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**Challenges and Opportunities for
Agribusiness Joint Ventures and
Cooperative Activities in the Greater
Mekong Subregion**

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Challenges and Opportunities for Agribusiness Joint Ventures and Cooperative Activities in the Greater Mekong Subregion

1. *Introduction*

1. It is inevitable that the expansion of trade and investment in the Greater Mekong Subregion (GMS) will have significant impacts on the social, economic, and environmental landscape of the region. Spurred on by globalisation and the dynamics of economic growth generated by export-oriented industrial expansion,¹ the GMS countries² can expect to experience mounting pressure -- both external and internal -- to accelerate trade liberalization and economic integration. In response, as a first step, and simultaneously in an effort to provide access to what have long been the most remote areas of the GMS, significant public investment has been made in infrastructure, with more being planned. To encourage sustainable development of human and natural resources and to maximize economic opportunities, GMS governments are expanding and upgrading transport and telecommunications infrastructure. This investment will strengthen intra-regional links, provide increased market access, and create new employment and income generating opportunities in the poorest regions of GMS member countries.

2. A major source of pressure for trade liberalization and economic integration is from domestic and regional business. Traders and investors throughout the GMS are becoming increasingly aware of many untapped production and marketing opportunities, and are eager to pursue them. In addition to infrastructure development, other initiatives are required however, that will (i) ensure economic returns on infrastructure investments; (ii) lead to the removal of many of the institutional barriers to cross-border trade; and, (iii) more comprehensively engage business as a partner in development.

3. In addition to overcoming infrastructure and institutional issues that constrain market-oriented economic development, GMS countries face the triple challenge of maintaining income growth and reducing poverty in a competitive global economy; pursuing recovery from the 1997 financial crisis; and, adapting to China's emergence as a major world and regional trader.

4. To meet these challenges, GMS governments partnerships with key stakeholders in the development process are crucial to mobilizing the sources of comparative advantage in the region. These include trade partnerships among countries in the subregion; trade and marketing partnerships with business; and, production partnerships with communities. Within this context, this paper will present some of the challenges and opportunities for agribusiness investments in the GMS, and ideas for cooperative activities among key stakeholders and development partners.

¹ The development model that has worked satisfactorily for Emerging Asia, namely: Hong Kong, Malaysia, Philippines, South Korea, Singapore, Taiwan, and Thailand.

² GMS countries include: Cambodia, China (Yunnan), Lao PDR, Myanmar, Thailand, and Viet Nam.

2. Challenges for Agribusiness Joint Ventures and Cooperative Activities

5. Increasingly, intra-regional trade is becoming more important as a factor in economic development and poverty reduction. The “production for export model” that worked well in the past for Emerging Asia³ is now in transition and is focused less on markets in Europe and North America, and more on the tastes and preferences of ASEAN and East Asian consumers and regional investment opportunities. Based on successful trade and investment models that have evolved elsewhere in the region, and given that most people in the GMS are engaged in agriculture and live in rural areas, it is likely that agriculture will be a key area for trade expansion and investment growth. The ADB supported “Pre-Investment Study for the GMS East-West Corridor,” and the on-going “Northern Regional Development Strategy” in Lao PDR, provide evidence that selected elements of the framework for expanding existing agribusiness investments and promoting new initiatives are in place. Similarly, several public and private cooperative activities are in progress.

6. It is only recently that trade statistics have shown that intra-regional trade is expanding; is bringing benefits to the rural poor, producers, and business; and, has the potential for significant expansion. In this context and seeking to accelerate recovery from the 1997 financial crisis, several regional governments have already modified the familiar “production for export model.” The focus has shifted and production is increasingly for domestic and regional consumers with similar tastes and preferences, thus contributing to increased intra-regional trade. This emerging development strategy, still led by agriculture production and agribusiness, faces numerous challenges. Some of the key challenges are presented in the discussion that follows.

Challenges in the Global Context

7. It should be noted that agribusiness is well developed in certain areas of the GMS. China, Thailand, and Viet Nam, all have several successful agro-processing enterprises that manufacture a variety of food and agricultural products for export in response to consumer demand in highly developed and challenging markets in Europe, Japan, and North America. However, several factors have emerged recently that are likely to further restrict access to developed country markets, namely:

? ***Competition from lower cost producers in Europe:*** With the admission to the European Union (EU) of the agriculture-dominated economies of Central and Eastern Europe, it is likely that the European Commission (EC) will create additional non-tariff barriers to trade to allow the newly admitted EU members states to capture market share, while restricting imports from elsewhere. Through existing highly developed European public and private sector technology exchange networks, the transfer of farming and processing technologies to Central and Eastern European producers will be accelerated, allowing them to respond quickly to EC standards and Western European tastes and preferences. In addition,

³ Emerging Asia comprises: Hong Kong, Malaysia, Philippines, South Korea, Singapore, Taiwan, and Thailand.

several European countries have trade agreements with their former African colonies that give preference to food and agricultural products from those areas.

- ? ***Competition from lower cost producers in North America:*** Over the past few years the North American and European economies have experienced an unprecedented increase in market concentration in nearly all agricultural sectors.⁴ The emergence of vertically and horizontally integrated multinational food and agricultural corporations, accompanied by consolidation has resulted in the creation of large agroindustrial operations that pay less for raw material inputs. Only in certain niche markets can Asian farmers still compete, and these too will decrease as the North American Free Trade Agreement (NAFTA) expands to include Asian competitors in Central America and the Caribbean.
- ? ***Delays in the Doha Round of Agriculture Negotiations:*** The failure of the trade ministers to make progress in World Trade Organization's ministerial summit in Cancun, Mexico in September 2003, bodes ill for developing countries, which have the most to lose from tariff and non-tariff barriers and other trade restrictions imposed by the developed economies.
- ? ***Developed country subsidies:*** Asian producers are increasingly threatened by historically low prices for agricultural output brought about in part by the consolidation and concentration of global food and agriculture businesses. To compensate for these market distortions, farmers in developed countries are provided with relatively large subsidies by their governments. The Organization for Economic Cooperation and Development (OECD) reports⁵ that total agricultural support and subsidies in 2001 reached US\$311 billion. The payments equalled 1.3 percent of GDP in the OECD area in 2001. About three-quarters of farm subsidies consisted of payments to producers, including large agro-processors, while the rest consisted of general support for collective goods such as infrastructure, inspection, research, and marketing. It is likely that no GMS government can afford to subsidize agriculture at that level.
- ? ***Consumer protection measures:*** Referring to the need to protect their consumers, developed countries are imposing increasingly complex food safety and environmental measures on imports from developing countries. Meeting national and international sanitary and phytosanitary (SPS) standards, ISO standards, and the terms of EU directives are obligatory. These measures are modified and upgraded regularly, as new science-based innovations are revealed. Lacking the human and financial resources to respond adequately and upgrade, Asian producers are always at risk of losing existing market share. They are therefore required to look elsewhere for markets with less stringent conditions.

Challenges in the Regional Context

8. At the global level, recently established and future agro-industries and food processors in the GMS are confronted with serious challenges in the form of (i) competition from new entrants to the international marketplace; and, (ii) a more complex global framework for trade in food and agricultural products. In addition, several trade and investment obstacles to agribusiness joint ventures and cooperative activities exist at the regional level.

⁴ Report to the National Farmers Union CONSOLIDATION IN THE FOOD AND AGRICULTURE SYSTEM Report prepared by Dr. William Heffernan Department of Rural Sociology University of Missouri Columbia, Missouri With the assistance of Dr. Mary Hendrickson Dr. Robert Gronski University of Missouri-Columbia February 5, 1999.

⁵ OECD, 6 June 2002

9. **Infrastructure Issues:** Major investments in the regional infrastructure network are being made that will promote trade, tourism, and cross-border investments among GMS countries. Key transport projects expected to facilitate market access and cross-border movement of people and food, agricultural, and forestry products include the following:

- ? Kunming - Chiang Khong road in the GMS North-South Corridor (route 3 in Lao PDR);
- ? Special trade zones at the China-Lao border at Boten, Luang Namtha Province, and the Lao-Thai border at Ngeun District, Xayaboury Province, Lao PDR;
- ? Upgrading port facilities in Viet Nam;
- ? Danang – Mukdahan road in the GMS East-West Corridor (route 9 in Lao PDR);
- ? Upgrading route 2 in Lao PDR, linking Nan Province, Thailand, with Dien Bien Phu, Viet Nam, via Oudomxay Province Lao PDR;
- ? Bridges crossing the Mekong River being constructed at Savannakhet / Mukdahan and planned at Pakbeng, Oudomxay Province, Lao PDR and between Houey Xay, Bokeo Province, Lao PDR and Chiang Khong, Chiangrai Province, Thailand;
- ? A bridge across the Huang River between Kaen Thao District, Xayaboury Province, Lao PDR, and Tha Ly District, Loei Province, Thailand;
- ? A bridge across the Moei River between Mae Sot District, Tak Province, Thailand, and Myawaddy, Myanmar;
- ? Expansion of airports in several key towns and cities in Lao PDR; and,
- ? Upgrading of Mekong River port facilities at Xieng Kok, Luang Namtha Province, Lao PDR.

10. Gaps remain in the regional infrastructure network however, that add to the cost of doing business and limit the ability of GMS agribusiness investors to collaborate in order to be more competitive with producers elsewhere in East Asia. Most notable among the infrastructure gaps is the poor condition and even absence of farm-to-market roads, particularly in parts of Cambodia, Lao PDR, and Myanmar. Other infrastructure and related problems that constrain contact and cooperation among business communities include:

- ? Poor telecommunications, especially among business communities;
- ? Lack of feeder roads to Mekong River ports and border towns with the potential to develop into trade hubs;
- ? The high cost of transporting raw materials and processed products from landlocked countries like Lao PDR to market outlets through preferred ports like Bangkok.
- ? Absence of trade hubs comprised of facilities for collection, storage, consolidation, grading, and packaging of raw materials at or near border locations prior to export or further processing; and,
- ? Absence of industrial clusters with purpose-build industrial infrastructure to support medium to large agro-processing operations.

11. Continued attention to resolving infrastructure problems will contribute to facilitating contact between and among business groups in all GMS countries. It is only through facility of movement of people and goods; increased contact, including

easy, reasonably priced, and regular telecommunications; and, access to information and markets that the trust and understanding required to do business is generated. In addition, increased contact will promote better understanding of market demand, consumer tastes and preferences, commercial strengths and weaknesses, and opportunities for trade and investment that business joint ventures and cooperative activities can best address.

12. **Information Issues:** The isolation of large areas of the GMS and the restrictions on information flows until the late-1980s has effectively deprived many in the business community (particularly small traders and investors) from learning first-hand of important global developments that private entrepreneurs elsewhere typically factor into their commercial decisions. This is the case particularly among business communities in the numerous rural and remote areas of the GMS. The area's rough terrain, scattered population, and underdeveloped physical infrastructure influence the small size, inward-looking perspective, and lack of vision of the private sector.

13. The regular exchange of accurate information among members of the business communities is critical to the establishment of business joint ventures and implementation of cooperative activities among GMS countries. Based upon research undertaken in preparing the Northern Regional Development Strategy for Lao PDR and the Pre-investment Study for the GMS East-West Economic Corridor, producers, traders, investors, and other members of the business community stated strongly that they lacked sufficient information about trade and investment opportunities in neighboring countries. Specific data requirements that they lack include:

- ? Well-organized and easily accessible data associated with subregional trade and investment opportunities;
- ? Knowledge of product standards and consumer preferences;
- ? Awareness of investment opportunities and incentives;
- ? Systematic information about general and seasonal availability, quality, and price of raw materials; and,
- ? Sharing of agricultural and agro-industrial processing research knowledge among GMS technicians.

14. Also constraining joint ventures is the willingness to share priority information, including technical and indigenous knowledge, out of fear of losing competitive advantage. Language is another limiting factor related to information exchange. Although some of the languages in the GMS are similar (e.g., Lao and Thai), others are distinctly different (e.g., Mandarin Chinese and all other languages in the GMS). This serves as a constraint to communications and causes entrepreneurs to hesitate to be in contact with traders in neighboring countries who do not speak their language. It has been noted however that businesses in border towns often have an advantage in that people are available who speak more than one language and who facilitate communications and are able to prevent misunderstandings.

15. Related to information also is the knowledge and understanding among traders and investors of commercial practices within each GMS country. Although trade and investment has existed between commercial groups and families in the region for millennia, a combination of globalization, imposition of international standards, and enforcement of the rule of law have brought about changes in traditional business

practices. Understanding the basic assumptions and legal framework of a joint venture is critical to its successful implementation and realization of benefits.

16. Regulatory Issues: Research undertaken for both the Northern Regional Development Strategy in Lao PDR and the Pre-investment Study for the GMS East-West Economic Corridor has revealed a long list of procedures, both official (i.e., laws, rules, regulations, restrictions, etc) and unofficial (traditional, customary, informal, irrelevant, etc) that serve as disincentives for regional joint ventures, cooperative activities, and cross-border initiatives. The regulatory issues most frequently mentioned by business representatives include the following (the list is not comprehensive nor definitive):

- ? Inconsistent valuation procedures for cross-border trade;
- ? Inconsistent procedures and regulations on cross-border imports, both temporary and permanent;
- ? Inconsistent standards on customs clearance procedures;
- ? Cumbersome trading procedures;
- ? Informal fees for processing and handling; and,
- ? Restrictions on use of vehicles in neighboring countries.

17. The imposition of both formal and informal measures on commercial activities at border crossings not only hinder trade and discourage cooperative cross-border activities, but also deter both domestic and foreign private investment. Profit margins particularly on food and agricultural products historically are small. The high transaction costs experienced by business at GMS border crossings raise the cost of doing business and reduce profit margins even more. In addition, the retaliatory habits of border officials tend to discourage any incentive for initiating joint ventures or other cooperative business arrangements that might serve to reduce transaction costs. Traders see no advantage in such arrangements if they do not lead to cost reductions, easier cross-border raw material movements, or increased profits.

18. To promote joint ventures and cooperative activities in the GMS, business requires conditions that promote private sector development, including:

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| ? Sound rules for the market (i.e., foreign exchange arrangements, rules for corporate governance, elimination of corruption, the same or similar rules for trade and investment for all interested parties, etc.) | ? The expectation that the rules will be adhered to both by market participants and the state (i.e., an experienced, trusted, and well-functioning judicial branch of government) |
| ? Macroeconomic stability | ? Well defined land and property rights |
| ? Sound judicial and contracting systems | ? Physical access to markets |
| ? Well-functioning financial institutions | ? A reasonable level of certainty about government policy |
| | ? Good physical infrastructure, such as a transport system, |

19. Education and Skill Issues: The level of education, business competency, management skills, and understanding of commercial development is significantly different among business groups in different GMS countries. The economies of

Emerging Asia that adopted a market-oriented development model earlier (i.e. during the period of rapid economic growth of the 1960s-1980s), have business communities that tend to be better educated, more experienced, visionary, open to new ideas, and less conservative (less risk averse). Nevertheless, both China and Viet Nam have recently made significant progress in catching up to Emerging Asia. To their credit, the business communities have been provided with the political and economic leadership, as well as the regulatory framework and enabling environment for growth led by domestic and foreign private investment. However, in Cambodia, Lao PDR, and Myanmar, it is perceived that there is hesitancy among officials to engage the private sector. In addition, the level of education, commercial orientation, management skills, and capacity of business is less developed than in Emerging Asia.

20. The skills gap is an obstacle to the formation of joint ventures and the undertaking of cooperative activities between entrepreneurs from Emerging Asia, who have the desire and potential to collaborate and invest, and those from the less developed GMS countries. The most frequent reasons given for failures of regional joint ventures and cooperative activities include:

- ? Differences in attitude toward business development;
- ? Misunderstandings due to language;
- ? Promises are not kept;
- ? Failure to honor contracts;
- ? Financial fraud as a result of greed;
- ? Official corruption and collusion;
- ? Lack of law enforcement; and,
- ? Frequent changes of government policies.

21. At the same time there are of course numerous examples of private joint ventures that are succeeding in the GMS. It is likely however that success is based on one or more of the following factors:

- ? The enterprise is owned and operated by members of the same family living in two different GMS countries.
- ? The joint venture has significant (majority or just less than majority) foreign ownership, with one or more foreign managers.
- ? The joint venture is with a company based in a border town with long experience in trade and investment in the neighboring country.
- ? The joint venture had a high rate of return on investment within a short period of time following commencement of operations.

22. **Raw Material Quality Issues:** Another obstacle to the formation of agribusiness joint ventures and cooperative and cross-border production activities among GMS entrepreneurs is the quality of food and agricultural products produced by farmers in the least developed GMS countries. Agro-processing facilities and consumer markets in the Emerging Asian economies as well as in China and Viet Nam increasingly require higher quality products to meet market demand of more mature and demanding consumers; a situation similar to that in the markets of Japan, North America, and Europe. Entrepreneurs from Emerging Asia interested in food exports and agro-processing hesitate to join with their GMS counterparts, recognizing the

difficulties they will have in sourcing high quality raw materials for export. Among the major problems arising for a selection of products (in parenthesis) are the following:

- ? Generating a sufficient and consistent supply of raw materials for processing (e.g., fruits, vegetables, poultry);
- ? Quality control of raw materials or primary commodities for export (e.g., rice, cassava, rubber);
- ? Application of science-based technologies to maintain export quality standards (e.g., coffee; livestock; certification of shrimp and poultry);
- ? Post-harvest handling and value added processing at the farm level (coffee, rubber, rice);
- ? Use of agricultural chemicals in crop production and pharmaceuticals in livestock raising (e.g., shrimp, poultry, fruit, vegetables);
- ? Transporting finished products to processing facilities and ports, and shipment to export markets (e.g., corn, tomatoes, fruits and vegetables, poultry and livestock, cassava); and,
- ? A lack of knowledge and understanding of export markets and consumer preferences (e.g., fruits, vegetables, coffee) caused by the lack of information and awareness of packing, packaging, labelling, and the flexible credit arrangements required to overcome these difficulties (e.g., shrimp, poultry, fruit).

23. In addition, and more directly related to the success of agribusiness ventures, contract farming with smallholder producers is not widely practiced in the GMS. Contract farming has been somewhat successful with selected crops, livestock, and aquaculture in some locations in Thailand and Viet Nam, and on a more limited basis in Cambodia and Lao PDR, as a result of many years of producers and processors learning how to operate with each other. The contract farming model requires however, that both producers and processors have the same mind-set. Agro-processors in many locations have pointed out that even though they have processing facilities, markets, and financing, projects can fail if farmers cultivate commercial crops under contract by applying the same standards and techniques that they utilize in subsistence farming. For farmers to be responsive to the needs of agroindustrial facilities, key factors that require changing include:

- ? Farmers' attitudes: : Producing for subsistence vs. producing for processing
- ? Skill levels : Improved crop and animal husbandry and post-harvest handling at the field level; family-based primary processing
- ? Quality of planting materials : Use of higher quality and hybrid seed and plant material
- ? Agricultural chemical use : Minimize the use of chemical fertilizers and pesticides and increase use of integrated pest management and organic fertilizers

24. **Banking and Financial Issues:** The lack of adequate banking services in many parts of the GMS serve as a serious disincentive for joint ventures and cooperative activities among agribusiness investors and commodity traders. In particular, many border towns and remote areas of several of the GMS countries are deficient in financial services such as letters of credit and foreign exchange. Allocation of short-

term credit is less of a problem than obtaining long-term loans. Sound credit practices are not the accepted standard. The use of collateral remains a problem because of the lack of secure property rights in many areas of the GMS. Packing and packaging credit, bridge loans, and other commercial financing services are generally unavailable in most locations outside of Thailand.

3. *Opportunities for Agribusiness Joint Ventures and Cooperative Activities*

25. Notwithstanding the many challenges to creating successful agribusiness joint ventures and cooperative activities, several opportunities exist in the GMS that appear promising, given sufficient determination, and combined with sensitivity to the political economy in the region.

Selected Agribusiness Trade and Investment Opportunities

26. Selected opportunities for joint venture agribusiness investments in the GMS are presented on Table 1. These sub-sectors have been chosen based on research for the Northern Regional Development Strategy in Lao PDR and on the findings of the Pre-investment Study for the GMS East-West Economic Corridor. Some joint venture opportunities mentioned are available immediately with processing facilities that are exporting to Europe, Japan, and North America. Each sub-sector is discussed briefly.

27. Livestock: Rising incomes of the growing middle classes in China and Thailand are creating expanding markets for meat products. However, livestock raising in both countries is increasingly constrained by a combination of urbanization, enforcement of stricter health standards and environmental regulations, waste disposal issues, and the rising cost of livestock feeds and production. These trends provide opportunities for farmers in neighboring GMS countries, where range raised livestock still predominates, to increase livestock production for export. By collaborating in joint ventures with livestock traders and meat processing facilities in importing countries, farmer groups have the potential to introduce improved breeds, receive training in animal husbandry techniques, and generate additional on-farm income from livestock raising. Based on a recent ADB study on *Participatory Poverty Assessment in Lao PDR*, expansion of livestock production could simultaneously contribute to poverty alleviation, since rural households use livestock as a principal measure of wealth. Livestock is currently being imported into Thailand (both officially and unofficially) from Cambodia, Lao PDR, Myanmar, and Viet Nam (via Lao PDR).

- ? Opportunities exist for agribusiness joint ventures in all GMS countries in slaughterhouses, livestock feed mills, hide tanning, and bone meal (for use as fertilizer) processing facilities.
- ? Opportunities for public and/or private sector cooperation include (i) livestock breeding technology transfers to extension agents and farmer leaders in Cambodia, Lao PDR, Myanmar, and Viet Nam; (ii) animal quarantine and inspection zones near border towns where livestock are exported; (iii) cooperation on vaccine production and livestock vaccination programs; and, (iv) harmonization of standards for meat and meat products among GMS countries.

Table 1: Selected Opportunities for Agribusiness and Cooperative Activities in the GMS

Agriculture Sub-sector	Potential GMS & East Asian Markets	Sources of Raw Materials (current & potential⁶)	Processing Facilities	Private Sector Joint Venture Opportunities	Public & Private Sector Cooperative Activities
Livestock (mainly cattle)	China, Thailand	Viet Nam, Lao PDR, Myanmar, Cambodia	Slaughterhouse, livestock feed mill, tanning facility, bone meal processing facility	Thai-Lao joint venture in Savannakhet, Lao PDR; Thai-Myanmar joint venture in Mae Sot, Tak, Thailand; Thai-Cambodian joint venture in Poipet or Sisophon, Cambodia	? Animal health and disease prevention between and among GMS governments ? Cooperative border inspection stations
Field crops (soybeans, maize, Job's tears, cotton)	China, Thailand, Taiwan, Viet Nam	Lao PDR, Myanmar	? Grain storage facilities (silos) at border towns (trade hubs) ? Livestock feed mills	? Northern Lao & Myanmar contract farming for Chinese, Thai, and Vietnamese processors ? Chinese, Thai, Vietnamese joint venture with existing Lao & American feed mills: Bokeo, Oudomxay, Houa Phan provinces, Lao PDR	Technical exchanges between Lao and Myanmar agricultural technicians and experts from China & Thailand; negotiate cross-border tariff issues
Rubber	China, Japan, Korea	Lao PDR, Thailand, Viet Nam, Cambodia, Myanmar	Rubber processing facilities	Lao & Myanmar contract farming for Chinese processors	Sharing of rubber technology from Thailand & China;
Sugar cane	China, Japan, Korea	Lao PDR, Thailand	Sugar mills	Lao & Myanmar contract farming for Chinese processors	Chinese technical assistance to address soil fertility issues
Tea	China, Japan, Korea, Taiwan	Lao PDR, Viet Nam, Myanmar, Thailand, China/Yunnan	Community-based drying facilities	International marketing of GMS organic tea brands	Technical assistance from China, Japan & Korea

⁶ Not including deficit countries.

Table 1: Selected Opportunities for Agribusiness and Cooperative Activities in the GMS (continued)

Agriculture Sub-sector	Potential GMS & East Asian Markets	Sources of Raw Materials (current & potential⁷)	Processing Facilities	Private Sector Joint Venture Opportunities	Public & Private Sector Cooperative Activities
Domestication of non-timber forest products	China, Thailand, Viet Nam, Korea	Cambodia, Lao PDR, Myanmar	Extraction of essential oils; lac processing; cardamom & tree bark processing	Lao & Myanmar contract farming for Chinese & Thai traders; Cambodian, Lao, and Myanmar contract farming for Thai traders.	Regional certification of sustainably produced NTFPs
Fruit tree plantations	Temperate climate fruit: Philippines, Malaysia, Indonesia, Thailand Tropical climate fruit: China, Japan, Korea, Hong Kong, Australia, New Zealand	? Temperate: China, Lao PDR, Viet Nam, Myanmar ? Tropical: Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam	? Cool storage facilities at border towns and ports ? Fruit canning and juice processing	? Chinese, Thai, Vietnamese, Korean investors joint venture with existing processing facilities in Vientiane Province, Xieng Khuang Province ? Chinese and Thai firms receive concessions in Lao PDR & Myanmar for fruit tree plantations	? China & Thailand have advance fruit tree production technology ? Technology transfer more easily accomplished through private sector channels
Forest tree plantations	China, Japan, Korea, Thailand	Cambodia, Lao PDR, Myanmar, Viet Nam	Chip mills, pulp & paper mills, saw mills for timber, furniture factories	Existing factories in Cambodia, Lao PDR, & Myanmar joint venture with Thai exporters and Japanese and European importers	? Sustainably managed tree plantations (both indigenous & exotic species) certified by Forest Stewardship Council ? Tree plantation established as carbon offset projects under the CDM ⁸ of Kyoto Protocol
Organic & non-organic vegetables and flowers	Domestic markets, Japan, Korea	Lao PDR, Myanmar	? Vegetable canning ? Cool storage facilities at border towns and ports ? Contract farming	Chinese, Thai, Japanese, & Korean investors joint venture with existing processing facilities in Vientiane & Xieng Khuang provinces, Lao PDR	Japanese & Korean firms send agricultural experts to train farmers and extension workers

⁷ Not including deficit countries.

⁸ CDM = Clean Development Mechanism

28. Field Crops: The increase in demand for food products and livestock and aquaculture feeds in China, Thailand, and Viet Nam, as well as elsewhere in East Asia offers an opportunity for farmers to expand field crop production linked to secure markets. In northern Lao PDR, two American investors (Luang Namtha and Bokeo provinces) and the Houa Phan Provincial Government have invested in feed mills that use raw materials purchased from farmers producing under contract farming arrangements. Because of soybean and maize deficits in China, Thailand, and Viet Nam, traders from all three countries purchase significant quantities of soybeans and maize, as well as Job's tears, cotton, sesame, and other field crops from farmers throughout northern Lao PDR and Myanmar, as well as from domestic sources. Chinese traders also are purchasing significant quantities of sugar cane in northern Lao PDR and Myanmar for export and processing at Chinese mills.

? Opportunities exist for agribusiness joint ventures in all GMS countries and include grain drying and storage facilities at border towns and livestock feed mills. In addition, in the medium-term, should the volume of sugar cane being produced in northern Lao PDR and Myanmar be sufficient and cross-border transaction fees minimize, Chinese investors may be interested in establishing sugar mills in these areas.

? Opportunities for public and/or private sector cooperation include (i) introduction of improved seed varieties to Cambodia, Lao PDR, and Myanmar from China, Thailand, and Viet Nam; (ii) training in field crop production, pre- and post-harvest production and handling technologies, and soil fertility management in China and Thailand for extension agents and farmer leaders from Cambodia, Lao PDR, Myanmar; (iii) formulation and dissemination of harmonized quality standards among GMS countries for commonly traded field crops; (iv) regional understandings on prohibiting the use of dangerous agricultural chemicals on field crops; and, (v) elimination of tariffs on crops produced and processed as part of officially registered supply chain arrangements, as an incentive to promote cross-border trade and investment.

29. Tree Crops: Included in this category of agribusiness opportunities are rubber, fruit, and forest tree plantations.

30. Although rubber is a commodity traded in world markets and has in the past been subject to wide-ranging price fluctuations, two factors appear to have positive future implications for the crop among GMS countries, namely: (i) the high demand for rubber products by China; and, (ii) the recent formation of the International Rubber Company Ltd, a tripartite enterprise established to bring stability to fluctuating prices for smoked rubber sheets.

31. The China Rubber Industry Association recently announced a 23.5 percent increase in natural rubber import quotas in an effort to ease shortages caused in part by an expanding automobile industry. The Association stated that China was able to meet only one third of its natural rubber demand of 1.5 million tons per year through domestic production. However rubber import tariffs will remain at 20 percent for the present time. In 2002, China imported 956,000 tons of rubber to fill the shortfall in demand as domestic production totaled only 540,000 tons.⁹

⁹ Reuters News Services, 25 October 2003.

32. The second factor that has implications for the GMS is the creation of the International Rubber Company Ltd (IrcO) that was initiated last year with the aim to pool the resources of the three countries that control more than 70% of the world rubber, namely, Indonesia, Malaysia, and Thailand. The company has initial capital of US\$225 million. IrcO management will step in to buy rubber when prices decline in the future. Exports of rubber products from Thailand were worth \$997 million from January to August 2003, up about 23 percent year-on-year. Thailand earned \$1.26 billion from rubber products in 2002. Joint ventures to expand rubber plantations in all GMS countries would appear to be a good short- and medium-term agribusiness opportunity. Agricultural technicians from Cambodia, Lao PDR, Myanmar, and Viet Nam should seek to benefit from technical exchanges with China and Thailand on rubber production, marketing, and processing.

33. High value markets for temperate and tropical fruits exist in several East Asian countries. Thailand is far advanced in terms of production technology and plantation management techniques for the cultivation of tropical fruit on fruit tree plantations located throughout the country. Several types of Thai fruit are exported throughout the region. Similarly, temperate climate fruit from China is plentiful in the markets of many GMS countries, replacing higher costing fruits traditionally imported from North America, Europe, and New Zealand. Thailand has developed a dynamic fruit processing industry responding to demand from consumers in European, Japanese, and North American markets. Although it is likely to be more difficult for temperate fruits to gain a share of these same markets, regional markets can be targeted in light of their relatively low prices and the general trend for rising incomes in the GMS and East Asia in general.

? Opportunities exist for agribusiness joint ventures in all GMS countries for cool store, juice, and canning facilities. Several small fruit processing units are operating in northern Lao PDR that have committed managers, smallholder sources of raw materials, and market outlets. The missing element is capital for expansion, improved understanding of high-value markets in East Asia, and diversification of products.

? Opportunities for public and/or private sector cooperation include (i) introduction of improved varieties of tropical fruit trees from Thailand to contract producers in Cambodia, Lao PDR, Myanmar, and Viet Nam; (ii) training in fruit tree production and pre- and post-harvest handling technologies by technicians from China and Thailand; (iii) formulation and dissemination of harmonized quality standards among GMS countries for fruits traded regionally; (iv) understandings on the use of dangerous agricultural chemicals on fruit trees; and, (v) elimination of tariffs on products derived from officially registered cross-border supply chain arrangements, as an incentive to promote cross-border trade and investment.

34. Pulp and paper projects are big business: they are large-scale, capital intensive, and highly centralized. They require large quantities of wood that is derived from forest plantations. The industry represents approximately 1 percent of total global economic output.¹⁰ Modern, high technology production facilities often involve

¹⁰ Carrere, R. and L. Lohmann (1996). *Pulping the South: Industrial Tree Plantations and the World Paper Economy*. London, Zed Books.

investments upwards of US \$1 billion each, allowing for the combination of high volume/low cost production key to profitability in a highly cyclical global industry. Recent FAO statistics project demand for industrial roundwood to increase by 25 percent between 1996-2010¹¹ with approximately half of the global output of paper and cardboard consumed by the US, Japan and Germany. In Southeast Asia, China represents a major, expanding market for pulp and paper exports. In part as a result of aggressive structural reforms and a domestic shift away from non-wood substitutes, Chinese fibre imports grew at a rate of 35 percent/year from 1995-2000, of which 49 percent was wood pulp. In the first quarter of 2001, approximately 31 percent of Chinese pulp imports were secured from Indonesia and 2.2 percent from Thailand.¹²

? The recent entry of China to the World Trade Organization will lead not only to the consolidation of domestic industries and increased foreign direct investments within the mainland (three top international pulp and paper firms are already operating within China: Stora-Enso; UPM Kymmene; and Asia Pulp and Paper¹³), but the eventual lowering of import tariffs may also promote increased Chinese foreign direct investments in tree plantations in the GMS. This provides an opportunity for GMS based forestry firms to collaborate with Chinese interests to establish sustainably managed tree plantations of high quality timber for processing. More than one attempt to initiate such a project in Thailand has failed, thus opening up opportunities for others.

? Opportunities for public and/or private sector cooperation include (i) granting of concessions to joint venture private investors on a competitive and selected basis, to establish sustainably managed tree plantations at suitable locations in the GMS; (ii) training and certification of professional foresters and environmental auditors by internationally recognized organizations or enterprises, to ensure high levels of professionalism in establishing and managing tree plantations; (iii) streamlining and harmonizing customs procedures for cross-border trading of wood from certified tree plantations; and, (iv) elimination of tariffs by GMS countries on wood products derived from tree plantations registered with the GMS Business Forum and certified as sustainable by professional foresters, as an incentive to promote cross-border trade and investment.

35. Tea: The northern area of the GMS, including the northern provinces of Lao PDR, Myanmar, Thailand, and Viet Nam, as well as southern Yunnan Province, is where the tea plant (*Camellia sinensis*) is thought to originate. The tea in this area is the large leaf variety, similar to the tea that is found in Assam, India. Farmers in Phongsaly Province, Lao PDR, adjacent to Yunnan Province, are growing tea under contract to Chinese traders and processors, some of whom indicated they are planning to build facilities to process locally grown tea for the Chinese market. They also confirm that the area is perfect for growing tea.

¹¹ Whitman, A. and C. Brown (1999). The Potential Role of Forest Plantations in Meeting Future Demands for Industrial Wood Products, *International Forestry Review* I(3), 143-152.

¹² Anonymous (2001d). "1st Quarter Pulp Imports Slow." *China Pulp and Paper Report*. Volume 1, Number 1. July 2001.

¹³ Rusli, F. (2001). *Asia Paper Sector*. Report for Credit Suisse First Boston (Hong Kong) Limited, 16 January 2001.

- ? Private sector trade and investment opportunities exist in the form of on-going projects in northern Lao PDR. It is likely that other models have been developed in northern Thailand, Viet Nam, and in China, that should be evaluated for possible replication with producers at suitable locations in the GMS. Although markets mentioned on Table 1 are limited to East Asia, in fact markets for organic teas and other herbal drinks are growing worldwide, and traders should consider expanding marketing activities in Europe, North America, and Australia, as well as the Middle East. Consideration also should be given to linking up with existing websites (e.g. www.inpursuitoftea.com) to expand marketing efforts.
- ? Opportunities for cooperative activities include the use of expertise from China, Japan, and Korea, as well as from South Asia (e.g., India and SriLanka) to train agricultural researchers, extension technicians, and lead farmers in the finer points of production and processing to upgrade quality standards.

36. Vegetables and flowers: Japan and Korea have the potential to become major markets for agricultural products from the GMS. As the world's biggest food importer, Japan provides significant opportunities for aspiring food exporting countries and enterprises in the GMS to expand and diversify their markets. Japan currently imports many food products from the United States, China, and New Zealand. A growing portion of these products are organic foods, the consumption of which has expanded 15-30 percent annually in Europe, the United States, and Japan, for more than five years. As many as 20-30 percent of consumers surveyed in these markets claim to purchase organic foods regularly.¹⁴ In addition, consumer concerns about food safety, the environment, and animal welfare increasingly affect demand in many developed countries.¹⁵ Therefore both Korea and Japan are seen as strong markets for organic food products, with major Japanese trading companies increasing their imports of organic frozen vegetables.

37. Japan's vegetable imports account for 11 percent of its total agricultural products and 15 percent of its vegetable consumption. Several US based organic certifying agencies have opened offices in Japan to certify producers of organic foods.¹⁶ Further, food safety concerns about meat products, particularly beef, have resulted in an increase in the consumption of vegetables in Japan.¹⁷ With these facts in mind, several opportunities arise for GMS producers to capture a share of the Japanese fruit and vegetable markets, due in part to food safety concerns with vegetables sourced in China. The relatively "uncontaminated" areas of the GMS (i.e., absence of agricultural chemical use for a minimum of three years) and the willingness of Japanese firms to invest in food production operations in the GMS under existing cooperation frameworks provide opportunities for agribusiness expansion and cooperative activities.

¹⁴ U.S. Department of Agriculture, Food Review, Vol. 24, Issue 3, "Consumer Preferences and Concerns Shape Global Food Trade," September-December 2001.

¹⁵ Ibid.

¹⁶ Market Ag.com website, 1997.

¹⁷ U.S. Department of Agriculture, World Horticultural Trade & US Export Opportunities, April 2001.

38. For example, foreign direct investment (FDI) from Japan in China, led to the significant increase food products imported to Japan from China, particularly vegetables, during the late 1990s. Specifically, Japanese firms invested in locations in both northern and southern China, which made possible the production of vegetables throughout the year for export to Japan.¹⁸ However, because of food safety concerns, the Japanese Government has begun to enforce strict inspections on vegetables imported from China. Several shipments have been rejected as being contaminated and not organic. Therefore, the potential exists to produce vegetables in the pesticide free areas of Cambodia, Lao PDR, Myanmar, and perhaps the central highlands of Viet Nam in response to demand from Japan and potentially Korea. Japanese vegetable imports from New Zealand during the northern winter could be replaced by vegetables from the GMS. These vegetables likely would include broccoli and other vegetables that require heading (cabbages, cauliflower, etc.) that have been successful in Thailand and Viet Nam.

China Organic Vegetables in Japan Market	
(2001-11-19) Luosen (transliteration) Company, subsidiary of Japan's noted chain stores Darong (transliteration) Company, has made decision to offer China vegetables on all of its counters, hammering at one safety and health vegetables supplier image to attract more customers.	
The contributing factors for this decision are the lower costs of production and processing of China organic vegetables with only 1/5 of the price of Japanese counterparts (while the ordinary goods having only 1/10 of the price of Japanese counterparts), enabling rich profits without prices lifting.	
Luosen Company, long being one importer of nine China vegetables such as spinach, taro and cauliflower, has established two frozen processing factories and three farms totally covering around 130 hectares in Shandong and Jiangsu Provinces in China, the sloe one in its domestic counterparts with self production, as part of its marketing program to realize the organic importation. Besides the company has obtained JAS organic certificate qualification.	
Despite of these, Luosen has planned to convert its fresh importation into organic ones from China in the future, the first choice varieties being those with easily transportation and less damages such as onions and burdocks. The importation channels will doubtless include the self-plantation as well as the direct bought from the local farmers.	
(Information Center of Xin Hua Agency)	Update Date: Nov 19 2001 4:48PM

39. In addition to pursuing markets in developed East Asian countries, numerous opportunities exist for local producers to supply fruit, vegetables, poultry, beef, pork, and flowers to hotels and restaurants in tourist centers throughout the GMS. Hoteliers and restraunteurs in Luang Prabang and Xam Neua (Houa Phanh Province), Lao PDR have complained about the shortage of good quality fruits, vegetables, and meats to serve guests, as well as flowers, most of which must be imported by air from Thailand.

¹⁸ Los Angeles Times, Iritani, Evelyn, "China's WTO Challenge: U.S. Farmers' Fears Growing," 8 August 2001.

40. *Opportunities for the public and private sectors*: Based on the model used in China, Japanese and Korean private investment should be invited to initiate the production of organic fruits, vegetables and flowers, in collaboration with local agribusiness enterprises. This could be achieved through existing framework arrangements for regional cooperation, including the GMS Business Forum; the ASEAN-Japan Working Group on Industrial Cooperation for Cambodia, Laos, and Myanmar; and, the Basic Framework for Development Cooperation in the Mekong River Basin.

- ? Through technical assistance agreements, public and private Japanese and Korean expertise could be mobilized to upgrade the capacity of GMS producers and processors to ensure that the quality standards of food and agricultural products were responsive to the preferences of their consumers.
- ? Through the ADB supported GMS Business Forum, SME's willing to joint venture with Japanese firms could be identified and financing arrangements defined to pursue an accelerated program of horticulture crop development in the subregion. The World Bank / International Finance Corporation's Mekong Project Development Facility (MPDF) would be an appropriate mechanism to arrange financing.
- ? GMS governments, through provincial and district agriculture offices, should seek to establish linkages between local restaurants and hotels, and farmer groups in and around cities and towns that are tourist centers, to link high quality production to existing market demand.

41. Domestication of non-timber forest products (NTFPs): Non-timber forest products provide food and medicine to a significant number of poor people in the GMS. NTFPs often are referred to as the social security system of rural people and the poor in many areas. At the same time, several studies¹⁹ have shown that increasingly large quantities of NTFPs are being extracted from the region's natural forests for export to China, Thailand, and Viet Nam. Although local people benefit through off-farm earnings from collecting NTFPs, and local governments frequently collect a resource tax from traders and exporters, the process has been criticised as being unsustainable by several international environmental non-governmental organizations.²⁰

- ? Private sector agribusiness opportunities could be based on models developed for tea cultivation in northern Lao PDR. Working in collaboration with local agriculture authorities at the district level, Chinese, Thai, and Vietnamese traders should make contract farming arrangements with farmers who currently collect NTFPs for sale; and offer higher prices for better quality NTFPs produced on farm plots. The opportunity for a tripartite development partnership exists – government, NGOs, producers, with local government being the link between traders and producers, while the NGOs provide the technical assistance to establish plots for domestic production of NTFPs.

¹⁹ E.g., ADB supported Northern Regional Development Strategy, Lao PDR; Environmental monitoring of the ADB supported Industrial Tree Plantations Project in Lao PDR; IUCN Study of Non-Cash Values of NTFPs in Southeast Asia.

²⁰ Consultation with IUCN, World Wide Fund for Nature (WWF), and World Conservation Society (WCS) and other rural development NGOs in Vientiane, Lao PDR, July 2003, as part of the Northern Regional Development Strategy in Lao PDR.

- ? The opportunities for cooperative activities include: (i) establishment of a graduated scale for resource taxes on traders who export large quantities of NTFPs over specified periods of time; with traders who are known to export more frequently being taxed at higher rates; and, (ii) formulation of a regional certification system for NTFPs produced domestically. High potential NTFPs for domestication include cardamom, tree bark (used for incense, e.g., *yang bong* or *Persea kurzii*), lac, bo saa bark (used to make traditional paper), hemp, agar (perfumed) wood (*Aquilaria crassna*), as well as other essential oil plants, and flowers.

4. Conclusions and Recommendations

4.1 Conclusions

42. China's continued economic expansion and accession to WTO will bring about greater opportunities for cooperation between China and GMS countries. The China factor combined with the growth in intra-regional trade as well as increased domestic demand in regional markets, are already causing changes in trade patterns requiring that producers, traders, and investors adjust to a regional paradigm shift.

43. The leaders of China, Singapore, and Thailand, meeting at the Ninth ASEAN Leaders Summit (7 - 8 October 2003, in Bali, Indonesia), stressed the importance of increasing economic cooperation and investment flows to Cambodia, Laos, and Myanmar (CLM). This initiative complements the recently introduced Thai-led Economic Cooperation Strategy. Both initiatives offer excellent opportunities for less developed GMS countries and should be fully utilized.

44. The creation of the ASEAN Economic Community (AEC) will enhance ASEAN competitiveness, improve ASEAN's investment environment and narrow the development gap among ASEAN members. The economic integration of the region will strengthen with implementation of the Roadmap for Integration of ASEAN (RIA) and Vision 2020. Critical for GMS countries is the creation of a single market and production base, with the free flow of goods, services, investment and labor, and a freer flow of capital.

45. Research supported by the ADB has revealed that the serious tariff and non-tariff barriers to trade notwithstanding, numerous models for cross-border production links exist throughout the GMS.

46. The declining share of agricultural gross domestic product means that the off-farm employment opportunities offered by post-harvest activities and agroindustry are becoming increasingly important. These new sources of employment will also reduce migration to already over-crowded urban areas. In addition, demand in the urban areas of developing countries is shifting increasingly toward higher-value-added products. Further, globalization may ease access to world markets for such products, thus facilitating export-led growth strategies. Incorporating the rural poor into broad-based post-harvest and agro-processing activities has the potential to raise their incomes significantly.

4.2 Recommendations

47. Additional support is required to strengthen the GMS Business Forum, to make it an essential element of cooperative private sector activities in the GMS.

48. Existing cross-border production models in the GMS should be examined in detail and evaluated in terms of their suitability for replication in other areas.

49. The GMS countries should carefully follow the blueprint for creating an ASEAN Economic Community by 2020 based on the Bali Concord II Declaration. Critical actions for GMS governments include:

- ? Accelerate the removal of non-tariff barriers to trade, cross-border supply chains, and tourism, by standardizing customs costs and procedures, and harmonizing their technical regulations across the region.
- ? Integrate industries across the region through the promotion of trade hubs, free trade zones, and industrial clusters, to promote regional sourcing, to make manufacturing more cost competitive, and to give companies greater economies of scale.
- ? Visa procedures for the region should be further simplified, allowing ASEAN nationals to freely travel within the area without a visa and to eventually issue a single ASEAN visa for overseas visitors.
- ? Standardize requirements for professional services to enable the free movement of professional and skilled laborers within the region.
- ? Fully implement liberalization and cooperation measures, including: human resources development and capacity building; closer consultation on macroeconomic and financial policies; cooperative trade financing measures; enhanced infrastructure and communications linkages; development of electronic transactions through e-GSM operated by the GMS Business Forum; and, intensive reform of banking services to support cooperative private sector activities.

50. The GMS/WGA should identify a limited number of non-contentious issues for government-to-government (G to G) cooperation and 1-2 potential public-private partnerships. High on this list should be human resources development, particularly the use of vocational training schools and colleges in key border towns to provide supplementary training in agriculture to students from Cambodia, Lao PDR and Myanmar, in China, Thailand, and Viet Nam. Another potentially non-contentious area establishment of an agricultural cooperation network for technical exchanges among GMS agricultural researchers and technicians. The knowledge shared should focus on crop production in Cambodia, Lao PDR, and Myanmar, needed by agro-processing facilities in China, Thailand, and Viet Nam, so that both sides benefit. It is expected that production of higher quality food and agricultural products would eventually lead to expansion of agro-processing facilities in the less developed GMS countries.

51. Follow the ASEAN model and adopt a “2+x” approach to GMS economic integration. In the 2+x approach, two countries that are ready to cooperate on specific sectors could work together first.

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