



Present Status of Agriculture and Possibility for Increased Export of Food and Agricultural Products in Cambodia

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Abstract This paper aims to discuss the possibility of increased export of food and agricultural products on the basis of collected data sources and interviewing for the policy makers and to build up the good relationship through Japanese investor to promote agricultural export in Cambodia. Government announced the exportable agricultural products with high potentials such as rice, maize, soybean, mung bean, sesame, peats, cassava, cashew nuts, pepper, rubber, fish products and cattle/buffalos. As far as government announcement is concerned, the direction for export expansion should be put already traded items in terms of amount bases. Even in already traded items, they should be developed with higher added value.

Keywords agricultural production, agricultural marketing, agricultural policy, export, foreign direct investment, public private partnership (PPP)

INTRODUCTION

Cambodia is an agriculture-based country with food self sufficiency centering on rice as staple food. Accordingly, her emphasis should be to put the stable fulfillment of domestic supply copied with the increased food demand on agricultural policy. In reality, however, a part of food and agricultural products is substantially dependent on the import; nevertheless it is possible to produce them domestically.

Towards the direction on agricultural policy, an import substitution by means of the increased and diversified local production should be implemented in accordance with the shift of demand for food and agricultural products while the increased export of food and agricultural products with advantageous competitiveness should be promoted, taking a careful look for international market.

Therefore, better understanding of the agriculture sector with possible accuracy will be necessary for clarifying the faced problem. Based on such understanding, an adequate strategy and political approach in solving the problem should be established, taking bilateral governmental cooperation and foreign private investment in Cambodia and Japan into consideration.

This paper aims to discuss the possibility of increased export of food and agricultural products on the basis of collected data sources and interviewing for the policy makers and to build up the good relationship through Japanese investor in order to promote agricultural export in Cambodia.

PRESENT STATUS AND PROBLEMS

Agriculture at the macro level

According to the statistics shown in the Ministry of Agriculture, Forestry and Fisheries of Cambodia (MAFF in Cambodia, 2009, GDP share of agricultural sector for total GDP has fallen down substantially from 44.8% in 1998 to 34.4% in 2008 (29.7% in 2007). On the one hand, gross value added in agriculture has increased by 52.2% during 1996 to 2008 at the nominal growth rate.

In the composition rate of gross value added shown by industry of agricultural sector in 2008, crops was 52.7%, 25.0% in fisheries, 15.5% in livestock & poultry, 6.8% in forestry & logging. In

the composition rate by annual crops in 2006, rice was 54%, 8% in vegetables, 5% in maize, 5% in cassava, 3% in soybean and by industrial crops rubber was 5%, 3% in cigarettes, 8% in other cash crops (JAICAF, 2009). In addition, 80% of total population is living in rural area, and most of population engaging in farming.

Trend of rice production

Agriculture is still the predominant sector in economic activity, and rice is especially and overwhelmingly positioned at the center of crops. Table 1 shows the trend of planted area, yield and production of rice for the period of 9 years from 2000 to 2008.

Table 1 Trend of rice production, planted areas and average yield in Cambodia, 2000-2008

Year	Production (1000Mt)	Planted area (1000ha)	Average yield (Mt/ha)
2000	4026.1	2318.5	2.12
2001	4099.0	2240.9	2.07
2002	3822.5	2137.1	1.92
2003	4711.0	2314.2	2.10
2004	4170.3	2374.2	1.98
2005	5986.2	2443.5	2.48
2006	6264.1	2541.4	2.49
2007	6727.1	2585.9	2.62
2008	7175.5	2615.7	2.75

Source: Bunthan NGO (2009) "Appropriate compost application as sustainable farming practices in Cambodia" (Doctorate Thesis not published). Original data was cited from Ministry of Agriculture, Forestry, and Fisheries (MAFF) (2008) "Report on agriculture in 2007 and direction of 2008-2009" (Khmer version)

As shown in Table 1, rice production increased from 4.03 million tons in 2000 to 7.18 million tons in 2008. Planted area increased from 2.32 million hectares to 2.62 million hectares while production per hectare increased from 2.1 tons to 2.7 tons. Accordingly, an increase of rice production for this period was contributed by the growth of yield more than planted area. Nevertheless, average rice production per hectare is far from 5.0 tons in Vietnam and 3.0 tons in Thailand in 2007 (FAOSTAT). Since rice planting takes place during both rainy and dry seasons, rice production in the rainy season is the mainstream with a share of 80% (Bunthan, 2009). Average rice production per hectare is higher in the dry season with 3.93 tons than in the rainy season with 2.49 tons in 2006 (JAICAF, 2009).

Even though rice production has substantially increased from 2000 to 2008, it was not necessarily uptrend consistently. In particular, rice production in 2002 and 2004 decreased greatly compared to the previous year due to the occurrence of serious flood during the rainy season (JAICAF, 2009). Generally speaking, rice production is significantly dependent on weather condition. Since attaining rice self-sufficiency in 1996, the surplus of rice has sustainably been exported. MAFF of Cambodia mentioned that a part of fragrant rice with high quality enabled to export at the higher price in the international rice market.

Trend of other crops' production

Table 2 shows the production trend of the other main crops consisting of maize, cassava, sugarcane and soybean from 2000 to 2007. As shown in Table 2, production of each crop has been uptrend for this period, showing heavy fluctuation year by year. Such fluctuation of each crop production was caused by the serious problems as mentioned below.

Table 2 Trend of main crop production (excluded rice) in Cambodia (unit: 1000Mt)

Year	Maize	Cassava	Sugarcane	Soybean
2000	157	148	164	28
2001	186	142	169	25
2002	149	122	209	38
2003	315	331	173	63
2004	257	362	130	110
2005	248	536	118	179
2006	377	218	142	98
2007	380	200	170	117

Source: FAOSTAT

Problems on agricultural production

MAFF of Cambodia revealed the constraints on agricultural production as follows (JAICAF, 2009).

- Inadequate rural infrastructures: roads, irrigation systems, rural markets, etc.
- Limited technological changes at community level as well as farmers and producers, agricultural research and extension are still inadequate.
- Limited access to credits and micro-finances in the rural areas.
- Limited investment capacity or interest in investing in agriculture.
- Variable climatic condition and water resources.
- Limited access to agriculture inputs: fertilizers (chemical organic), pesticides, machineries, improved seeds, etc.
- Weak agri-business and agro-enterprises.
- Export constraints due to technical barriers (Quality standard, quality control, quality certifications).

Present status and problems in agricultural marketing

Agricultural marketing system in Cambodia is complicated and diversified. The present status of agricultural marketing will be clarified from the result of interviewing concerned persons. In depth interviewing survey was conducted for local trader handling mainly some kinds of vegetable in Phnom Penh. The trader is establishing the system in selling vegetable to restaurant and supermarket and at the same time provides the farmer with agricultural inputs like seed and financial support. The trader instructs vegetable growing technology for the farmer and finally purchases vegetable from the farmer on a contract basis. As a result of interviewing the trader, some serious problems were clarified as follows. (1) Hard to collect vegetable due to insufficient farmer's group; (2) Selling vegetable to other traders or buyers without contract basis; (3) Difficult for the farmer to learn the growing technology because the farmer does not come to the training class over in-service training; (4) Depressed local price due to inflow of Vietnamese vegetable at the lower price. According to the information from the trader, in case of assuming the existence of local market demand it is difficult to collect the quality-controlled vegetable through the formal route and carry stable supply to the local wholesale market; and consequently the shortened supply of vegetable is set off by Vietnamese vegetable.

Basic marketing channel of vegetable is described as follows: Harvesting vegetable at farm → Collecting vegetable in the production area → Transporting vegetable from the production area → Transacting at the wholesale market → Transacting at the retailed market → Consumer purchasing. Since there are other specific channels like the contract farming system between trader and farmer mentioned above, the marketing system is multi-dimensional and not transparent. In addition, since vegetable is not clearly classified by kind, size, shape, maturity, freshness and appearance based on any regulation and criteria, a process in pricing is unclear. Furthermore, it is unclear which part of

the vegetable is used for consumer and for food processing industry as well as how vegetable is transacted and what pricing mechanism is working.

Under such incompleteness of the marketing system, it is impossible to say that a transaction of vegetable is carried out properly between farmer and consumer or trader and food processing industry. Based on the lack of storage facility, hardness of collecting the market information and inaccurate data due to the incompleteness of marketing system, a market price of vegetable is inclined to fluctuate significantly. A speculation is easily occurring with price fluctuation. The incompleteness of the marketing system is applicable to other agricultural products as well. It will be against the sound development of agriculture and food processing industry.

Some trader interviewed mentioned equal word that transportation cost was extremely high. The higher transportation cost is attributed to high petrol price, no good road condition and vehicles. The higher transportation cost is brought about by the higher marketing cost, which is becoming to be one of the important hazards in transporting agricultural products smoothly.

Possibility for increased export of food and agricultural products

Cambodia is exporting various food and agricultural products. Table 3 shows the trend of exported principal agricultural products from 2000 to 2007. Though natural rubber and cigarettes are mainstream of exported agricultural produce, they are materials for industrial use, not for edible food. Edible food for export is maize, soybean and rice though export trend is largely fluctuating within a year.

Table 3 Trend of export value of main agricultural products in Cambodia (unit: 1000Mt)

	2000	2001	2002	2003	2004	2005	2006	2007
Natural rubber	6258	18447	28258	33402	36933	8304	18142	25877
Cigarettes	1838	2216	650	885	1143	11017	25241	22650
Maize	-	-	-	-	3713	1600	2461	6177
Soybean	-	-	-	62	3442	6486	4405	6104
Palm oil	-	-	-	437	797	1113	1754	1635
Rice	94	2386	1691	639	1889	744	2440	1357

Note: 1. Order of commodity is based on 2007; 2. Cigarettes excluded tobacco. Rice in 2000 consists of rice milled, rice broken, rice husked and rice paddy

Source: FAOSTAT

Apart from these export items, in 2007 other exports were as follows - salted cattle (FAOSTAT, same data in below, 850,000US\$), cassava starch (619,000US\$, cashew nuts (with shell and shelled) (598,000US\$), garlic (516,000US\$), chillies and peppers, dry (297,000US\$), sesame seed (148,000US\$), spices (143,000US\$), dried Beans (106,000US\$), pastry (94,000US\$). However, in reality it should be noted that active transaction in nearby borders with Thailand and Vietnam may be conducted illegally though it is never shown on statistics.

Government announced the exportable agricultural products with high potentials such as rice, maize, soybean, mung bean, sesame, peanuts, cassava, cashew nuts, pepper, rubber, fish products and cattle/buffalos. Even in already traded items, they should be developed with higher added value. For instance, the export of fragrant rice should be greatly increased (10,000 ton was exported to United States, Hong Kong and EU at this moment). Organic vegetable and fruits have high potentials as exportable items. In Cambodia any technology and know-how for food processing is significantly constrained. The Ministry of Agriculture, Forestry and Fisheries in Cambodia is expecting with great pleasure that foreign investors are able to work jointly with local manufacturers. The Ministry of Commerce indicated that development of higher value added cassava with help of foreign investors would be promising direction for export promotion in the future.

CONCLUSION AND RECOMMENDATION

An effective strategy in developing agriculture can be described in three ways. (1) To strengthen domestic food supply chain in response to the demand change of food and agricultural products; (2) To combine effectively among the different industries such as the sector linkage between agriculture and tourism; (3) To enhance international competitiveness of food and agricultural products with higher export potentials. These three different kinds of agricultural development strategy are called “Demand pulled approach”. Among these strategies, export oriented strategy is likely to have most effectiveness on accelerating the process of agricultural development by transferring the dynamism for agricultural development from external origin to the domestic agriculture and food manufacturing industry. When Cambodia increases export with high value added products to the developed countries, higher barriers like inspection, certification and quality control for exportable product should be overcome in addition to stably providing it at the relatively lower price. If this seems to be hard, it will be impossible to increase export;. Cambodia should have full knowledge of what, how many, at what price and with how quality can meet export standard to the destination. Cambodia should predict change on the external conditions along global trade liberalization. In this case, exportable products are requested to make a selection with criteria in creating out job opportunity and incrementing income multiplied by the additional supply increase. As for the criteria in making selection of exportable products, products should be selected along the lower cost, using local resources with rich-endowment. Producer and food manufacturer are needed to learn and apply the sophisticated technology to increment exportable products at the lower price. Trader and exporter are requested to handle and transport the products efficiently. Among each actor playing role along food supply chain, precious information and human resources should be networked functionally. Each actor has to make an effort for capacity building of human resources and at the same time fulfillment and arrangement of physical infrastructure and marketing system as well as law and institution building should be implemented to promote export of food and agricultural products.

This, however, will be not easy to conduct only with own effort. Japan will be able to help by means of actively participating in the export promoting project for food and agricultural products concerning the selection of exportable products, fulfillment of physical infrastructure, technology transfer, financial support, capacity and institution building along the scheme of public and private partnership in both countries. The increased export for food and agricultural products in Cambodia will not only contribute to agricultural development, but also to ensure food security in Japan with stable supply of the imported food and agricultural products.

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