

## CHAPTER V

### POLICIES AND MEASURES FOR THAI DAIRY INDUSTRY DEVELOPMENT

#### 5.1 Present Situation

Today the Royal Thai Government considers the dairy industry an important section of the existing industries in Thailand. Specifically, it considers the dairy farms as a major branch of Thai agriculture. Government policy is to assist, promote, and guide dairy farmers in a number of ways, some of which are mentioned in the National Economic and Social Development Plans. Without such Government concern, the dairy farms would not have developed as they have. This is so mainly because dairy farms are foreign to Thai farmers.

However, the present dairy policy is very weak when compared to other agricultural policies. A complete dairy policy must thus be proposed by this study if dairy industry development is to be accomplished to any great extent. But before embarking, it may be useful to mention many efforts already made.

As studied, the efforts to promote local dairy farming have been made only by the Government. They are the establishment of demonstration dairy farms, restriction of foreign dairy product competition, exemption of dairy machinery and equipment from customs taxes, establishment of self-help land settlements for dairy farming, the establishment of livestock stations, the establishment of co-operative dairies, and miscellaneous others. As to the first measure, the Ministry of Agriculture and Co-operation, with the assistance of the Royal Danish Government, jointly established the Dairy Farming Promotion Organization of Thailand<sup>1)</sup>

<sup>1)</sup> Formerly: the Thai-Danish Dairy Farm and Training Centre. This name was changed in 1971 according to the royal decree concerned.

at **Muaglek, Saraburi, in 1962** to conduct experiments and **research** into **dairy farming** in order to draw **conclusions** as to the **feasibility** of dairy farming in Thailand. They explored the **possibility** of training Thai farmers and agricultural **technicians** in dairy farming. The experimental **station** has also **functioned** as a dairy demonstration **farm** for the **farmers, dairy processors,** and others to study various **aspects** of the **industry**. Now the Organization is establishing a modern dairy plant of **medium size** for processing milk to supply the **local market**.

In **addition, the Ministry, with technical assistance** of the Federal Republic of **Germany, has** established another **demonstration** dairy farm at **Chiengmai** in the **North of Thailand, namely,** the Thai-German Dairy **Farm, in** most part for the **same purposes** as mentioned above. In the opinion of **Danish and German scientists, successful** dairy farming is possible in **this country**.

Another **measure** to promote local dairy farming was the Government's reservation of **land areas** in Saraburi for a permanent resettlement of Thai **farmers, who have** already undergone training at the Dairy Farm Promotion of Thailand and **decided** to be permanent dairy farmers. **Later, Self-Relp Land Settlement communities** were **set up** in these areas for **dairy farming**. **The Government also** rendered long-term agricultural **credits with** low interest rates to such farmers to **enable** them to organize and manage their dairy farms.

The **Livestock Department, under the Ministry, has set** up livestock stations in **various areas** to **improve** the quality of milk and to provide veterinarian and **artificial** insemination **services** to dairy **farmers**. The livestock **stations also** control **cattle diseases, and** produce improved breeding **stock** for **sale** to the farmers at **low prices**.

The next **measure is** to **restrict** foreign dairy **products** competition. Imported dairy products compete **with** the local dairy **products, and** owing to the better **quality** of the imports they **are preferred** by the majority of Thai **consumers. They compete** not on the basis of **price, but** rather on the **basis** of

quality. To encourage the local **dairies**, a tariff is imposed by the Government on various imports.<sup>1)</sup> Besides imposing this duty, the Customs Department under the Ministry of Finance allow imported dairy machinery and equipments for local dairy plants to be exempted from customs **taxes**, as another local dairy **incentive**.

Two other local dairy **incentives** are being **considered** by the Government. The first is to **exempt** dairy farms from **income taxes**. The second is to exempt from sales tax those dairy plants utilizing more than **50** per cent of locally produced fresh milk **as** an input for the production of dried milk. These measures will **certainly** lessen such dairy plants' expenditures.

The latest proposal for promoting local dairy farming is to set up a "**Milk Board**" to perform the following functions: (1) **regulating** and **controlling** local milk production, (2) **improving** milk quality, (3) **distributing** the supply of fresh milk and dairy products to nearby markets, and (4) **studying** and solving of the **problems** of milk and **dairy-products** marketing.

## 5.2 Policy

As stated earlier, dairy farming is a new and **underdeveloped** part of Thai agriculture. The Government has not **launched** an overall **precise policy** and appropriate **measures** for dairy **industry development**. The measures presented above are **incomplete** because of lack of a **precise policy** on the part of the Government. **Thus**, it is necessary to formulate such a policy as a segment of the national agricultural policy for implementation **purposes**. In addition, the availability of such a normative policy is **indispensable** for the country because it will serve not only for selection of **instrument variables** but also for structural **changes** in agriculture. **Without** such a policy the **selection** cannot be carried out successfully. It will also serve as

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<sup>1)</sup> ---, Tariff Rates on Imports, Royal Act of Custom Tariff Rates, 1967.

one for preparing a budget for possible annual development in the future.

### 5.2.1 Policy Objectives

Usually, when any policy is formulated, its objectives are also developed by a policy maker. The dairy industry development policy's objectives may be summarised as follows:

- 1) To increase the dairy farms' productivity;
- 2) To increase and maintain the dairy farmers' income;
- 3) To develop the Thai dairying to the fullest extent;
- 4) To promote dairy education and the social welfare of the dairy farmers.

Owing to the Thai dairying's smallness and newness today, it must be enlarged to achieve its economic potential. It must be developed to the fullest extent to contribute to agricultural development as a whole.

To achieve this purpose, the dairy farm's productivity should be increased in technical and economic efficiencies simultaneously. Technical efficiency means here the utilization of modern dairy farm processes by the dairy farmers for greater output. Economic efficiency means that the value of input utilized in the production process for a period of time be less than that of output produced from the utilized inputs. In other words, economic efficiency is the improvement of dairy farm production by use of minimum input for maximum output.

The dairy farmers' current low income must be increased through better dairying business. That is, dairy farming must be improved and developed according to modern dairy techniques, and the marketing of milk should be organized and managed along the lines of the Danish co-operative dairy model. Farm income must also be permanently established by various methods to upgrade the standard of living on farms.

Today, social welfare is very underdeveloped in rural Thailand, insufficient to meet the rural people's needs. It is

very difficult for them to obtain this needed service, which should be quickly developed. It should encompass all palliative, rehabilitative, and preventive measures for the purpose of assisting the rural people to function appropriately and at maximum capacity as a constructive unit of society.

### 5.2.2 Essence of the Policy

In accordance with the above objectives, the overall economic policy must consist of 1) dairy farming technique improvement, 2) increase and maintenance of dairy farmers' income, 3) large dairy development, and 4) promotion of dairy education and social welfare. The following is the subject matter of each essential:

1) Dairy Farming Technique Improvement: Owing to considerable lack of modern dairy farming techniques on the part of the farmers and the low productivity of dairy farms today, the dairy farming technique improvement by the farmers and the Government must emphatically be mentioned in the policy. To make such improvement possible, financial aid to the farmers by the Government should also be mentioned in the policy, and put into practice after the policy is officially accepted.

2) Increase and Maintenance of Dairy Farmers' Income: The policy should include this essential because today's income is still low. Moreover, the income is uncertain; it fluctuates from time to time. It is thus reasonable to increase income through better dairying business and to stabilize the increasing income by the co-operative method. Financial and monetary policies, as well as international trade policy, which are consistent with the dairy policy are also essential.

3) Large Dairy Development: The policy must provide for great dairy industry development in Thailand, because there is now an infant dairy industry only. It should be developed to its fullest extent as a main branch of Thai agriculture, the backbone of Thailand's economy. If largely developed, it

**will** contribute to the increase of farm income. To **achieve** this **purpose, all** the efforts mentioned should be accomplished and expanded by the people concerned.

#### **4) Promotion of Dairy Education and Social Welfare:**

One main essential of the policy for Thai dairy development should be a manpower development promotion for improving the talents and skills of the agricultural population at an institution of dairy education and training. The policy should mention that it is crucial to train dairy farmers and others to be economically efficient citizens with a sense of **responsibility** towards dairy industry development. Social welfare promotion by the **Government** for the farmers should also be mentioned in the **policy, to** make the farmers the healthy businessmen with confidence in their **careers.**

### **6.3 Measures**

#### **6.2.1 Introductory**

How should the policy objectives be accomplished in **practice?** From an administrative point of view, **this responsibility** is assigned to the Minister of **Agriculture** and Co-operatives of Thai Government. For this **responsibility, overall** dairy industry development plan of operation must be used **as** a specific guideline for effective implementation of the policy.

In this **connection, one** who plans operations should **have** broad knowledge of agricultural **economics, with** dairying as a **major** field. He should **possess** knowledge of potential demand for milk and **dairy products, sufficient** supply of the **goods, close** substitution of other **goods, consumers' consumption habits, and** local **dairy production efficiency.** He must also be **dairy** practitioner to utilize the plan effectively.

#### **6.2.7 components of the Operating Plan**

The components which make up the plan are the **change** of economic structural **relationship, methods** of improving dairy

farms technique, methods of increasing and maintaining of dairy farmers' income, procedures for developing large dairying, procedures for promoting dairy-educated social welfare, and financing.

1) To attain the poliyay objectives delineated above, the plan must include a change in economic structural relationship in Thai agriculture for any possible apploiation of instrument variables, such as the control of foreign dairy products imports, higher duty on imported dairy products, and the existing dairy organizations. Another reason for the change is that the existing structural relationship is composed of self-sufficient agricultural enterprises unsuitable for the country's present economic conditions. Further, dairy farmers encounter some exeution problems, such as that in milk-marketing, due mainly to the inappropriate economic structural relationship. Thus, if we want really to develop dairy farming, the old dairy economic structural relationship should be changed for a better one, such as the following. <sup>1)</sup>

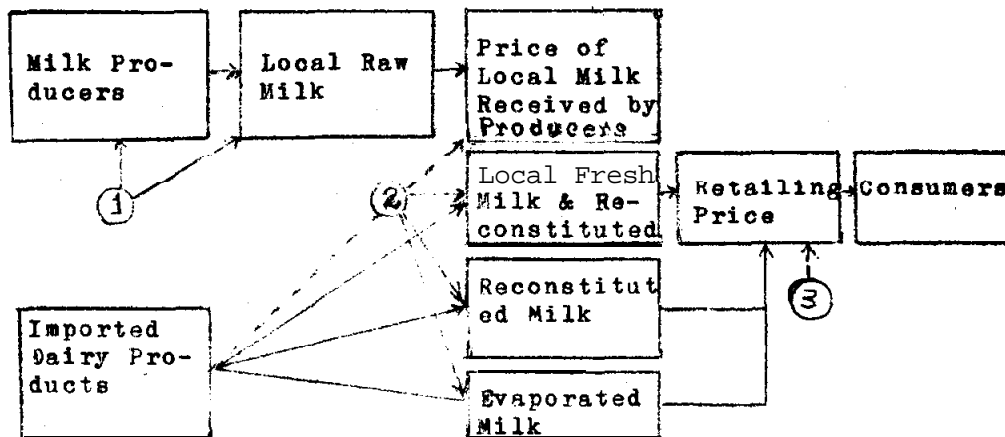


Figure 11

Thai Economic Relationship of Milk and Milk Products

<sup>1)</sup> Somnug Sriplang and Koset Manoyalailow, Agricultural Economy Development (Bangkok: Division of Agricultural Economics, 1971), p. 4.

① means that the milk producers are organized to build a modern dairy plant under a co-operative dairy system for processed milk and dairy products.

As has already been done, the centres, collecting and keeping raw milk from the producers for a short period of time, face a marketing problem, i.e., they cannot find a permanent favourable market for selling their whole milk. Moreover, the unit price paid for their milk is low (to be mentioned later).

② means that imported milk powder to private firms for the production of condensed milk and reconstituted milk must be controlled strictly by the Government in order to limit its quantity to a minimum. At the same time a proportional part of local milk must be sold to the private dairy plants at a controlled price. This milk would be raw material used in the production process of the private dairy plants.

As presently established, the private dairy plants utilize the imported milk powder as their entire raw material for the mentioned production. Only a very small quantity of local milk is used for this purpose.

③ means that the retail sales of all processed milk and dairy products must be controlled by the Government in both price and hygienic aspects.

The above-mentioned three projects should be emphasized in the Plan for the effective possible utilization of the instrument variables.

**Methods of Dairy Farm Technique Improvement:** In fact, dairy farmers suffer a considerable lack of modern dairy farm techniques in many respects. Consequently, they cannot improve their dairy farming, and productivity is low. To overcome this obstacle, some methods of dairy farm technique improvement should be used by the farmers and the government officials concerned: for instance, modern breeding, feeding, and management of dairy cows based on modern Danish principles of dairy science. The principles can be introduced to the farmers by



teaching and publishing.

The main cause of the lack of dairy farm technique improvement is the **shortage** of money capital among Thai farmers themselves, which **shortage** prevents the farmers from **improving** techniques. To promote the above-mentioned **improvement**, **financial** aid by the Government through the Bank for Agriculture and Agricultural Co-operators in **Bankok** should be **provided** to the fullest **possible extent** to the dairy farmers. **Agricultural loans** should be made to farmers at low interest rates and repayment of loans made through an **amortization** plan.

3) **Methods of Increasing and Maintaining of Dairy Farmers' Incomes:** To attain this aim in practice, other financial and monetary policies and international trade activities which may affect dairy enterprises should be consistent with domestic dairy policy. In Thailand farmers are much affected by changes in financial and economic conditions. During periods of deflation, the agricultural products' prices generally decrease. And the prices increase considerably during inflation, but their increase rates are smaller than those of other goods. Farmers usually produce more during such periods because of better prices. Consequently, the agricultural prices may rapidly decrease while the non-agricultural prices remain at higher levels. Farmers may suffer very much from high non-agricultural prices. 1)

Therefore, the practices must operate during the periods of inflation and deflation in order to increase and maintain the mentioned income. For instance, during inflation financial aid for dairy production should not be rendered by the Government because it may increase dairy production. The appropriate measures instead would be quantitative control of agricultural production and limitation of agricultural credit,

During the deflation period programs for increasing purchasing power for consumers, extending agricultural credit,

1) Chaiyong Choochart, Agricultural Economics of Thailand (Bangkok: Kasetsart University, 1960), pp. 262-265.

including more **investment, lowering tax, increasing** government **expenditures, and** promotion of more agricultural products **consumption** should be undertaken by the Government. The practice of **such** programs will increase the **farmers' income**.

Another Important measure is the creation of **growing demand** for milk and milk products. One prime reason for this is that the program for increasing the income is impossible if **demand** is **small everywhere**. The **demand created, must also** be stabilized for a long time. The **farmers will receive** higher **income** from their production. If **so, the farmers will be certain** to continue their production. Another measure should be the establishment of **milk quality controls for good** quality milk to **satisfy** the **consumer** demand. This will contribute to an increase in **income as well**.

4) Procedures for Large **Dairying** Development: As mentioned **previously, the** dairy industry must be developed into a **main sector** of Thai agriculture. To attain **this** purpose all the efforts **suggested** above *must* be continued. In **additions, since** the milk supply is continuously developing at the **fullest** extent to meet **the demand, and the boost of demand for** fresh milk and **milk products is being continuously created, co-operative** dairies organized and managed **along** the Danish model **must be established** in greater number to overcome **marketing problems** and to extend the **dairy** economy. The Government, which **has recognized the need for supporting** the dairy industry, should support it more and more by promoting and providing greater incentives and extension **services and facilities to individual dairy farms**.

5) Procedures for Promoting **Dairy** Education and **Social** welfare: To **achieve this objective, appropriate measures** should include (1) **dairy farming** and **dairy-plant** education and (2) **social welfare** services. Both dairy farming and dairy plant education should be **established** and run initially **by the Ministry** of agriculture and Co-operatives through a dairy

educational institute. Dairy education must include both theoretical and practical aspects to meet the actual needs of trained and competent personnel in the dairy industry as a whole. The dairy education should be systematically organized in a form of two-year course, consisting of both dairy and related subjects. In order to be effective, dairy education should be run on the basis of the Danish dairy education and training system. In this connection, a Danish expert on this field of economic activity should be provided. Apart from the education, some necessary social welfare services should be provided for the farm population, in appropriate forms such as programs for economic maintenance and supporting economic measures. They would assist individuals, families, groups, and communities in rural Thailand to function effectively. These activities should be performed by the Department of Public Welfare under the Ministry of Interior.

6) Financing: The financing of dairy industry development expenditures of the plan is of course a burden for the Government to carry; otherwise the policy and the plan will be a mockery. The expenditures may reach many million baht, from both domestic and external sources. The domestic sources are government revenue and domestic borrowing; the external sources are loans and grants from foreign countries. The Government must set a specific time period for the plan, with particulars of work to be done, and estimate the actual expenditures therefor, for effective future operations.