CHAPTER VIII

ASSESSMENT OF EFFICIENCY OF THE ROYAL PROJECT MARKETING

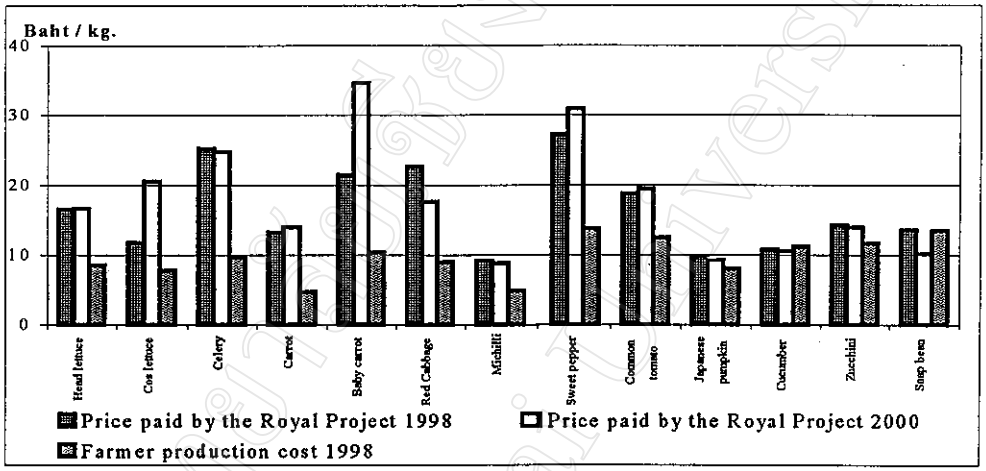
In principle The Royal Project is not considered as a profit seeking enterprise, however, for analyzing the efficiency of the marketing section, it is viewed as a profit seeking enterprise, and thus some basic profitability ratios are computed. The efficiency of the Royal Project vegetable marketing practices can be assessed by consideration of the margin of the Project and farmers under the Project, trend of the past sales data, and rate of turnover. The descriptive analysis was used to determine the margin of the cost of the Project and the farmer who supply products to the Project. The margin of the Project was calculated from the cost and retail price in the market, which was the result of hedonic price model. The results from the Project's marketing efficiency assessment would provide information for better decision making and to plan their marketing practices.

8.1 The Margin of the Farmers under the Royal Project

Vegetable is the cash crop of the farmers under the Project, it has provided cash income to the farmer since 1981. Concerning the highest value of vegetables promoted by the Project, it was found that most of the prices that the project paid to the farmers cover their production cost as shown in Figure 8.1. The production costs for each vegetable depend on several factors, those are yield per area, growing period, management, etc. The costs of some vegetables for example snap bean, zucchini, cucumber, tomato, and sweet pepper are higher than other vegetables because they need more management and a longer period of growing. These caused the higher labour costs (Sriboonchitta. *et al.* 1996). From some vegetables such as sweet pepper, baby carrot, cos lettuce, and celery the farmers under the project gain big amount of profit. Snap bean

was only one vegetable where the average purchasing price of the project did not cover production costs of farmers in 2000. Apart from cos lettuce, sweet pepper, baby carrot, and snap bean the prices per kg. that the Project paid to the farmers in 2000 remained the same as in 1998. Therefore the farmers have gained profit from selling their products to the Project.

Figure 8.1 Prices Paid by the Royal Project and Production Cost of Farmer



Source: Sriboonchitta, 1996
The Royal Project Foundation,2000

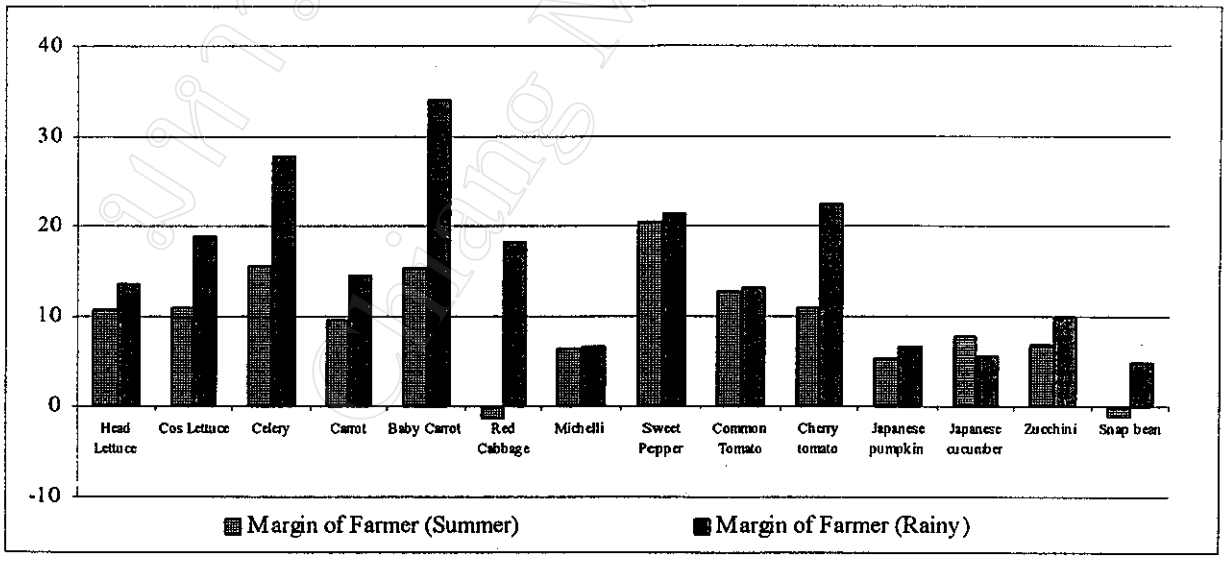
In the rainy season, the farmers gained more profit than in summer from most of the studied vegetables. As shown in Figure 8.2, only Japanese cucumber has margin for farmers in the rainy season less than in the summer season. However the margin of some vegetables such as head lettuce, michilli, sweet pepper, common tomato, Japanese pumpkin, and zucchini in summer season are not much different from rainy season. While the farmers' margin for cos lettuce, cherry tomato, celery, baby carrot, and red cabbage in the rainy season were higher than summer at 8.12, 11.40, 12.15, 18.65, and 19.56 baht per kg. respectively.

From 15 studied vegetables, the farmers gained the highest profit from growing sweet pepper, 20.51 baht per kg in summer. And the margin of farmers who grew celery, baby carrot, common tomato, cherry tomato, cos lettuce, head lettuce, carrot, Japanese cucumber, zucchini, michilli, and Japanese pumpkin were equal to 15.54, 15.28, 12.65,

10.96, 10.79, 10.69, 9.57, 7.82, 6.93, 6.54, 5.40 baht per kg. respectively. While the farmers who supplied snap bean and red cabbage to the Project in the summer season lost 1.10 and 1.28 baht per kg.(Figure 7.2).

In the rainy season, the farmers under the Project gained the highest profit from growing baby carrot, 33.93 baht per kg. As mentioned earlier the farmers who grow vegetable crops gained more profit in the rainy season than in summer. The profit of the farmers who grew celery, cherry tomato, sweet pepper, cos lettuce, red cabbage, carrot, head lettuce, common tomato, zucchini, michilli, Japanese pumpkin, Japanese cucumber, and snap bean were equal to 27.68, 22.39, 21.29, 18.91, 18.28, 14.50, 13.49, 13.10, 9.99, 6.73, 6.66, 5.64, and 4.80 baht per kg. in the rainy season. Contrary to the summer season, the farmers could gain benefit from selling red cabbage and snap bean to the Project. Especially for red cabbage the margin was up to 18.28 baht per kg. in the rainy season (Figure 8.2).

Figure 8.2 The Margin of Each Vegetables of the Farmers under the Royal Project in 2000



Source: The Royal Project Foundation,2000

8.2 The Margin of the Royal Project

In this study the margin and retail prices of the Project's product were separated into two sections, Chiang Mai and Bangkok sales sections.

Head Lettuce

In the summer season the retail price of head lettuce for Chiang Mai sales did not cover the total cost and it was lower than the other brand names (Figure 8.4). There were some products left in this season. The retail price of head lettuce in Bangkok was also lower than its total cost (Figure 8.4). The cost of loss per kg. to Bangkok sale section was much higher than Chiang Mai sales section. The costs to both sales sections need to be reduced in order to compete with the other brand names in the market.

In the rainy season the total cost to Chiang Mai sales section was nearly at its retail price in the market. While the retail price to Bangkok sales section was higher than Chiang Mai and it could cover total cost. Therefore the Project has to expand the market in Bangkok in the rainy season by selling the product at a lower price than other brand names.

Cos Lettuce

The variable of the Project's brand name was omitted from cos lettuce hedonic price model as it was correlated to the variable of marketplaces. However the retail prices of other brand names' products in Chiang Mai and Bangkok could cover their total costs of the Project in both rainy and summer season (Figures 8.3-8.6). In summer the gross margin of this product for Bangkok sales section was higher than Chiang Mai sales section, therefore the Project has to expand the market in Bangkok by selling the products at a price lower than the other brand names. Moreover if the Project gains more benefit from selling the product in Bangkok, this would lead to the increasing of the price paid to the farmers. In the rainy season the margin of this product for Bangkok sale

section was higher than Chiang Mai sales section. In rainy season the Project can sell cos lettuce in Chiang Mai or distribute to Bangkok. However the cost of this product to Bangkok sales section has to be reduced or the product has to be sold in the foreigner-business-area supermarkets to ensure that the selling price can cover the cost.

Celery

The retail prices for celery of the Project were higher than the other brand names in the market. The margin of selling this product was highest when the product was sold by Bangkok sales section in the rainy season. Chiang Mai sales section might face difficulty to compete in selling celery in Chiang Mai. Not only the costs of this product were near to the retail prices of the other brand names in the market, but also the retail prices of the Project's product were higher than other brand names in both rainy and summer season (Figures 8.3. and 8.5). The margin for celery sold by Bangkok sales sections were higher than Chiang Mai sales section in both summer and the rainy season (Figures 8.4 and 8.6). Moreover the costs of this product to Chiang Mai and Bangkok sales sections were not much different from each other. Therefore celery has to be distributed and sold in Bangkok more than in Chiang Mai, to gain more profit as well as to provide more income to the farmer. Bangkok sales section can reduce the prices to compete with other brand names, and expand the market in Bangkok, because the retail prices were much higher than the cost.

Carrot

The retail prices of carrot in the Project were higher than other brand names in the market. Similar to celery, Chiang Mai sales section might face difficulty to compete selling this product because its costs were nearly at the retail prices of other brand names in the market, and the retail prices of the Project were also higher than other brand names. While the costs of carrot to Bangkok sales section were lower than retail prices of other brand names (Figures 8.4 and 8.6). The Project can expand the market in

Bangkok due to the costs in Bangkok were near to the costs of Chiang Mai sales section in both rainy and summer season, but the margins for selling carrot in Bangkok were higher. However the selling prices of the Project have to be reduced in order to compete with other brand names in the market.

Baby Carrot

The costs of baby carrot to Chiang Mai and Bangkok sales sections were not different from each other in both summer and rainy season. The margins from selling product in Bangkok were much higher than in Chiang Mai (Figures 8.3-8.6). In Bangkok the retail prices of the Project's baby carrot were higher than other brand names. The Project has to expand the market in Bangkok to gain more profit as well as provide more income to the farmers. In order to compete with the other brand names in Bangkok and reduce the loss of left product, the Project's prices in Bangkok in the summer and rainy seasons have to reduce to be the same as other brand names.

Red Cabbage

The retail price of red cabbage in the Project could not be measured due to its variable being omitted from the hedonic price model. However the retail prices of other brand names in the market were higher than the cost of the Project. In the summer, season the retail price of this product in Bangkok and Chiang Mai were higher than the cost of the project at 31.30 and 24.42 baht per kg. respectively. While the farmers who supplied red cabbage to the Project lost 1.28 baht per kg. The Project can set the same price as the other brand names and increase the price paid to the farmer to cover their cost.

Michilli

Chiang Mai sales section might face difficulty to sell michilli in Chiang Mai as its costs were higher than the lowest retail prices of the other brand names in the market in both the summer and rainy seasons. While the margin for Bangkok sales section in

summer and rainy season were 20.71 baht per kg. (Figure 8.3) and 15.44 baht per kg. (Figure 8.5). The Project has to expand the market to Bangkok by selling products at the present price, which was lower than the other brand names, to gain more profit and provide more income to the farmer.

Chinese Cabbage

The margin of selling Chinese cabbage in the Project in the rainy season was higher than in the summer season. In 2000, Chiang Mai sales section could not get the profit from this product (Figure 8.3), while the margin for Bangkok sales section was equal to 9.10 baht per kg. thus the products in summer have to be distributed to Bangkok more than Chiang Mai. The margin of Chinese cabbage for Bangkok sale section was also higher than Chiang Mai sales section. Even though the price of the Project in the market was lower than other brand names, there were some products left in Chiang Mai sales section. Therefore Bangkok sales section has to expand the market to absorb the surplus supply of the Project by selling the product for which the price was lower than other brand names in the market.

Sweet Pepper

The prices of sweet pepper in Bangkok were much higher than in Chiang Mai in summer and rainy season. While the costs of this product of Bangkok and Chiang Mai sale were almost the same, but the margin of Bangkok were much higher than Chiang Mai sale section in both seasons. Therefore the Project has to expand sweet pepper to Bangkok to gain more profit and provide more income to the farmers. Consider to the cost of this product in Bangkok sale section, the Project can set the selling price that lower than other brands to compete in the market.

Common tomato

Chiang Mai sales section gained profit from selling common tomato of only 9.64 baht per kg. in the summer season, while the margin for Bangkok sales section from this product was equal to 29.62 baht per kg. In rainy season the margin of Chiang Mai and Bangkok sales sections were equal to 16.93 and 36.88 baht per kg. respectively (Figures 8.3-8.5). This product has to be distributed for sale in Bangkok more than in Chiang Mai, especially in the summer season, to get higher profits and provide more income to the farmers. The Project can sell the product at the present price to increase market share in Bangkok or increase the price to equal other brand names to get the more profit.

Cherry tomato

The retail price of cherry tomato could not be predicted as to the variable of the Project's product was omitted due to correlation to the selected variables in the model. However when comparing the cost of this product to the retail price of other brand names, it was found that the retail prices could not cover the cost of the Project's product in the summer season. The retail price in Bangkok was higher than in Chiang Mai and it covered the cost of product to Bangkok sales section. In the rainy season, the margin from cherry tomato to Bangkok sale section was much higher than in Chiang Mai. Therefore the project has to distribute more product to Bangkok to avoid the loss in Chiang Mai.

Japanese pumpkin

The margin from selling Japanese pumpkin for Bangkok and Chiang Mai sales sections in summer were equal to 19.61 and 1.3 baht per kg. respectively. In the rainy season the margin of this product for Bangkok sales section was 17.36, and the margin for Chiang Mai sales section was 7.24 baht per kg., while the farmers who supply Japanese pumpkins to the Project gained profit at 5.41 and 6.66 baht per kg. in the summer and rainy seasons. The cost of this product in both sales sections were almost

the same. Therefore the Project can increase profit and provide more income to the farmers by selling Japanese pumpkin in Bangkok to get the higher prices.

Japanese cucumber

The variable of the Project's brand name for Japanese cucumber in the hedonic price model was omitted as it correlated to the variable of the marketplace, the products of the Project were seldom sold in the studied marketplaces Bangkok. However when comparing the costs of the Project and the retail prices of the other brand names, it was found that the margin for selling Japanese cucumber of Chiang Mai and Bangkok sales sections in summer were equal to 6.10 and 40.77 baht per kg.. The margin of both sections in the rainy season was 3.43 and 38.47 baht per kg.. (Figures 8.3- 8.6) While the farmers gained benefit from selling the products to the Project at 7.82 and 5.64 baht per kg. (Figure 8.2) in the summer and rainy season respectively. The Project has to distribute more products to Bangkok to get more profit and increase the price paid to the farmer in both summer and rainy season.

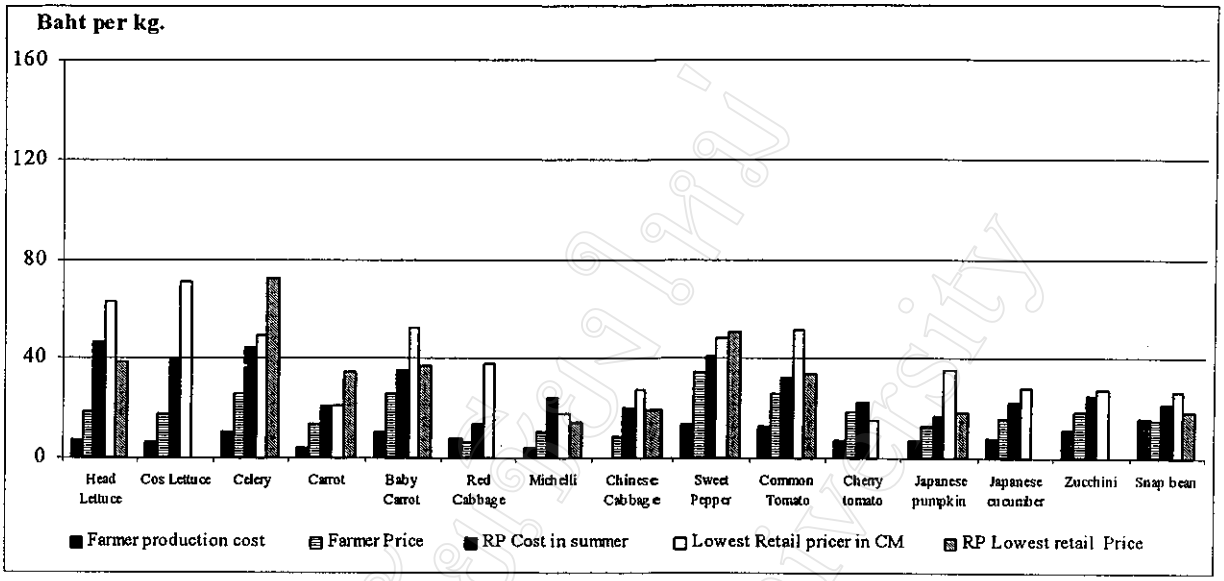
Zucchini

Similarly to Japanese cucumber, zucchini of the Project was seldom found in the studied marketplaces. The variable of the Project's product was omitted from the model as it correlated to the variable of the marketplace. However when comparing the costs of the Project and retail prices of other brand names in the market, it was found that the margins of selling this product in Bangkok were much higher than in Chiang Mai sale section. In summer, the margin of Chiang Mai and Bangkok sale section were equal to 2.12 and 100.02 baht per kg., while the cost to the Project was higher than the lowest retail price of other brand names by 10.13 and the margin for Bangkok was 78.28 baht per kg. In order to gain more profit The Project has to distribute more products to Bangkok, this would lead to increasing the price paid to the farmers.

Snap bean

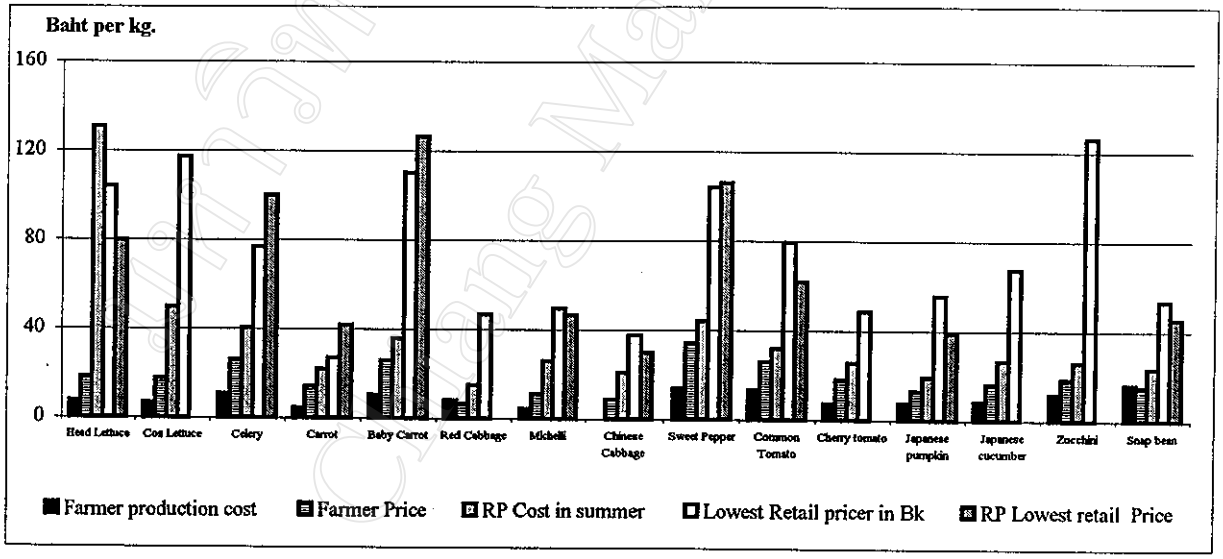
In the summer season Chiang Mai sales section lost from selling snap bean by 3.36 baht per kg. and the total value of the left product was equal to 57,262.13 baht. Moreover the farmers who supplied the product to the Project also lost in selling snap bean by 1.1 baht per kg.. The margin of selling this product in Bangkok sales section was equal to 21.86 baht per kg.. The Project has to expand the market in Bangkok in order to reduce the loss and provide more income to the farmers. In the rainy season Chiang Mai sales section lost at 7.31 baht per kg., while the margin for Bangkok sales section was 16.67 baht per kg.. The products have to be distributed to Bangkok more than Chiang Mai to get higher profit and increase the price paid to the farmers.

Figure 8.3 The Cost to the Chiang Mai Sales Section and Retail Price in the Market in Summer Season



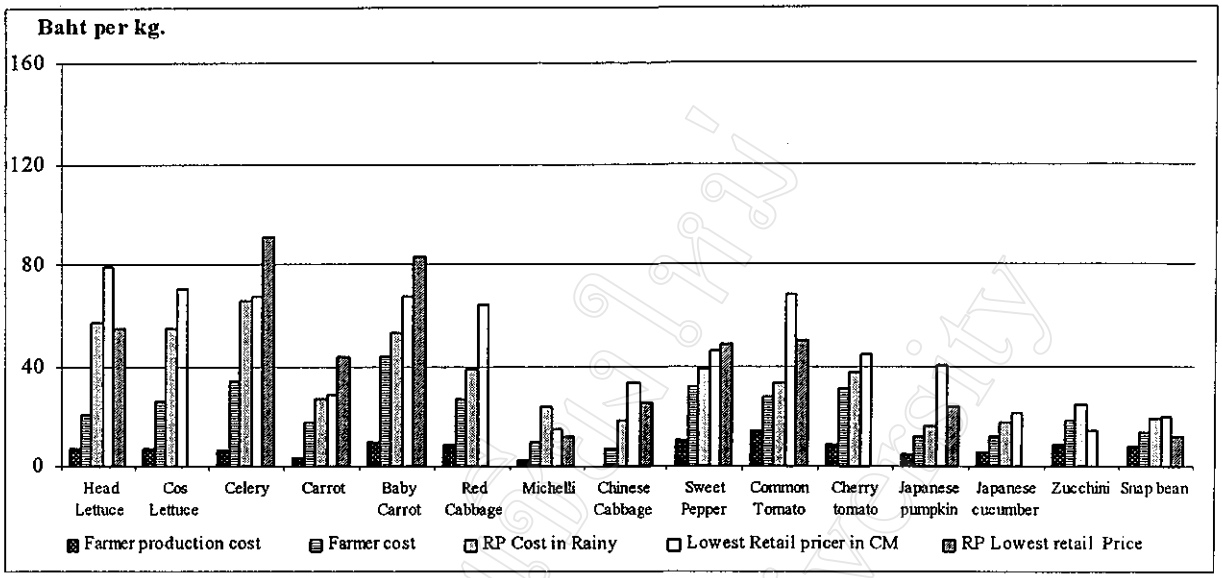
Source: Calculated

Figure 8.4 The Cost to the Bangkok Sales Section and Retail Price in the Market in Summer Season



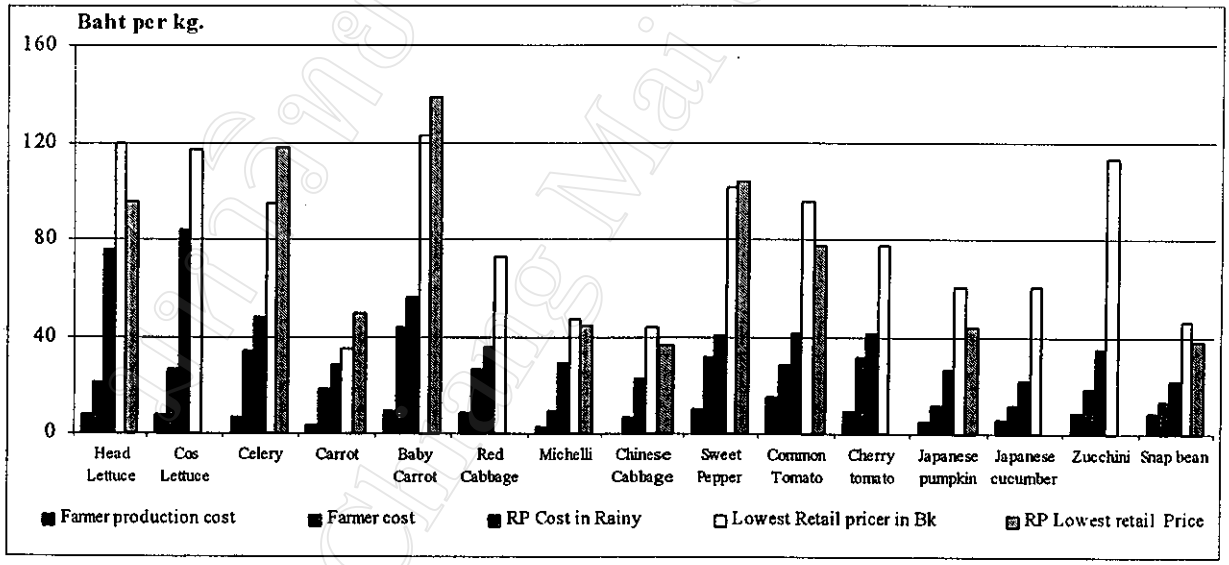
Source: Calculated

Figure 8.5 The Cost to the Chiang Mai Sales Section and Retail Price in the Market in Rainy Season



Source: Calculated

Figure 8.6 The Cost to the Bangkok Sales Section and Retail Price in the Market in Rainy Season



Source: Calculated

8.3 Gross Margin of vegetable marketing of the Royal Project

The value of purchased vegetables by the project has increased from 161,172 baht in 1981[1] to 62.53 million baht in 2000. The proportion of vegetable income was 69.48% from the total in 2000.

The margin of vegetable marketing for both Chiang Mai and Bangkok sales sections were expressed as;

Gross Margin = Total vegetable income – Total Vegetable Cost

Total Cost = Total Vegetable Cost + Marketing cost of vegetable (Salary of marketing officer, Utility, Asset, and Expense) + Opportunity Cost of Investment

Total vegetable cost was calculated from percentage of vegetable income from total. The cost are shown as in table:

Table 8.1 Total Vegetable Cost and Gross Margin in 2000

Details	Baht	%
Vegetable Cost	62,537,723.83	70.81
Marketing Cost of Vegetable	24,783,615.09	28.06
Opportunity Cost of Investment	991,344.60	1.12
Total Vegetable Cost	88,312,683.53	100
Total Vegetable Income	95,223,845.03	
Gross Margin	6,911,161.50	
Output and Input Ratio	1.08	

Source: The Royal Project Foundation

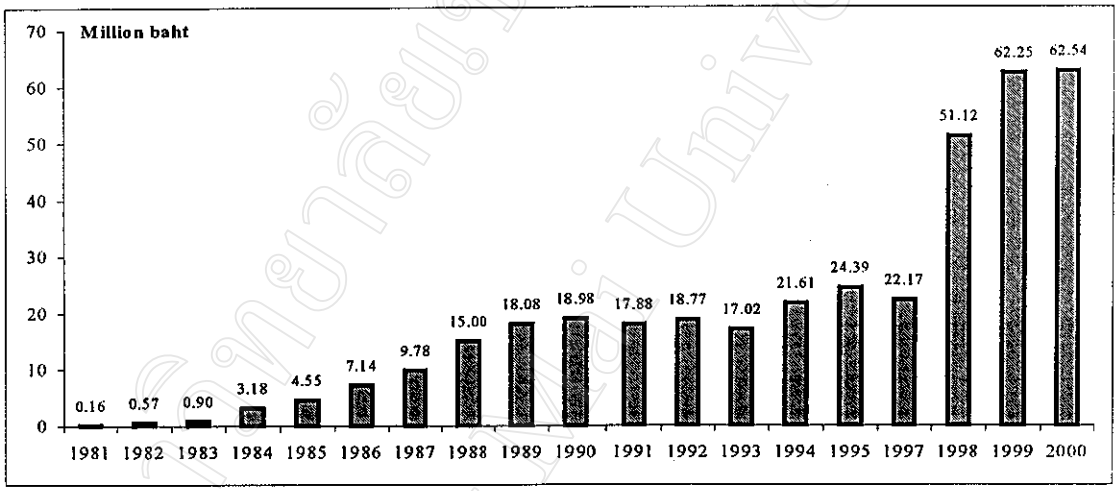
In 1999/2000 the value of purchased vegetables of the Project is equal to 62.53 million baht, 70.81% of total vegetable cost. Marketing cost of vegetables was measured from percentage of vegetable income and total expense of the Project, it was equal to

[1] Suemanotham

28.06% of vegetable cost. The margin of vegetable is equal to 6.91 million baht, and the ratio of output and input is 1.08. As a non-profit organization the Project aims to help the farmers, the Project has to be sustained by running their business to cover all the costs.

In terms of providing cash income to the farmers, it was found that the purchased value of vegetables of the Project has increased since 1981, especially when marketing practices of the Project were changed to be profit center in 1999 (Figure 8.7).

Figure 8.7 The Value of Purchased Vegetable by the Royal Project



Source: The Royal Project Foundation
Suemanotham, 1999