Thailand's Policy for Increasing Cassava Supply

1. Production Situation

During 2002 - 2006, the cassava production in Thailand has been quite unstable. Although high yield varieties of cassava roots have been widely planted, there are some important factors which affect cassava supply. These are the farm price and weather variations. As a result, the harvested areas have been fluctuated between 16.87 - 22.58 million rai whereas the production yields varied between 2.73 - 3.38 tons per rai.

In the year 2007, the cassava harvested areas increased to 7.20 million rai with output at 26.41 million tons, the increases of 7.62% and 16.96% from last year respectively. Such increases have been resulted from a number of factors: attractive prices, government policy to promote ethanol production from cassava, favorable weather, and high yield seed varieties. All these have contributed to area expansion and hence, production increases.

However, it is estimated that the cassava harvested area and output would increase slightly despite of significant increasing price trend in the year 2008. This is because some cassava growers have switched to plant eucalypts and para rubber, the perennial crops which can not be changed to upland crops in the short run.

| | Harvested Area | Production | Yield | |
|--------------------|----------------|---------------|----------------------|--|
| | | | (per harvested area) | |
| Year | (Million Rai) | (Million Ton) | (Kilogram) | |
| 2003 | 6.386 | 19.717 | 3,087 | |
| 2004 | 6.608 | 21.440 | 3,244 | |
| 2005 | 6.162 | 16.938 | 2,749 | |
| 2006 | 6.692 | 22.584 | 3,375 | |
| 2007 | 7.201 | 26.411 | 3,668 | |
| Annual Growth Rate | 2.56 | 6.57 | 3.92 | |
| 2008 (estimated) | 7.303 | 27.619 | 3,782 | |

Table 1 Harvested Area and Production

Source: Office of Agricultural Economics

2. Marketing

2.1 Export Thailand is the 3^{rd} largest cassava producer in the world. About 80% of cassava roots have been processed in forms of starch, pellets and chips for exports. During 2003 – 2005, the cassava products exports varied according to quantity supplied. Due to increasing trends of import demand for chips and starch from world market, the export prices of these cassava products have moved up accordingly.

In 2007 (Jan – July) the cassava product exports totaled 4.34 million tons, amounted to 24,610 million baht, an increase at 20.56% and 5.59% compared to last year respectively. It is expected that the demand from importing countries for cassava products will continue to rise significantly in the 2^{nd} half of the year 2007

Table 2 Quantity and Value of Tapioca Products Export

| | Chips | | Pellet | | Flour & Starch | | |
|---------------|----------|--------|----------|-------|----------------|--------|--|
| Year | Quantity | Value | Quantity | Value | Quantity | Value | |
| 2003 | 1.81 | 5,353 | 1.86 | 5,096 | 1.61 | 16,219 | |
| 2004 | 2.81 | 8,641 | 2.21 | 6,392 | 1.77 | 18,686 | |
| 2005 | 2.77 | 11,938 | 0.26 | 838 | 1.61 | 20,113 | |
| 2006 | 3.82 | 15,777 | 0.39 | 1,386 | 2.31 | 24,773 | |
| 2007(JanJul.) | 2.14 | 8,487 | 1.03 | 3,853 | 1.17 | 12,606 | |

Quantity: Million Ton, Value: Million Baht

Source: Department of Customs

Trends

In 2008, world demand for cassava products is expected to increase continuously since cassava becomes an alternative source of energy replacement for fossil fuels.

It is expected that the cassava product exports continue to show an increase trend in the year 2008.

2.2 Domestic consumption

Domestic demand for cassava consumption was about 3.40 - 4.68 million tons during the year 2003 - 2006. In 2006, Domestic consumption for cassava products both in forms of chips an animal feed and starch industry has been steadily increasing. The demand quantity for cassava roots rose to 4.68 million tons, a 26.49 percent increase

from the year 2005. Apart from the increases of consumption demand for the animal feed and industrial sub-sectors, demand for cassava roots to produce ethanol on a commercial basis has become a driven force to increase market demand for cassava roots in 2006.

It is estimated that in 2007, consumption demand for cassava roots will be at 6.67 tons, a 42.52 percent increase from last year.

| | Unit: Million Ton of Root Equivalent | | | | | |
|-------------------|--------------------------------------|-------|-------|-------|-------|-------|
| Items | 2005 | 2006 | 2007* | 2008* | 2009* | 2010* |
| Domestic | 3.70 | 4.68 | 6.67 | 8.04 | 9.77 | 11.58 |
| demand | | | | | | |
| - chip and starch | 3.70 | 4.47 | 6.30 | 6.72 | 7.39 | 8.11 |
| - ethanol | - | 0.21 | 0.37 | 1.32 | 2.38 | 3.47 |
| Export demand | | | | | | |
| - chip, pellet, | 13.22 | 18.65 | 20.50 | 20.79 | 21.83 | 22.89 |
| Flour & starch | | | | | | |
| Total demand | 16.92 | 23.33 | 27.17 | 28.83 | 31.60 | 34.47 |

Table 3 Cassava Demand

* Estimation

Trends

During 2008 – 2010, demand from domestic consumption and exports for cassava are expected to grow with increasing trends. Especially, domestic consumption will expand larger than export demand at a growth rate of 20% per year. This is due to growing demand for cassava used in ethanol production. As a result, the demand for cassava is estimated to increase to 3.47 million tons in 2010. During the same period, the cassava export demand will grow at the rate of 5% per year.

3. Problems

3.1 Soil deterioration with low fertility in most cassava planting areas. This is due to a number of factors long-run monocropping and lack of soil conservation practices

3.2 Low productivity as most cassava roots are grown in marginal land.

3.3 Farmers are dis-incentive to invest on improving production technology as they are uncertain about price fluctuations. As a result, they could hardly make decision on production plan under such uncertainty.

3.4 Farmers can not get access to supportive information such as cassava production outlook and price, situation technological process on research and development of improved varieties, etc.

4. Policy/Guidelines

In recent years, the Thai government has promoted development of cassava both in production and marketing through a cassava development strategy. In order to realize the objectives, the Ministry of Agriculture and cooperatives has set up a cassava Development Committee responsible for cassava development which includes cassava processing to meet market demand and government policy.

The main tasks of the Committee are as follows:

- Determine production development measures and guidelines for production development, product processing;
- Product processing to meet market demand and government policy;
- Establish networking system
- Providing consultation on soil problems related to cassava production development.

The cassava Development Committee has it members consisting of Committee Consultants (Mrs.Prachuab LamUbon and Professor Dr.Chareonsak Rojanaritpichet), Committee Chairman: Secretary General of the Office of Agricultural Economics; Vice Chairman (Director General of Department of Agricultural Extension, President of the Thailand cassava Trade Association); Committee members (Government agencies and private sector representatives)

The cassava Development Committee has the view that during the forth coming 2-3 years (2008 – 2010), cassava consumption demands both from domestic and foreign markets will show a bright prospect. Given that the current demand for cassava at been 27.17 million tons, hence, it will increase to 34.47 million tons in the year 2010. The increased quantity will continue to grow in the future. Such increases will be as a result of expansion from cassava derides demand industry, as well as the global growing trends of demand for energy-substitute agricultural products, such as, ethanol production from corn in the United States. The rising demand for corn has accordingly

pushed up the price of grain. Many countries therefore have turned to import cassava for producing ethanol.

The cassava Development Committee has the resolution to set up the Action Plan for cassava Development. The Action Plan aims to speed up cassava production in order to meet Speed up to market demand. Particularly, the emphasis has placed on productivity rather than area expansion. Guidelines to increase productivity are as follows:

1. Increase productivity so as to reduce production cost of cassava. This could be done through using appropriate varieties suit to local areas, applying fertilizers suitable to soil attributes; in particularly bio- fertilizer, liquid fertilizer from manure, organic fertilizer to replace the increasing high-priced chemical fertilizer.

2. Cassava research and development. Research work aims at variety testing for ethanol and starch production, mechanization technology and cassava processing products.

On the marketing aspect, the related agencies should proceed the cassava marketing development activities as follows:

- 1. Promote and develop Futures Market for cassava products.
- 2. Proactively undertake market access negotiation with new potential markets such as countries in Africa and Middle East.
- 3. Expand Thai cassava export markets through intensive negotiation on tariff reduction with high tariff importing countries.

Source : Annual Report 2007. The Thai Tapioca Trade Association.