



**NINTH MEETING OF GMS WORKING GROUP ON AGRICULTURE (WGA-9)
Nanning, Guangxi, People's Republic of China, 4-6 July 2012**

Summary of Proceedings

Introduction

1. The Ninth Meeting of the GMS Working Group on Agriculture (WGA-9) was held in Nanning, Guangxi, People's Republic of China, on 4-6 July 2012, with the theme *"Innovative Financing through Public Private Partnership (PPP) for Regional Investment in Low Carbon Agriculture in the GMS"*.

2. The Meeting was organized and sponsored by the Asian Development Bank (ADB) with the cooperation of the Ministry of Agriculture, PRC, and attended by participants from the six GMS countries (Cambodia, People's Republic of China, Lao PDR, Myanmar, Thailand, and Viet Nam), and ADB. Resource speakers from the public, private, and academic sectors, FAO, and ADB. Representatives of development partners¹ 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. Included in the WGA-9 program was a field trip to the Pingxiang Tariff-Free Zone, Cross Border Market and Certificate Office near the border with Viet Nam, and the Guangxi Modern Agricultural Exhibition Center.

Opening Session

3. Dr. Qu Sixi, Deputy Director General of the Department of International Cooperation, Ministry of Agriculture, PRC, extended his warm welcome to all the participants. He stated that PRC has extensive cooperation in agriculture with other GMS countries under the auspices of WGA and has carried out cooperative activities such as agricultural technology demonstration and extension projects on high-yield crops to boost food security, transboundary animal and plant disease control, supporting the GMS Agriculture Information Network System, training programs on rural biomass energy, etc, which are contributing to the subregion's agricultural development and poverty reduction. Through the GMS economic corridors and China-ASEAN FTA, agro-trade in the subregion has grown steadily. In 2010, agro-trade volume totaled \$6.2 billion, and increased to \$8.5 billion in 2011 (+36.5%). Import volume amounted to \$4.5 billion while exports totaled \$4.0 billion. PRC will continue to work with other GMS countries, ADB and other development partners to further enhance GMS agricultural cooperation.

4. In his Opening Remarks, Mr. Javed Mir, Director, Agriculture, Environment and Natural Resources Division Southeast Asia Department, ADB, recalled that under the current phase of the Core Agriculture Support Program (CASP), the collective vision of the subregion is for *'the GMS to be recognized as a leading producer of safe food using climate-friendly agricultural practices and integrated into global markets through regional corridors.'* He noted that under the new GMS Strategic Framework for 2012-2022, the agriculture sector is one of the lead sectors in transforming the GMS transport corridors into thriving economic corridors. With more than 1/3 of

¹ CANSEA, CIRAD, Development Partners Finance, Inc., JIRCAS, Kasetsart University, MARS, Novozymes (China) Investment Co., Ltd., YAAS

the rural population living below the poverty line, agricultural growth could substantially reduce poverty and hunger in the GMS; the relatively small size of each country's economy and the poor agricultural infrastructure make generating such growth challenging and resource intensive. Since investment in a country-by-country basis is not nearly sufficient to overcome these challenges, more attention should be given to leveraging growth dynamics at the sub-regional levels. More specifically, planning and investment at regional level will lead to expansion of intra-regional sourcing of eco-products and trade which can potentially generate large growth spillovers and enhance regional competitiveness. Global trade statistics indicate that intra-GMS trade export of agri-food products increased from \$3 billion in 2000 to \$13 billion in 2010. As global consumers increasingly become concerned about how food traverses from farm to fork, sustainably produced and low carbon agriculture products are now creating a rapidly expanding market. Thus, enhancing GMS agricultural competitiveness on green growth through public-private partnerships and international cooperation will enable the subregion to expand its access to global markets, which could lead to improved rural income and reduce poverty. The recent ADB Annual Meeting held in May 2012 emphasized the need to diffuse low carbon green technologies across all countries through public-private partnerships and international cooperation. WGA-9's theme on Innovative Financing through Public Private Partnership (PPP) for Regional Investment in Low Carbon Agriculture in the GMS reflects the GMS countries' continuing search for collective solutions to modernize agriculture and enhance regional sourcing of critical mass of quality products to ensure food security and green growth.

5. Mr. Mai Chujun, Deputy Director General, Department of Agriculture, Guangxi, noted that Guangxi has good climatic condition and rich resources for agricultural development and that the traditional pillars of local agriculture include the production of high-quality grain, sugar cane, fruit, vegetable, animal husbandry and aquaculture. Recently, there have been emerging sectors such as the production of silkworm, traditional Chinese medical herbs, edible fungi, tea, diary buffalo, cassava and flowers. Guangxi is an active player for GMS economic cooperation. With the support and guidance of the Ministry of Agriculture, Guangxi has been optimizing its rich agricultural resources, advanced technologies, and favorable geological conditions for cooperation with GMS countries in crop plantation, animal husbandry, aquaculture, product processing, disease control, rural energy and ecology, human resource development, technology exchanges, and agricultural information network. Projects to showcase China's advanced agrotechnologies include demonstration and extension of household bio-gas digesters in Cambodia, demonstration of new varieties of fruit and vegetable in Lao PDR, testing of rice and corn in Vietnam, demonstration of corn in Myanmar and joint control of disease with Vietnam have all become important windows. In addition, Guangxi has held 20 training courses on modern agriculture for GMS countries and sent 170 experts to GMS countries to conduct technology training and dissemination, thereby contributing to GMS agricultural service capacity and farmers' income growth.

6. Copies of the welcome and opening remarks are in Appendix 3.

7. Dr. Qu Sixi and Mr. Mir chaired and co-chaired the Meeting, respectively.

Session I: Review of Activities of the Working Group on Agriculture under the Core Agriculture Support Program (CASP)

8. The session reviewed the progress of regional activities implemented in the GMS countries under the coordination of WGA and supported by ADB RETA 6521 on Accelerating the Implementation of the Core Agriculture Support Program.

1.1. Status and Progress of Implementation of CASP II

9. Ms. Sununtar Setboonsarng, Principal Natural Resources Economist, Agriculture, Environment and Natural Resources Division, Southeast Asia Department, ADB, gave an update on the status of implementation of the Core Agriculture Support Program Phase II (CASP II). She gave an overview of ADB operations and noted that out of a total of US\$ 21.7 billion of ADB loans, grants, technical assistance, guarantee and equity investment in 2011, about \$4.9 billion supported 20 loans and technical assistance in the agriculture and natural resources sector in the GMS countries. ADB has supported WGA activities through 3 regional technical assistance (RETA 6110, RETA 6324, and RETA 6521) amounting to over \$3 million between 2003-2012. The on-going RETA 6521 Accelerating Implementation of the Core Agriculture Support Program (\$1.5 million) is supporting CASP II activities from 2009 to June 2013 (new target completion date), covering (i) Component 1: Implementation of the Strategy for Biotechnology and Biosafety - FAO; (ii) Component 2: Agriculture Information and Network Service Development and Use – Foreign Economic Cooperation Center (FECC), GMS AINS Workshop held February 2012; (iii) Component 3: Rural Renewable Energy (RRE) Development Strategy – FAO; (iv) Component 4: Food Security and Cross-Border Agricultural Trade Strategies-ADB; activities include: Lao Coffee Pilot project implemented and completed, and publication of Trade Facilitation Study; (v) Component 5: WGA Secretariat - processed approval of TA7833 with \$ 4 million financing from NDF; held discussions with partners resulting in proposed funding support from Sida, Japan Government, and Finland; organized/financed holding of WGA9 meeting, publication of brochure and CD brochure on CASP Phase II, final review for printing of Ecotrader Case Studies and Agricultural Trade Plan for the GMS, preparation of DVD on Agriculture and Climate Change, and updating of GMS WGA website. Amendments on the scope of the RETA are proposed to include pilot testing of satellite-based drought monitoring system, establishing and implementing regional level results-based framework for CASP II, increased coordination with other sectors (environment, tourism, trade), and making preparation to set up WGA Secretariat office in Bangkok and WGA National Secretariat Support Units in GMS countries.

10. Ms. Setboonsarng reported that RETA 7833: Efficient Utilization of Biomass for Bioenergy and Food Security was approved in June 2011 amounting to \$4 million and covering the period 2011-2015. RETA 7833 is supporting Component 1: Enhancing regional cooperation on bioenergy development that fosters and safeguards food security; Component 2: Pilot-testing climate-friendly biomass technologies for scaling up as investment projects; Component 3: Strengthening capacity for the efficient use of biomass; and Component 4: Development and dissemination of knowledge products. Inception meetings were held in January-February 2012 and a regional meeting is being held back-to-back with WGA-9.

11. The scope of RETA 6390: Transboundary Animal Disease Control for Poverty Reduction in the GMS (amounting to \$ 450,000 and supplementary fund of \$1.2 million or total of \$1.65 million) covering the period 2007- 2011 is being extended to 2013 to allow: (i) recruitment of a firm to pilot public-private partnership on livestock traceability system; and (ii) development of grassroots awareness raising materials on safe food production and accessing higher value markets.

12. A new regional technical assistance on Implementing the Core Agriculture Support Program Phase II in the GMS with initial funding of \$7.5 Million from Sida and may include supplementary funds from other development partners (in particular about \$2 million from the PRC Poverty Reduction and Regional Cooperation Fund) is proposed for approval of ADB Board in September and will be implementation from 2012- 2017. The proposed TA will have the following targeted outputs: strengthened regional framework and capacity for agri-food quality

management; conduct pilot e-trade programs on cross-border eco-friendly agri-food production for smallholders; increased adoption of gender-responsive and climate-friendly agriculture practices; knowledge management and dissemination; and strengthened WGA Secretariat to enhance regional cooperation on agriculture.

13. There are several other ADB related projects that support CASP II covering a broad range of topics including regional investment projects and RETAs. Regional investment projects are on: flood and drought risk management and mitigation and improvement of SPS handling. Among the RETAs with components covering GMS countries are supporting: pre- and post-harvest challenges of the rice supply chain; enhancing transport and trade facilitation; ASEAN + 3 Integrated Food Security Framework agricultural and natural resources research centers; innovative financing for food and agriculture value chain; and strengthening local chambers of commerce along EWEC to promote organic vegetable production clusters, trade, investment, and value chains.

1.2. Result of the GMS AINS Meeting, February 2012, Bangkok, Thailand

14. Mr. Tang Zhishao, Director, Asia Regional Cooperation Division, Foreign Economic Cooperation Center (FECC), Ministry of Agriculture, PRC, briefed the meeting about the workshop held on 22-23 February 2012 in Bangkok attended by 48 participants from Cambodia, PRC, Lao PRD, Thailand, Viet Nam, ADB, private sector, and development partners. The workshop was organized on the theme “Enhanced Competitiveness of GMS Global Export through Paperless Trade” and as follow-up to the Lao coffee pilot case discussed at WGA-8. Targeted outputs of the workshop were refinement and agreement on a proposed e-Trade Roadmap for strengthening and transforming the GMS-AINS into a regional e-Trade Platform, including a suitable action plan on rolling out a paper-free solution to six GMS countries; identification of pilot commodities (2 in each GMS country); and identification of market needs and partners. Since its official launch in 2007, the AINS has built up local websites and improved awareness and strengthened cooperation among the countries. Until now, a number of problems have been identified for AINS. These include outdated and poorly organized information, weak practical applicability, poor relevance and waning popularity. Given these problem areas and challenges in implementing and managing the AINS, the transformation of the AINS into e-trade platform is to be explored.

15. Dr. Somnuk Keretho, Director, Institute for IT Innovation, Kasetsart University, Thailand, discussed the Proposed Agriculture e-Trade Vision and Roadmap for the GMS that involves applying ICT as enabling tool to improve management and business processes with electronic documents among key stakeholders in the GMS agriculture cross-border supply chain, to enhance GMS trade competitiveness, safe food, and climate-friendly agriculture. He described the process, functions and components, and gave illustrations of the Farm Management and Regional Traceability System. Examples of successful application of the system for rice, banana, and organic vegetable farming clusters in some GMS countries were given. He also outlined a proposed Roadmap to Establish a Regional e-Trade Platform for GMS Agriculture Trade Supply Chain including related proposed action plans. A proposed Project A-1 Pilot Regional Traceability and Farm Production Management System Development with one or two identified products for each GMS country was recommended for WGA’s consideration.

1.3. RETA 6521 – Update on Component 3 – Bioenergy and Renewable Energy for Rural Development and Poverty Reduction

16. Mr. Beau Damen, Bioenergy Officer and Climate Change Coordinator, FAO-RAP, gave an update on Bioenergy and Renewable Energy in the GMS. He gave an overview of bioenergy

development targets set by governments in the GMS. For instance, PRC targets 362 GW RE (including biomass) by 2020 and 15 billion litres of biofuel by 2020. Viet Nam targets 5% RE (including biomass) by 2020 and 560 million litres of biofuel by 2020. Thailand targets 20% RE (including biomass) by 2022 and 5 billion litres of biofuel by 2022. Investment in renewable energy in Cambodia reached \$41.8 million (34 projects); in Lao PDR \$290 million (73 projects); in Myanmar \$370 million (55 projects); and in Viet Nam \$1.6 million (20 projects). The FAO Project which is a contribution to component 3 of RETA 6521 and thus the CASP II - has developed 15 case studies including energy financing in Myanmar, jatropha biofuels in Viet Nam, biomass gasification in Lao PDR, and biogas in Cambodia. The Project identified opportunities and challenges for renewable energy in the GMS and recommended priority areas for action including policy coordination, financing, capacity-building, awareness-raising, and technology selection. Thematic studies on various topics were conducted including challenges in replicating small scale bioenergy projects, opportunities for biochar, bioslurry, wood briquettes industry, and challenges to financing bioenergy in Lao PDR and Viet Nam. Further collaboration with WGA is being discussed under RETA 7833.

Open Forum

17. Cambodia expressed support for the proposed e-Trade platform and noted that while they have participated in AINS training programs and noted there is limited opportunity to practice knowledge learned upon return of trainees to home country.

18. Thailand also expressed support for further investigation and work on developing AINS into an e-Trade platform, especially for the benefit of small holders. A regional mechanism needs to be established through a committee proposed to be composed of policy makers of GMS countries and ADB, which will be responsible for following up the progress of the project. To effectively implement the project, Thailand underscored the need for support for capacity building and technical assistance from ADB and other sources. Also, development of AINS into e-Trade platform should build a link with the ASEAN single window for sharing of information, and should learn from other regional systems such as those in EU.

19. In response to Lao PDR's query about the linkage of bioenergy with the agriculture sector and rural development, FAO responded that agriculture provides feedstock for rural renewable energy (e.g. cassava production as feedstock). Co-Chair mentioned another dimension which is how to address cost-effective rural energy availability to support the requirements of the agricultural sector, for example in supporting good milling capacity.

20. From the presentations and comments from the floor, the Co-Chair concluded that there is strong support for CASP II activities, including making AINS much more responsive to subregional requirements for enhancing GMS trade competitiveness.

21. Copies of presentations under Session I are in Appendix 4.

Session II: Innovative Financing through Public Private Partnership (PPP) for Regional Investment in Low Carbon Agriculture

22. This session focused on sharing of experiences and lessons learned from private sector initiatives on innovative financing and PPP for low carbon agriculture, and discussed financing modalities and investment opportunities under the CASP.

II.1. Perspectives on Explicitly Pro-Poor Innovative Financing in the Context of Public Private Partnerships/Collaborations for Climate-Friendly Agricultural Development: Drawing from Experiences of S³IDF and Others.

23. Mr. Russel J. deLucia, President, Small Scale Sustainable Infrastructure Development Fund (S³IDF), noted that the “development boom” has bypassed many poor in the GMS and that there is not enough development capital to finance needed soft and hard infrastructure for pro-poor, low carbon agriculture. Development capital must be more effective, innovative and hybridized (with private capital), leveraged to bring local capital into low-carbon agriculture hard investment deals, and support soft infrastructure with high public good potential and its supply chains. Energy and water infrastructure are key to agricultural development, but large infrastructure are often not inclusive. Small-scale locally owned/operated infrastructure service and productive-use investments can be more responsive to local needs and designed with explicitly pro-poor focus. Recognizing that the working poor can be passionate infrastructure entrepreneurs, he suggested a paradigm shift for development capital providers to increase intellectual and programmatic focus on small projects and small, local, private players; emphasize partnerships for internal and external development capital support and more implementation of “hybrid” operations that combine public (sovereign) debt and private (non-sovereign) operations, and involve multiple international players (bilateral and multilateral agencies, foundations, NGOs). He stressed that small, pro-poor, low-carbon investments need well-designed and implemented intermediation, and described a specific investment project deal cycle based on his company’s experience with a number of projects in some countries.

24. Co-Chair commented that an important issue is how to encourage economic growth without creating and increasing inequities, particularly for smallholders.

II.2. Financial Mechanisms for Inclusive Business Development

25. Mr. Jason Yapp, private sector specialist consultant under RETA 7833 Capacity Building on Efficient Utilization of Biomass for Bioenergy and Food Security Enhancement in the GMS, presented a review of innovative financing modalities, issues, gaps, needs, and challenges in the livelihood-food-energy-climate nexus. The focus was on the smart and innovative use of public loan to leverage and mobilize private sector resources through inclusive business development to scale-up and accelerate the pace of sustainable bioenergy and food security investment for the conversion of biomass into competitive bioenergy and food/nutrient security. He also discussed the issues, needs, gaps and challenges of various financial options/models for maximizing social returns (outcome-based finance, Social Impact Bond, Development Impact Bond, carbon finance, nationally appropriate mitigation actions or NAMA). He outlined an Inclusive Value Chain Framework for Assessing Public Private Partnership, and a strategy to attract more private sector funding. Some potential interventions under RETA 7833 were presented including inclusive business development in market transformation for certified improved cook stove, composite biogas digesters, certified green charcoal and biochar, organic cashew for tourist market and export, certified gasifier cook stove with biochar as soil amendment, and certified seeds and straight vegetable oil.

Open Forum:

26. Co-Chair noted that a key issue is up scalability of pilot projects, and addressing disconnect among temporal and spatial elements.

27. It was noted that consumer confidence is very important for increasing product demand.

28. In response to Cambodia's query about hybrid operation between the public and private sectors, Mr. de Lucia clarified that this refers to how institutions and entrepreneurs are organized. He noted that ADB as a financing institution has sovereign lending and private sector operations, using different instruments to deliver results. He stressed that there has to be more ways for bringing in experience in such operations for microfinance institutions to benefit from available skills and experience towards channeling investments into pro-poor, CDM projects.

29. Co-Chair noted that in many of ADB's rural renewable energy projects, one of the key areas of work is with farmers associations. Another thing to keep in mind in giving meaning to the PPP concept is that farmers have always been partners and engaged on financing aspects. He noted that many countries have put up their own funds for green growth projects but that uptake has been limited, and that entrepreneurs do not know which of their projects could qualify. Therefore, there is a need to fill in the gap between the supply and demand side (financier and the borrower) and for developing a business model that engages all the partners, and reduces the risk factors.

30. Viet Nam commented on the need to ensure the involvement of the private sector and clearly defining funding for a project, and identifying the financial institutions to be involved right from the start of project preparation.

31. Co-Chair emphasized the need for WGA to start thinking about a proposed investment portfolio to move CASP II implementation forward. Since additional regional investment for CASP II is required, WGA coordinators need to put their hats together and join forces because CASP II would have to compete with other sectors for limited funds. It would be important for WGA coordinators to put forward to relevant agencies in their respective governments the needs to support CASP II and collectively move towards specific project directions under CASP II. The list of pipeline projects for CASP II should be available for endorsement by GMS leaders in December 2012.

II.3. Innovative Indirect "Financing" to Deliver Real Value – Nestle Paddy Club Experience

32. Mr. Chong Chin Yin, Agricultural Officer, Nestle, Malaysia, presented Nestle's Creating Shared Value (CSV) as a fundamental principle behind the way they conduct business for win-win-win for People, Planet and Profit. The Nestle Paddy Club project was initiated in 2010 in Alor Setar, Kedah, Malaysia, starting with 20 farmers over 40 hectares and eventually increased to 104 farmers over 273 hectares in November 2011. The project aims to commercialize semi-aerobic rice intensification as a rice-growing sustainability innovation (SARI) to reduce environmental footprint; demonstrate economic viability and agronomic advantages of SARI method to grow rice; develop "green" thinking among them; increase yields and/or lower production costs using beneficial microbes, microbial enzymes and trace elements to enable faster and stronger growth of plants; reduce and/or optimize the use of agrochemicals; and

ensure full traceability in the supply chain. Moving forward, Nestle will come up with a 'Best Practice Manual' and work with the International Rice Research Institute (IRRI) on pilots for incorporating 'ecological engineering' into rice farms.

II.4. Bringing National and International Attention to Modern Agriculture in KaiHua County

33. Mr. Robert Flanagan, Vice President, GeneEra Biotech, described Charion's corporate vision to conceive, develop, and deploy technologies that significantly and sustainably improve the GHG performance of farming systems for energy and food production. The core aim is on improving soil health and fertility and developing sustainable and replicable systems through the application modern integrated farming technologies. A modern swine and goose farming project in Kai Hua county in rural PRC involves converting animal waste to biogas, biomass for energy and charcoal, intensive wild mushroom production, and composting waste to produce biochar fertilizer. On 16-20 September 2012, the 4th International Biochar Conference will be held in Beijing, PRC, where Kai Hua's biochar composting project will be showcased. Replication of the project all over PRC is contemplated. There are other complementary technologies for using bacteria and fungi for animal health and plant growth, using waste water for phytoremediation with fast growing bamboo, and using fast-growing plants to take up excess nutrients in goose pond, feed pigs or geese or composting site.

Open Forum:

34. In response to PRC's query about the profitability and economic return of the Nestle paddy club project, as well as its sustainability, Mr. Chong clarified that profit is assured due to demand of safer rice for baby food. In addition, there are other intangible benefits such as – traceability and food safety, and higher yields for farmers. Nestle will continue to pursue this approach.

35. Thailand noted that it is not easy to educate farmers about the application of new technologies. Thus, it is important to set up demonstration models.

36. In reply to Myanmar's query on how Nestle was able to generate the interest of farmers to participate, Mr. Chong replied that initially they worked through millers through whom interested farmers were identified.

37. Videos on Business Model on Biochar for Bioenergy and Food Security and on Agriculture and Climate Change were shown during the coffee break.

II.5. Organic Vegetable Cluster Development along the East-West Economic Corridor – Investments through PPP

38. Mr. Montague Lord, ADB Consultant, presented activities of RETA 7521 Strengthening Local CCIs along the East-West Economic Corridor to Promote Trade, Investment and Value Chains. The TA found that organic vegetable market is booming globally due to growing consumer concerns about chronic illnesses. The consumption of organic foods is the fastest growing sector of the entire food industry worldwide, but only 0.8% of the world's total agricultural land is organically managed. Market prices for organic vegetables in both developed markets and Thailand are, on average, 2.4 times higher than conventional vegetables. Organic cultivation in the GMS is below all regional averages and GMS countries are missing opportunities in this fast growing food sector. The 14-month project covered 3 phases involving (i) mapping EWEC's organic vegetable value chains; (ii) setting up of producer clusters, conduct of workshops and

trade forums and signing of MOUs; and (iii) training programs, putting up an eco-tourism website (to promote the organic corridor following the GMS Tourism Development model), and linking producers to buyers. He emphasized 5 important lessons learned: (i) use demonstration pilot projects; (ii) use producer clusters; (iii) know your buyers (markets); (iv) get certified; and (v) develop logistics infrastructure (hardware and software). The successful implementation of the TA pointed out that promoting organic value chains for EWEC provinces and an “organic corridor” would help transform the EWEC from a transport corridor into a full-fledged economic corridor.

II.6. CLMV Study on Agriculture – ADBI Study

39. Dr. Giovanni Capannelli, Special Adviser to the Dean, Asian Development Bank Institute (ADBI), gave a presentation on the project Supporting Equitable Economic Development in ASEAN, particularly on pilot phase activities focused on Agricultural Productivity and Natural Resources Management. The project supports ASEAN 2030 aspiration Towards a Borderless Economic Community through promoting equitable and inclusive ASEAN growth by narrowing development gaps of CLMV countries with the rest of ASEAN members. Targeted outputs include policy-oriented research; knowledge products (policy briefs, case studies, discussion papers, reports, books); training programs (policy dialogues - roundtables, forums, policy training at subregional and national levels; national review seminars); and outreach activities (dissemination events; project-related webpage, blogs). One of the thematic areas is agricultural productivity and natural resource management. He outlined the organizational structure and timeframe for related activities under the pilot phase. Some of the key issues to be studied include priorities and strategies for agricultural development in the CLMV countries, country case studies on the seed industry, agriculture sector restructuring, development of agricultural markets and supply chain, and agricultural investment and rural development financing. He invited WGA to participate in the study.

Open Forum:

40. Although there are national certification bodies, getting certification for small scale farmers is a big challenge.

41. Viet Nam mentioned about current country programs which can share lessons learned with the ADBI CLMV study for more effective utilization of resources. Viet Nam also raised the issues about multicentricity of groupings (ASEAN, GMS, CLMV) and related problem of coordination, and ensuring maximization of benefits from participation in training programs.

42. Thailand suggested for the ADBI project to align its focus with the 3 pillars of CASP II. Mr. Capannelli clarified that the focus of the CLMV project is productivity to accelerate economic growth and how to make best use of natural resources; the project intends to focus on policy-related issues, and not so much on technical aspects. In response to Thailand’s suggestion for the CLMV project to ensure synergy with related ASEAN programs, Mr. Capannelli replied that ADBI will be working closely with the ASEAN Secretariat. It was also noted that neighboring countries, particularly Thailand and PRC, have important roles to play in narrowing the development gap in the CLMV countries.

43. It was noted that while Asia is growing very fast, it is also seeing growing inequality not only among countries but also within countries.

44. Ms. Setboonsarng noted that as WGA continues to mature as the coordinating body for GMS cooperation in agriculture, it will increasingly be working closely with other relevant bodies to

improve coordination, avoid duplication of efforts, and promote sharing of knowledge to better inform the implementation of its priority activities.

II.7. Low Carbon Agriculture Approach to Develop and Disseminate Conservation Agriculture in Lao PDR

45. Mr. Soulivanthong Kingkeo, Deputy Director General, National Agriculture and Forestry Research Institute, Ministry of Agriculture and Forestry, Lao PDR, gave a presentation on the Lao Government's policy to promote conservation agriculture (CA) as an approach to managing the ecosystem for improved and sustained productivity, increased profits and food security while preserving and enhancing the resource base and the environment. CA is a generic concept integrating agricultural practices and aiming both at viability and sustainability of agriculture and environment protection. It is based on three principles, namely: (i) Continuous minimum mechanical soil disturbance; (ii) Permanent organic soil cover; and (iii) Diversification of crop species grown in sequences and /or association. Based on a government decree and a Ministry of Agriculture and Forestry circular, a National Conservation Agriculture Centre (NCAC) was established in 2009. Mr. Soulivanthong gave illustrations of CA practices in maize, rice, bean, and livestock production in Sayaboury Province and proposed a project on Low Carbon Agriculture Approach to Develop and Disseminate Conservation Agriculture in Lao PDR for consideration by ADB and other development partners.

46. Ms. Chan Phaloeun, Deputy Director General, General Directorate of Agriculture, Ministry of Agriculture, Forestry and Fisheries of Cambodia, gave a presentation on a proposed conservation agriculture project to restore degraded soils in Kampong Cham, Battambang and Pailin provinces of Cambodia. The project, covering a period of 48 months, would require a total budget of \$1.2 million (requesting CASP II contribution of \$1.08 million and partner contribution of \$0.15 million). Objectives are to strengthen adaptive research in the field of CA aiming to promote and disseminate direct seeding mulch-based cropping system (DMC), strengthen adaptive research on DMC for rain-fed lowland rice areas; strengthen HRD in CA; involve private sector in CA systems; and enhance regional cooperation through CANSEA's existing exchange mechanisms.

Open Forum:

47. Thailand informed the meeting that promoting organic agriculture is the National Agenda for Thailand and CA is also somewhat similar to organic agriculture and with are low-carbon agriculture. Their Ministry of Agriculture has formulated a master plan on low-carbon agriculture to reduce carbon and greenhouse gas emissions. Thailand expressed readiness to share information with other GMS countries in this area.

48. In response to Viet Nam's query on the Lao experience in addressing weeds and soil borne diseases, representative of Lao PDR replied that they use good agriculture practice and that CA has been successful in reducing use of herbicides and pesticides.

49. There was keen interest on the part of some countries to learn more from successful experiences in the application of conservation agriculture. Viet Nam is planning to support low-carbon agriculture through a proposed loan from ADB and would like to learn from the Lao experience in encouraging farmers to get involved in such projects. Lao PDR mentioned that provinces involved in their CA project were selected because of their high degradation rate. While there is clear government policy, there are challenges encountered such as slow rate of

dissemination of CA technology, insufficiency of capital and requirements for investment from the private sector and support from donors.

50. Co-Chair noted that there are always challenges in applying CA technologies. One of the key questions is why swidden agriculture still persists. Although it was originally and traditionally intended to sterilize the soil, now there are various new technologies and techniques are coming out from which farmers could learn.

II.8. Development Partners Strategic Priorities

51. Representative of Conservation Agriculture Network for Southeast Asia, (CANSEA), gave an overview of its Network. Organized in 2009, CANSEA covers Yunnan Province (PRC), Cambodia, Indonesia, Thailand, Viet Nam, and Lao PDR. It supports the development and dissemination of conservation agriculture. Activities include participation in international events, contribution to research of regional interest like rehabilitation of acidic soils, updating of website and database, and facilitation of preparation of proposals for regional cooperation for submission to donors.

52. Representative of CIRAD expressed support for CANSEA's program to develop eco-friendly and climate resilient agriculture through conservation agriculture and noted that land degradation renders agricultural systems unsustainable and contributes to maximum carbon emission. CA definitely presents an alternative solution to preserving natural resources and the environment, make farming systems more resilient and sustainable, and contribute to mitigation of climate change.

53. Ms. Betty He, Novozymes (China) Investment Holding Company, gave a presentation on the Clean Star project in Mozambique. Clean Star is a developer of commercial ventures with social and environmental impact established at Oxford University Skoll Centre in 2004. It focuses on agro-forestry in India, Brazil, Australia and Mozambique. It works in partnership with Novozymes (a leading Danish industrial biosciences company) and ICM (a U.S. chemical and agri-process engineering company). The project in Mozambique focuses on 5 communities (5,000 ha of farms) and the business model involves substituting the use of charcoal in the cities with sustainably produced cassava ethanol-based cooking fuel, thereby reducing respiratory diseases and deaths caused by indoor air pollution from burning charcoal, and drastically increasing smallholder farmers' agricultural output and income. The project can be scaled and replicated, creating new markets or enzymes, and presents an opportunity to experiment with other technologies including bioagriculture, food, feed and oils. It represents an example of "bio-based society" where sustainable agriculture provides inputs to biorefineries that meet the needs for food, energy, materials, chemicals, etc.

54. Representative of JIRCAS Southeast Asia based in Bangkok mentioned their research collaboration with developing countries in the fields of agriculture and forestry, projects involving technology that reduce the use of irrigation water, introduction of biogas digesters in the Mekong Delta as a CDM initiative, rural development in Lao PDR that involves the setting up of an experimental village to establish farming systems technology towards self-sufficiency and profitable crop production. JIRCAS expressed keen interest to learn more about Lao PDR's experience in CA.

55. Representative of MARS, a global food company focusing on cocoa, commented that a key challenge for them is supply and availability of sustainably produced inputs from farmers that would give them sustainable income. The shared values and collaborative approach may work to

address the declining yield of smallholder farmers in order to meet the increasing demand from emerging markets for cocoa, the supply of which is projected to be short of 1 million tons. In Asia, they are looking at rehabilitating farms in Indonesia, Viet Nam and Philippines as new source markets for cocoa.

56. Representative of Yunnan Academy of Agricultural Sciences mentioned the existing collaboration among agricultural institutions in the GMS under an MOU formalized in 2008, and expressed support for CANSEA's initiative on conservation agriculture in the GMS.

57. Representative of Development Finance International (DFI), a consulting firm that works on public-private partnerships and bridging business and development, was pleased to hear about WGA's interest to pursue PPP, and expressed their own interest to expand their working relationship with governments and donors.

58. Representative of Thailand mentioned that CASP II should include activities on promoting climate-smart agriculture.

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

SESSION III. Core Agriculture Support Program Phase II: Implementation, Extension to 2020 and Indicative Pipeline of Projects

60. This session discussed extension of CASP II implementation period and various preparation and actions required to launch the new proposed TA on implementation of CASP II.

III.1. Extension of Implementation timeframe of CASP II from 2015 to 20.

61. Ms. Setboonsarng proposed extension of CASP II (current implementation period is 2012-2015), underscoring that the current implementation period of 4 years is not realistic, hence the need to extend the implementation period to 2012-2020, while retaining the CASP II vision and pillars which remain relevant. Meanwhile, WGA would periodically review and update the appendix to CASP II representing the roadmap for implementation. The new timeframe is more realistic to sources to additional resources, including regional investment projects to realize the vision of CASP II. The new timeframe is more in line with the new GMS Strategic Framework for 2012-2022 and in the context of the Regional Investment Framework now being developed

62. The Meeting agreed to extend the implementation period to 2012-2020 as proposed.

63. Co-Chair underscored the urgency for WGA to come up with a pipeline of regional investment projects for the agriculture sector to be integrated with the overall GMS Regional Investment Framework for endorsement to the upcoming 18th GMS Ministerial Conference in December 2012.

III.2. Strengthening WGA and Establishing WGA National Support Unit

64. Ms. Setboonsarng, ADB, with the assistance of Mr. Kunhamboo Kannan, ADB Consultant and WGA-9 Facilitator, gave an overview of the new GMS Strategic Framework for 2012-2022, its focus on economic corridor development, and the role of the agriculture sector in facilitating agriculture trade along the corridors.

65. Co-Chair informed the meeting on key points arising from the ECF-4 held on 28 June 2012 in Myanmar which looked into the challenges constraining GMS corridor development, which include inadequate infrastructure, a lack of logistics such as freight forwarding or warehousing, and burdensome border crossing procedures. These challenges could be addressed through a number of measures, including better linking of investments in physical infrastructure with associated institutional support and services. ECF-4 looked at these gaps and what can be done to increase linkages in physical connectivity, what kind of investments can strengthen linkages between new and historical trade routes. WGA needs to look at investments that are needed to increase production of tradeable goods, what is technically feasible and financially viable, given the tremendous demand for various products not only in the region but also globally. The ECF-4 also examined ways to enhance multisector coordination while encouraging greater engagement with the private sector and development partners, as well as the ongoing development of a regional investment framework, the first phase in the development of a comprehensive portfolio of second-generation investment projects for the third decade of the GMS program. He reiterated the task ahead for WGA to develop its regional investment pipeline for the agriculture sector.

66. Ms. Setboonsarng mentioned that one firm regional investment project under CASP II pipeline was the GMS Climate-friendly Bioenergy Project which is now being merged into a regional multi-sector investment project with a tentative title of GMS Low Carbon Infrastructure Development Project. However, initial response from countries have not been so positive to borrow on rural renewable energy so it is up to WGA to discuss with relevant agencies during the regional programming. If agreed the PPTA will start in 2013 for a project in 2014. Other tentative pipeline projects include a pipeline investment project on food safety and trade facilitation and regional technical assistance projects on weather-based index insurance to mitigate climate risk and transboundary disease control and invasive species. A new list of projects to support CASP II will be prepared and consulted with the GMS countries in the months to come.

67. Mr. Kannan invited countries' views on what they feel the new proposed pipeline might cover.

68. PRC would like to know more about the proposed projects on climate change and transboundary plant and animal disease control, and mentioned about PRC's plan to establish animal and plant disease control centers nationwide.

69. Thailand mentioned a training course on livestock development that they are organizing in August 2012 sponsored by the Thai Government for participation by the other GMS countries. Besides transboundary animal and plant disease control, Thailand also expressed interest in the promotion of participatory guarantee system, and fisheries.

70. YAAS mentioned about plant hopper – a rice pest which poses risk on rice security; cooperation to control this pest was suggested.

71. Ms. Setboonsarng mentioned that ADB through RSDD is supporting a technical assistance with IRRI on plant hopper, but the resources required to address this serious problem is beyond what is available through TA. Regional investment project should be considered to facilitate transformation agriculture systems to be more resilient to increased pest infestations which will intensify with climate change.

72. Viet Nam noted that WGA meets only once a year, and they would like to be informed early on of possible funding allocation for GMS projects that could inform WGA's discussions on

the common subjects/issues to be addressed and help the countries arrive at an agreement on required investments.

73. Co-Chair noted the need to put in place other mechanisms to increase frequency of WGA interaction, such as through videoconference. He mentioned WGE's experience involving consultations between the working group and development partners to collectively deliberate upon issues and agree on common approaches, including funding. Perhaps WGA could adopt a similar approach with the assistance of its secretariat. He clarified that ADB's resources are not specifically earmarked for the GMS, and that there are other regional programs that tap ADF and OCR funding. At the moment, the allocation figures are not yet fixed, and country programming and allocation will be determined later through the CPS and RCOBP processes. This notwithstanding, WGA could already deliberate on the kind of development objectives it would like to pursue and identify some of the potential investments that could become part of the regional investment portfolio under CASP II. He added that the co-financiers of CASP II implementation, i.e., Sida and PRC Fund would need to be consulted also as they too have a say on what is deemed consistent with their respective decision criteria and priorities.

74. Mr. Kannan suggested that countries would need to determine the kind of assistance they need and that it is important for WGA members to interact with their respective ministries of planning to ensure that projects get into the country/regional pipeline.

75. Ms. Setboonsarng outlined a proposed RPATA: Implementing the Core Agriculture Support Program (CASP II) which builds on lessons from CASP I. Sida is prepared to provide an equivalent of about \$7.5 million with possible additional financing of up to \$2 million from PRC fund as well as additional funds from other sources. Implementation period would be 15 September 2012 – 14 September 2017.² Proposed outputs are: (i) strengthened regional framework and capacity for agri-food quality management; (ii) established e-trade on eco-friendly agri-food production for smallholders; (iii) increased adoption of gender-responsive and climate-friendly agriculture; (iv) knowledge management and dissemination; and (v) strengthened regional cooperation on agriculture.

76. Ms. Setboonsarng discussed the proposed implementation arrangements involving the setting up of the WGA Secretariat Office at the Environment Operations Center (EOC) in Bangkok. Office space and facilities will be on cost-payment arrangement with EOC. CASP ADB Project Officer will be based in Manila together with the Program Coordinator. Core Environment Program (CEP) ADB Project Officer based at ADB's Thailand Resident Mission will provide oversight to WGE and WGA program coordination (Phase II of both CEP and CASP). The WGA Secretariat will be composed of WGA Manager, National Secretariat Specialists from GMS countries, and an Administrative Staff; to be supervised by ADB Project Officer, and supported by consultants and National Secretariat Support Units in implementing TA activities.

77. FAO inquired on how the TA is going to be integrated with the existing programs of other development partners. FAO observed that a number of key development partners usually attending WGA meeting are not at the WGA-9.

78. Ms. Setboonsarng replied that although invitations to WGA-9 were extended to development partners who traditionally participate in WGA meetings, the timing of the meeting unfortunately coincided with the partners' vacation schedule. Furthermore, the agenda/program for this year's meeting has been skewed towards private sector participation.

² Disbursement of Sida fund will be completed in December 2016

79. Co-Chair noted that partnerships take time and effort. WGA would need to be able to clearly demonstrate how agriculture can help accelerate agricultural productivity and trade, and how CASP can give value addition to economic corridor development.

80. PRC recalled that the idea of having national secretariat support units was proposed several years ago but nothing has happened. A number of steps need to be done if WGA is to establish national secretariats: ADB could provide seed funds to get things started but it is important that GMS countries provide counterpart contributions to take ownership to ensure sustainability. It is also important for counterpart staff and related agencies are actively involved in the national WGA Secretariat Support Unit. Countries would need to put in more resources to be able to translate discussions into actions.

81. Thailand supported PRC's view and noted that they have had discussions and agreed on the proposed structure during the ADB fact-finding mission.

82. Ms. Setboonsarng underscored the need to involve other ministries like those for commerce, environment, and energy in CASP II implementation and how this process can be facilitated by the national secretariats to complement the work of the Ministry of Agriculture.

83. Mr. Kannan stressed that what is required is structured engagement among ADB, WGA and related ministries to strengthen country linkages and coordination. The TA provides an opportunity to strengthen the synergy to take GMS cooperation in agriculture forward. ADB would be willing to help facilitate country level discussion if needed.

84. A copy of the presentation is in Appendix 6.

III.3. Other Matters - CASP II Calendar of Events

- **Workshop on Results Framework for CASP II**
- **WGA-10**

85. Ms. Setboonsarng informed the meeting on the upcoming activities under CASP II which will include: (i) launching a new pilot program on drought monitoring in Q3 2012; (ii) regional consultation on pipeline projects and establishment of results framework for CASP II in Q3-Q4 2012, and (iii) possible WGA meeting back-to back with a WGE meeting planned to be held in Lao PDR in May 2013.

86. The meeting welcomed Lao PDR's offer to host WGA-10, tentatively planned in Xieng Khouang Province, Phonsavanh, Lao PDR. The exact dates and venue will be determined later in consultation with all GMS countries and the WGA Secretariat.

87. Mr. Tang Shengyao, PRC, fully agreed with the proposal regarding the next WGA meeting. He expressed his government's appreciation for ADB's support to WGA. In his personal capacity, he offered some personal suggestions for improving future WGA meeting's agenda and program, namely: (i) more active consultation on items that countries wish to be taken up at the WGA meeting; (ii) for ADB to consider including WGA coordinator excursion/retreat as was successfully done a few years back, to allow exposure to everyday life and work of farmers; and (iii) utilize a small portion of TA resources to finance micro-projects to benefit farmers which, if successful could be used as a model for future work and could be expanded and up scaled.

88. Co-Chair agreed that consultations with the countries could help in developing a meaningful agenda for WGA meetings and welcomed the suggestion regarding field trips which would need to be anchored on WGA's work. Regarding possibility of funding for micro case study, ADB will take this and the other suggestions carefully in consultation with the countries to see what is appropriate to pursue in the interest of optimizing available resources for CASP II.

Closing Session

89. 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.

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

Recap of Highlights of Discussions:

- For the next decade of GMS cooperation which focuses on economic corridor development under the new GMS Strategic Framework for 2012-2022, the agriculture sector will continue to be one of the lead sectors in transforming the GMS transport corridors into thriving economic corridors.
- WGA-9 underscored the role of planning and investment at regional level towards expansion of intra-regional sourcing of eco-products and trade which can potentially generate large growth spillovers and enhance regional competitiveness.
- There is strong interest and support among GMS countries for further investigation and collaboration on enhancing AINS into an e-Trade platform, for the benefit of small holders. The need to develop AINS to be more responsive to subregional requirements for enhancing GMS trade competitiveness was underscored.
- As consumers increasingly become concerned about chronic illnesses and how food traverses from farm to fork, there is growing market for sustainably produced and low carbon agriculture products. There is large potential for high-value organic vegetable production in the GMS, particularly by smallholder farmers. The rapidly expanding organic products market is opening up new opportunities for enhancing GMS agricultural competitiveness on green growth through public-private partnerships, and for expanding the subregion's access to global markets that would ultimately benefit farmers through improved rural income, and environment.
- Presentations shared models and experiences on methodologies for diffusing low carbon green technologies to small holders, through public-private partnerships and bilateral and subregional cooperation. It was noted that large multi-national food producer firms are entering the growing market of safe and traceable food.
- In developing inclusive financing modalities, an important thing to keep in mind in giving meaning to the PPP concept is to recognize farmer as partners. There is a need to fill in the various gaps between the supply and demand side (financier and the borrower) and for developing a business model that engages all the partners, and reduces the risk factors.
- Globally, 'green' investment funds are increasingly available for social entrepreneurs which are after social and environmental or climate outcomes. Such investors are aiming at cost recovery and achievements of social and climate outcomes. WGA, through the ongoing RETA on biomass management is at the forefront in piloting these new innovative modalities in the CLV countries to extract lessons for the subregion.

- WGA would need to start thinking about a proposed investment portfolio to move CASP II implementation forward, while competing for limited funds. The challenge is for WGA to come up with new regional pipeline projects to present for endorsement by GMS Ministers at the 18th GMS Ministerial Conference in December 2012.
- As WGA continues to mature as the coordinating body for GMS cooperation in agriculture, it will increasingly work more closely with other relevant bodies to improve coordination, avoid duplication of efforts, and promote sharing of knowledge to better inform the implementation of priority activities.
- WGA agreed to extend the implementation period of CASP II to 2011-2020.