS countries). PRC also participated in 20 GMS agricultural cooperation projects/activities. These have contributed greatly to the promotion of subregional cooperation in the agricultural sector. Several suggestions were put forward on agricultural cooperation in the future including formalization of MOUs to strengthen cooperation, setting up of GMS rural renewable energy fund, and setting up of long-term cooperation mechanisms with international organizations e.g., IFAD, FAO. Several activities were also suggested including training courses and knowledge-sharing forums.

- ***Lao PDR***

44. Lao PDR has adopted a policy on agriculture production that is secure, sustainable, clean, free of toxic substances, and low cost. Agriculture transition has accelerated in the last 10 years. Food security based systems are integrated with commercial systems. The country, being land-locked bordering 5 neighboring countries, provides both advantages and challenges (high transport costs, poor logistic infrastructure, and risks associated with plant and animal pests). Agriculture products from Laos are exported to neighboring countries, Hongkong, Europe, New Zealand, Singapore, and Korea. A legal framework exists for SPS and trade-related issues (governing food, livestock, fisheries and plants), and MOUs on SPS cooperation have been formalized with Viet Nam and PRC. There is strong policy support with regard to

incentives and investments; however, there are several constraints for the development of SPS including lack of qualified scientists and technical staff, limited budget, inadequate laboratory facilities, insufficient legal framework for development of market access, geographical and support services, lack of awareness and insufficient information. Lao PDR suggests that implementation of WGA"s program should give priority to addressing these constraints.

- ***Myanmar***

45. Myanmar is an agricultural economy and the agriculture sector contributes 33.7% (2008-2009) of GDP; 15.4% of total export earnings; and employs 61.2% of the labor force. Myanmar has joined international organizations/agencies such as FAO, IRRI, ICRISAT, ASEAN, GMS, ACMECS, CLMV, BIMSTEC, CIRDAP, UNESCAP and SEARCA. Under GMS CASP, Myanmar has participated in capacity building/training and been involved in the GMS AINS, and studies on biofuels and rural renewable energy. In most cases, Myanmar has participated as observer although it has had the opportunity to participate in a few capacity building trainings. Myanmar will continue to participate in GMS-AINS to exchange agricultural information among GMS countries through the main English site and Myanmar"s AINS website. As a member of WTO, Myanmar implements SPS in conformity with the International Standard for Phytosanitary Measures, however, the country lacks modern laboratory equipment and looks forward to receiving assistance in this regard. For future cooperation, Myanmar is in transition toward GAP and organic farming and would like to develop GAP for major exporting commodities. Myanmar did not have the opportunity to participate fully in the implementation of CASP I and would like to participate to the maximum extent in CASP II. Myanmar feels that only when this opportunity is given would the essence of regional cooperation among GMS Countries be achieved.

- ***Thailand***

46. Thailand"s country report provided details on regional cooperation and country activities in the agriculture sector in support of the CASP. These include CASP initiatives on the GMS AINS (participation in related training and workshops, hardware and software installation, uploading, updating, and enrichment of data content), transboundary animal disease control, and workshops and training programs organized under regional technical assistance supported by ADB to implement activities under the CASP. Thailand identified some issues and challenges in the implementation of CASP including gap in technology access, standardization of products applying GAP, HACCP, and ISO standards in the agriculture sector, and technical difficulties encountered in operating the AINS. Moving forward, Thailand suggests the need for strong collaboration among WGA, GMS Business Forum, and Transport and Trade Facilitation working group, strengthening of the WGA Secretariat and WGA institutional arrangement, and clearly-defined role for WGA country focal points with regard to WGA-related correspondence.

- ***Viet Nam***

47. Viet Nam"s country report provided comprehensive details about the historical evolution of WGA and subregional cooperation in agriculture, including the status of

projects in the agriculture sector as reflected in the status report of the Vientiane Plan of Action. An important aspect of the country report concerns the issues and challenges for implementing CASP I, including insufficiency of funding for CASP I initiatives, weak ownership by member countries of some regional projects/initiatives arising from lack of in-depth consultation and low feasibility resulting in weak prospects to attract donor funding, weak coordination and information exchange about implementation of regional projects, unclear project approval procedures (both on the part of Government and ADB), disparity in national staff capacity to implement CASP I, need to continue capacity building programs, need for more frequent meetings among coordinators for thematic working groups in carrying out related activities (training, seminars/workshops, studies), and need to intensify information exchange and sharing of experiences among WGA national focal points to improve mutual understanding and coordination. Viet Nam also offered specific recommendations for implementation of CASP II, including (i) encouraging more active roles of GMS countries; ii) clarifying responsibilities of Working Groups on Agriculture, Environment, Trade, Communication, etc. in order to avoid duplication and improve sharing of information among these groups; iii) focusing CASP II projects/programs to help in resolving problems at regional level; iv) establishment of specific cooperation/coordination mechanisms; (v) assessment of individual projects upon completion and sharing of information among GMS countries; (vi) strengthening the capacities of WGA Members; (vii) ADB to help in strengthening public-private partnership, and (viii) ADB to support training of national staff on animal and plant quarantine, language (English) etc.

III.2. Progress Reports: Biotechnology and Biosafety Initiative and Transboundary Animal Disease Control; FAO Financial Report on Contribution to RETA 6521

48. Ms. Shashi Sareen, Senior Food Safety and Nutrition Officer, FAO, presented detailed activity progress and financial status reports covering FAO's parallel activities relating to ADB-funded Biotechnology and Biosafety Initiative (funded by RETA 6521) and Transboundary Animal Disease Control (funded by RETA 6390), including case studies and workshops that have been completed and remaining work yet to be done.

III.3. Progress Report: Agriculture Information Network Service

49. Ms. Jiang Xiaoruo, Ministry of Agriculture, PRC, presented the progress, main problems, and future work regarding the AINS. A workshop was held in May 2010, procurement of hardware and software has been completed, and daily update and maintenance of GMSAINS (local and English sites) is being done. Main problems encountered pertain to sustainable development and innovation, standardization of website management, and stabilization of specialist team. Future work is contemplated to address the need to enhance capability for constructing, managing and maintaining database; need to search actively for sustainable development of AINS through participation of private sector and international organizations; and prospective application of paper free trade using the AINS platform.

III.4. Rural Renewable Energy Initiative

50. Mr. Beau Damen, Bio-energy Officer, Natural Resources and Environmental Group, FAO, presented an overview of the various partner organizations with which FAO

is working on bioenergy and food security (BEFS). There is current work on BEFS in Thailand, and there are also national level activities being carried out in Cambodia, Lao PDR, Myanmar, and Viet Nam, including preparation of renewable energy databases, and conduct of case studies and practitioners‟ meetings. Priority areas for action have been identified on policy coordination, financing, capacity building, awareness raising, and technology selection. Planned activities for 2011 include a Regional Conference on Bioenergy and Food Security, a Bioenergy and Food Security Indicators Project in Thailand, and a scoping project in South Asia.

III.5. Proposed Regional Capacity Building Technical Assistance Climate-Friendly Bio-energy and Food Security

51. Ms. Sununtar Setboonsarng, ADB, introduced a proposed Regional Capacity Building Technical Assistance on Climate-Friendly Bioenergy and Food Security for which funding is being sought from the Nordic Development Fund for possible implementation in 2011 She explained that the investment project on bioenergy originally planned for 2012 is now postponed to 2013 due to lack of ADF funds allocation in 2012. There are 3 pathways of biomass-based energy: converting agricultural and forestry residues to energy and organic fertilizers including biochar; production of liquid biofuels from crops grown in small-scale integrated farming systems; and use of improved cook stoves to reduce fuel demand and reduce black carbon emissions. The project will have the following components: (i) subregional framework for bioenergy development with food security concerns; (ii) capacity building of government institutions, service providers, and rural communities to support bioenergy development; and (iii) knowledge products for ensuing investment project from pilot projects and studies. Proposed budgetary requirements amount to $4.4 million (Euro 3 million or $3.8 M equivalent grant from NDF and $600,000 in kind contribution from CLV governments). TA fact finding is scheduled in December 2010-early January 2011, and project approval is expected in February 2011.

Open Forum

52. JIRCAS supports the project approach for small-scale Jatropha production, and has a successful jatropha project in Indonesia that utilizes jatropha seed as fuel in improved cook stoves which can be used as a model.

53. In response to UNESCAP‟s query about second generation biofuel production, particularly cellulose-based production of biofuel, FAO mentioned that Thailand is already advanced in this field, with pilot scale plants being implemented using cellulosic biofuel; however, cost of production is still uncompetitive.

54. Copies of reports and presentations are in Appendix 6.

III.6. Development Partners' Forum on CASP II

55. Development partner representatives shared their views and insights with the working group.

56. JIRCAS is now preparing their next 5 year mid-term plan and pleased that there is convergence between JIRCAS and CASP II objectives, including common thrusts on food safety, food security, climate change, bioenergy, and rural development. Tentatively, JIRCAS is planning projects relating to climate change mitigation/adaptation, introduction of biogas digester from animal waste, new irrigation technologies, and organic material application for carbon sequestration.

57. FAO suggested the need to (i) involve the Ministry of Health and other concerned agencies on food safety/food standards; (ii) clearly identify focal points for coordination to ensure country ownership; and (iii) ensure timely release of funds for project implementation.

58. AFD mentioned their pilot projects in CLV on cropping system, and building of a network on conservative agriculture which complement work under CASP II and relevant to WGA"s emphasis on agricultural trade.

59. CIRAD emphasized the need to address the issue of postharvest losses, estimated at 30-50%, in the context of food security and increased productivity. Also, pests and toxins could destroy products for human consumption and pose food security and food safety considerations. Productivity push alone would not solve the issue of meeting the supply-demand gap which needs to be addressed at the policy and technical levels.

60. ILRI offered their technical support for livestock-related initiatives. Their office in Ha Noi currently focuses on zoonotic emerging diseases, and productivity enhancement related to livestock including market access, and is currently working with the World Bank on a food safety project. ILRI would be interested to collaborate with GMS countries on some of their research work on development issues in the subregion.

61. SIDA recognized that presentations at the WGA7 represent promising „out-of-the-box" solutions to the current and emerging problems in the sector and mentioned a new institutional set up within SIDA to support regional cooperation in Asia, including the GMS subregion. SIDA hoped to have more concrete plan on how they could get engaged under CASP II in the next 5-6 months, when its internal reorganization will be completed. SIDA recognized that the problems that the subregion faces today and the future have implications on the global food security system. SIDA agreed with the earlier suggestion to look at postharvest losses, and suggested the broadening of participation of other stakeholders, including NGOs, in WGA"s work.

62. Yunnan Academy of Agricultural Sciences suggested for ADB to support key agricultural technologies.

63. UNESCAP mentioned their work with ADB on the preparation of a trade facilitation manual. They are organizing an experts" group meeting on e-traceability to promote paper free trade in the Asia Pacific region, including participation of the private sector and NGOs, in January 2011. They look forward to further cooperation with ADB on trade facilitation and to working closely with partner institutions on paper free trade and food safety.

64. FAO raised two technical issues. One is the cold-chain approach to address postharvest losses. Another is certification and accreditation, and how to harmonize

certification procedures within each country, and mutual recognition of each other"s product certifications.

65. Mr. Tan Jin Soong noted that Singapore has developed standards on cold chain for dairy, meat and vegetable products, and can share information with GMS countries.

66. Mr. J. Mir noted that cross-sectoral engagement and participation are being encouraged and that there are mechanisms for cross-sectoral engagement. For example, under the GMS Cross Border Transport Agreement (CBTA), there is multi-agency involvement/participation.

67. Ms. Setboonsarng noted that on the issue of fund releases, ADB has a letter of agreement with FAO and that provisions need to be followed. With regard to the Transboundary Animal Disease Control Project, FAO"s work plan does not correspond with the technical assistance document, hence the need to revise the work plan and budget which entail project delays. She stressed that both FAO and ADB have their respective procedures to follow. She mentioned that ADB is funding projects that address postharvest losses, and also avian flu. She informed the working group about plans to organize regular informal development partners" meeting, similar to the one held in September 2010, as a forum for more exhaustive knowledge and information exchange on CASP II implementation.

III.7. WGA Agreements and Next Step

68. Following is a recapitulation of the key points discussed during the meeting:

- ***Climate Change and Food Security***

  - Climate change is one of several drivers of change that will determine the performance of agriculture in the GMS in the next 30-50 years. Temperature change is a critical climate change-related factor that will directly and indirectly influence food safety and food security, and water is a key factor in this equation.
  - Agriculture development planning will have to be done in a highly uncertain physical environment. Maintaining and enhancing agro-ecological diversity is a sensible option to deal with this uncertainty.
  - Diversifying agriculture beyond rice is a good idea, both from the climate change and water scarcity risk management perspective, and for moving rural farmers out of the poverty trap.

- ***Food Safety and Agriculture Trade***

  - Eco-products have high potential in the GMS, and can play an important part in diversifying agriculture and rural economies.
  - Small holders are key partners in agricultural production in the GMS, and establishing cost-effective food safety standards are both desirable and feasible.
  - Food safety should not be seen just in industrial agriculture/farming context. For agriculture trade to have its full developmental impact, small holders and SMEs need to be brought into the regional supply and value chain.

- While food safety upgrading is important for accessing and maintaining the subregion"s export market share in the US and EU, it is equally important to increase food security in the domestic and GMS markets.
- Food safety improvements should drive productivity and profitability enhancement of GMS agriculture production and trading business models.
- IT-based traceability systems are available and deployed in the region.
- IT can and must play an important role in reducing information costs, trading costs and product losses along the production and distribution chain.
- IT can be used to intensify “intelligence” content of agriculture production, marketing and distribution.
- GMS Governments, and WGA in particular, must play a critical role in enhancing the use of IT in the agriculture sector, especially in intra- and inter-regional trade, particularly for products which poor farmers can produce.
- Microsoft and IBM are ready to partner with GMS countries in piloting and scaling up initiatives. One way forward is to select one or two high value products per country, and pilot IT-based traceability and trading system.
- MAF in Lao PDR, supported by Microsoft, TradeFacilitate and Bioglobal, and ADB have agreed to undertake organic and Fairtrade coffee pilot as an initial undertaking.
- WGA generally accepted ADB"s concept of a new technical assistance on bioenergy.

Closing Session

69. The Chair and Co-Chair expressed their thanks to all the participants, resource persons, and observers for their active participation and contribution to the discussions. The Co-Chair also mentioned the ongoing preparation of country strategy and program in the GMS and efforts to ensure that regional initiatives are aligned with country planning, programming, and operations.

70. The Meeting expressed thanks and appreciation to the officers and secretariat staff of the ADB for their efficient arrangements.