

Executive Summary

Study of beef cattle supply chain project in Chumphon and Prachuap Khiri Khan province has the objective to study the status of production and marketing of beef and beef cattle. It also has the aim to study the composition of supply chain activities, managements, marketing channels and cost and value-added activities of elements in the supply chain of beef and beef cattle in Chumphon and Prachuap Khiri Khan province.

Pattern of the beef cattle production in both provinces, the most of farmers have 1-10 heads which be 78.90 percentage of the all farmers. In Chumphon province we find the farmers have the most of other agricultural carrier along with beef cattle as palm oil planting which be 53.58 percentage and rubber planting as 18.54 percentage. The farmers in Prachuap Khiri Khan have the other carrier as coconut, pineapple and alovela planting.

The most of beef cattle are hybrid cattle which come from internal breeding on farm or trading between local farmers by using native breed and Brahman. They are fed by grazing only natural grass as 45.01 percentages and roughage as corn, hay or grass. Feeding in the barn by the grass cutting is 15.11 and 14.70 percentages for the concentrate feeding. They feed by without the concentrate 80.75 percentages of the farmers

The average of income from beef cattle feeding from both provinces is 433.29 baht per month. The most expenses are medical and artificial insemination cost which higher than other costs. The most of live beef cattle selling is by the middleman which own the butcher coming to farm. The price will be base on weight and condition of cattle. In some area of Prachuap Khiri Khan province the middleman will accumulate the live culling cattle and sale to the beef ball factory in Pathum Thani, Ang Thong and Ratchaburi as 42 baht per kilogram which the fattening beef cattle price as 46 baht per kilogram. The most selling in Chumphon area is for the middleman and butcher shop owner which slaughtering and sale in the province.

For the big farm size, most of the farmers have 50 – 100 heads of the cattle beef. There are 2 feeding patterns as short period fattening 1-4 months and 8-12 months fattening period. The 8-12 months fattening period is the crossbred Charolais and Kampheng Saen by

internal breeding on farm as the farmers be the member in the Kampheng Saen beef cooperative. For short period fattening 1-4 months, the most of the cattle is the crossbred Brahman and Charolais which originating from Phetchabun, Sukhothai and Kanchanaburi cattle market. There are not many cattle coming from the local area as the amount is not enough for fattening requirement and could not get to break event point. The short period fattening has 30-40 percentages in Prachuap Khiri Khan province which selling to Pathum Thani, Ratchaburi and Ang Thong for beef ball processing and 60 – 70 percentages sending to the lower region of the South and Malaysia. Beef cattle from Chumphon province are sold to Narathiwat province and Malaysia.

There are 4 types of the beef cattle farmer as 1) Group setting of the beef cattle farmers as the corporative or community enterprise 2) Beef cattle farmers feeding only bull 3) Beef cattle farmers feeding only heifer and 4) Beef cattle farmers which be the middleman selling accumulated live beef to the lower region of the South.

Beef cattle providing for fattening in the farmer corporative will do by beef requirement collection in each farmer following the beef amount and condition at least 40 heads for the break event point of the transportation and other costs. Those cattle are bought from the cattle market in Sukhothai, Phetchabun and Kanchanaburi province. Buying system will be in per live cattle as about 33 baht per kilogram. Beside the corporative of farmer for buying the beef, they also have corporative to buy the raw material feed as oil palm meal and cassava chip. They also sell the live fattening beef to the middleman about 400 – 500 kilograms weight and 45 baht per kilogram for the crossbred native and Brahman beef and 46-47 baht for the crossbred native and Charolais. The farmers will have the profit about 4,000 baht per head.

Most of fattening bull farmer is the big farm size which having about 100 heads and using short period fattening 1-4 months for 400 – 500 kilograms weight. The most of feed comes form own mixing by using cassava chip from Nakhon Pathom and Suphan Buri province as the main ingredient. The oil palm meal can bought in Chumphon province. The main raw material feed in Prachuap Khiri Khan province is pineapple peel. The beef for fattening are bought from cattle market in Sukhothai province by selecting the crossbred

Brahman about 10,000 – 12,000 baht per head with 300 kilograms weight. All the fattening live bull will sell to the middleman to Malaysia. The middleman will come to buy 25 -30 heads with 500 kilograms for the average weight at the farm. The selling price for crossbred Brahman bull is 45 baht per kilogram and 46 – 48 baht for crossbred Charolais bull.

Fattening heifer farmers, they will have lower cost of the live cattle than fattening bull. The cost will be 27 baht per kilogram live cattle which coming from cattle market in Phetchabun province. The most of feed is the own mixing concentrate feed as cassava chip from Nakhon Pathom and Suphan Buri province. The oil palm meal can bought by quota system from the oil palm factory in Chumphon province. The fattening period is about 4 months for 300 -400 kilograms weight. The middleman will come to buy at the farm for 34 baht per kilogram as about 3 -5 heads per day and sell to slaughter in Surat Thani province.

The middleman will buy and collect the live beef cattle for fattening to be the reservation in case that could not find the source on time to provide the market. They will collect from Prachuap Khiri Khan and Chumphon province from buying with the average price as 27 baht per kilogram live cattle and about 200 kilograms. There are 2 ways for selling those live cattle as 1) Buy the fattening beef at 45 baht per kilogram for the bull and 35 baht for the heifer from the local area 2) Sell the own fattening beef at 43 baht per kilogram for heifer and 52 baht for the bull. The main selling area is Narathiwat province which be the live cattle market to slaughtering for sale in domestic. The difference price is 5 – 7 baht per kilogram between farm price and market price at Narathiwat province.

In the downstream supply chain, we find the most of beef selling in Prachuap Khiri Khan coming from the local slaughtering and having some from Phetchaburi province. The customers will be general and small hotel as the most. If they are the butcher shop buying the beef from the slaughter, the difference price will be 20 baht per kilogram. The butcher shop with slaughtering will have the beef cost as 60 percentages of the selling price. There are 10 percentages as slaughtering cost. In case of the high quality beef, it will have order from the distributors in Bangkok.

In Chumphon province, there are butcher shops which slaughtering and selling beef by themselves and sell and other butcher shops which only do selling. The wholesale price is

120 baht per kilogram and 140 baht per kilogram for the selling price at the shop. The most consumers are the local people which require only general beef quality. The consumption does not depend on seasonal, vegetarian festival, as the most beef consumers be not vegetarian. In the closed gulf period (15 February – 15 May of each year as the spawning season of sea animals) will increase the beef consumption. The another consumer group is the workers or the migrants from neighboring countries which require the lower beef price through the distribution channel in the mobile market in each area.

The linkage between the household activities in the small beef farmers and small fattening beef farmers are piggy bank and will sell the beef out if necessary as before school opening. The farmer group who fattening beef as the main carrier will have good financial and reserve capital so the beef selling does not have any correlation with the household activities but considering on the production crop (fattening period and weight).

The linkage between the farmers who having other main agricultural carrier along with beef production, the beef production should be the supported carrier by using the weed for the roughage. It also applies to use the oil palm leaves to improve the management quality. The farm size should be 5-10 heads which suit for the workers, free timing from the main carrier and having enough roughage for production. Government knowledge linkage, the government agencies should establish the farmer group to be the knowledge source and exchanging center of beef management, marketing information management and needs of the local consumers. There is not the mention process happening yet as the most farmer be small farmers and not grouping. For the fattening beef farmers, there is exchanging information process in middleman needs for the amount and condition of live beef but the price information does not really have the exchanging.

Movement of live beef price in each month is consistently and could not motivate to do this carrier. The reason why Chumphon and Prachuap Khiri Khan province still have this carrier as because of the raw material potential and enough roughage and weed from the rainy in whole year.

Development trends for beef in Chumphon and Prachuap Khiri Khan province are 1) Supporting to establish beef farmer group 2) Networking to collaborate between the farmers

3) Development and standard farm registration to beef farmer group on quarantine site for beef movement to free foot and mouth disease zone 4) Government should help the big farm size or the farmer group to sell the live beef to Malaysia 5) Government should help to develop the concentrate feed suitable to beef requirement 6) Need comparative cost and income study from fattening beef production by using oil palm planting area for roughage planting 7) Government should study on the impact and solution in case not enough upper stream beef from the central area 8) Knowledge and understanding providing to the farmers about semen selection for genetic improvement 9) Slaughter and transportation improvement for distribute clean and safe beef to customer 10) Chumphon beef production development policy need encourage the farmers do upper stream beef for the fattening and sale to the lower area of the South and Malaysia as good area potential for roughage (by product from other industries) 11) Chumphon fattening beef potential development is good on roughage and quarantine area which need before sending to free disease zone. It is the advantage of Chumphon as the law need 21 days quarantine before sending live beef the lower area of the South. Chumphon is the advantage place to bring the upper stream beef to quarantine than other provinces 12) Prachuap Khiri Khan beef production promotion should be small farmers as it be the planting area for seasonal economic plants. It leaves the space for beef herds. Fattening beef production in Prachuap Khiri Khan province has the good potential from agricultural by product as pineapple peel, papaya, rice bran and fish meal which having in own province and nearby provinces a Nakhon Pathom and Suphan Buri