

CHAPTER IV

MARKETING OF VEGETABLES IN BLOCK S4

In this chapter, the four types of vegetables selected will be studied in detail. They are chili, long beans, ladies finger and pumpkin, chosen on the basis of popularity and also with a view to represent the important categories of vegetables produced. They are treated together because of their similarity with respect to most of the basic marketing functions involved. Whenever there was a difference which is thought to be significant from the point of view of marketing, mention will be made to that effect.

PRODUCT AND PRODUCTION

Characteristics

There were two types of chili produced in Block S4 or Sekinehan for that matter. One was red chili while the other was green chili. All the four types of vegetables, like most farm products, are rather bulky in nature compared to industrial goods. They occupy more volume or space while the price or value is small. This is important as far as transportation is concerned. These four products, particularly red chili, are also perishable in nature, which means that markets must be found immediately if price and quality are to be maintained. Another thing is that they are seasonal in supply. Thus in any particular month or months, the supply may be so great that there is a shortage of lorries to carry them to distant markets like Kuala Lumpur, Klang, Kuala Selangor, Telok Anson and others. If condition is so bad, physical wastage could not be avoided while at best the quality goes down. Moreover, at the peak of the harvesting period when the supply is maximum, the price must fall substantially in order to increase the quantity demanded only slightly, because of low elasticity of demand.

Quality and Uses

The quality of the four vegetables (and most probably of other vegetables also) produced in Block S4 or Sekinehan varied from lot to lot and from year to year. That is to say, they possessed low degree of uniformity due to slightly different techniques and principles of cultivation followed and the different degree of watering, manuring, controlling of pests and diseases and the fertility of the soil. There was moreover no standard seeds used, no standard picking method and no standard method of controlling diseases.

Again towards the end of the harvesting period, the quality went down which was quite natural.

Generally speaking the vegetables produced in Block S4 were slightly lower in quality compared to those produced by Chinese market gardeners around Kuala Lumpur who were and still are either specialising in intensive cultivation of vegetables for sale or engaged in ordinary mixed farm. However they were better than those produced by Malays in surrounding areas.

The vegetables from the outskirts of Kuala Lumpur were fresher and hence in greater demand than those produced in Block S4, though price might or might not differ.

Except among a limited number of people who are basically flesh or fish eaters, various vegetables, after grain, form the chief article of diet. They provide good food and are an important item in a health-giving, balanced diet. Chilies are used to make curry tastes hot or in making "sambal". Long beans are eaten in form of curry. Ladies finger and pumpkin are also used to make delicious curry, though the latter can be made into porridge. They are necessities to most people and are demanded by all races, particularly Indians and Malays in case of chili.

Nature of Production

Out of 25 farmers interviewed in Block S4, 24 or 96% of the total planted off-season crops of vegetables, maize and sweet potatoes for sale in 1964, that was just before the first main season padi crop under the system of double cropping. The other one farmer or 4% of the total also cultivated some vegetables etc. but only for home consumption.

Table 4.1 below gives an idea of the scale of operation of off-season crops in Block S4. Each of the 24 lots were operated by different farmers. More than four-fifths of the lots were each 3 acres in size while the rest were 2 acres and $1\frac{1}{2}$ acres in size each

For individual crops, the acreage planted was even smaller, for normally, each farmer planted a combination of 3 or 4 crops on a single lot. Thus the acreage under single crop varied from about $\frac{1}{2}$ acre and below to 3 acres, the most frequent size or mode being $\frac{1}{2}$ acre as Table 4.2 shows.

TABLE 4.1

SIZE OF OPERATING UNITS OF OFF-SEASON CROPS IN BLOCK 84

Acreage under off-season crops ¹	No. of lots under off-season crops	% of total lots	Whole or half of lot
3	20	83.34	Whole
2	2	8.33	Half
1½	2	8.33	"
Total	24	100.00	-

From table 4.2 it can be seen that there is a close correlation between the size and number of vegetable plots. From the data it can be generalized that the number of vegetable plots decreased as the size of the plot increased from ½ acre to 3 acres. The same trend appeared as the size decreased from ½ acre to ¼ acre and below.

From interviews with 25 farmers it is gathered that the family was the chief source of labour used in the cultivation of off-season crops including vegetables. Occasionally, however, hired labour might be used for ploughing or picking the produce.

¹This was actually the size of operating units which were again divided into a number of plots according to types of crops grown.

TABLE 4.2

SIZE OF VEGETABLE PLOTS INVESTIGATED IN BLOCK 84

Acreage of Plot	No. of Plots	% of Total
(A) CHILI PLOTS ¹		
3	1	6.25
1½	2	12.50
1	2	12.50
½	8	50.00
¼ and below	3	18.75
Total	16	100.00
(B) LONG BEANS PLOTS		
3	-	-
1½	1	7.69
1	3	23.08
½	6	46.15
¼ and below	3	23.08
Total	13	100.00
(C) LADIES FINGER PLOTS		
3	-	-
1½	2	16.67
1	3	25.00
½	5	41.66
¼ and below	2	16.67
Total	12	100.00
(D) PUMPKIN PLOTS		
3	-	-
1½	2	20.00
1	2	20.00
½	4	40.00
¼ and below	2	20.00
Total	10	100.00

¹ Each plot of a particular type of vegetable was on different lot, hence it was operated by a different farmer.

SUPPLY

Gross Yield and Amount Marketed

From interviews with the farmers concerned, data on gross yield and amount marketed were obtained. For simplicity of exposition, figures were then converted in terms of an acre.

TABLE 4.3

GROSS YIELD AND AMOUNT MARKETED FOR AN ACRE OF VEGETABLES
IN BLOCK 84

Type of Vegetables	Gross Yield in katies (Estimated)	Amount kept for own consumption in katies (Estimated)	Amount Marketed in katies (Estimated)
Chili	4,000 to 5,000	30 to 60	3,955 to 4,955
Long beans	5,000 to 6,000	30 to 60	4,955 to 5,955
Ladies finger	7,000 to 8,000	30 to 60	6,955 to 7,955
Pumpkin	9,000 to 12,000	40 to 70	8,945 to 11,945

Frequency and Time of Supply

Field investigation shows that the frequency of supply of vegetables varied from the beginning to the end of the harvesting period which was quite different from one type to another as table 4.4 shows. The harvesting period can be divided into three stages according to volume and frequency of supply.

During the first stage of harvesting period chili, long beans and ladies finger were picked once every two days (i.e. on alternate days) while for pumpkin, it was picked once a week. During the second stage, chili, long beans and ladies finger were picked every day while for pumpkin it was done once in every 4 or 5 days. Frequency of picking during third stage was exactly the same as in first stage for all the vegetables.

Variation and Trend of Volume Marketed

At harvesting, a chili plot was normally divided into two sub-plots, one for red chili and the other for green chili. The proportions were normally $\frac{2}{3}$ red and $\frac{1}{3}$ green.

TABLE 4.4

STAGES IN HARVESTING PERIOD FOR VEGETABLES ON A NORMAL PLOT

Name of Period	Period	Duration in days
(A) RED CHILI		
Growing	Mid-April to Mid-July	90
Harvesting	Mid-July to early September	45
1st Stage	Mid-July to early August	15
2nd Stage	Early August to Mid-August	15
3rd Stage	Mid-August to early September	15
(B) GREEN CHILI		
Growing	Mid-April to early July	75
Harvesting	Early July to early September	60
1st Stage	Early July to mid-July	> 15
2nd Stage	Mid-July to Mid-August	> 20
3rd Stage	Mid-August to early September	> 15
(C) LONG BEANS		
Growing	Mid-April to Mid-June	60
Harvesting	Mid-June to mid-July	30
1st Stage	Mid-June to late June	10
2nd Stage	Late June to early July	10
3rd Stage	Early July to Mid-July	10
(D) LADIES FINGER		
Growing	Mid-April to Mid-June	60
Harvesting	Mid-June to early August	45
1st Stage	Mid-June to early July	15
2nd Stage	Early July to mid-July	15
3rd Stage	Mid-July to early August	15
(E) PUMPKIN		
Growing	Mid-April to early July	75
Harvesting	Early July to early September	60
1st Stage	Early July to Mid-July	15
2nd Stage	Mid-July to mid-August	30
3rd Stage	Mid-August to early September	15

Table 4.5 below shows the variation and trend of volume marketed per harvest from an acre of vegetables. For convenience of exposition, the figures given by the farmers according to actual acreage under each type, were converted in terms of an acre.

TABLE 4.5

VARIATION AND TREND OF VOLUME MARKETING PER HARVEST FROM AN
ACRE OF VEGETABLES

Types of Vegetables	Estimated volume in katies per harvest from an acre of vegetable at:			
	Beginning of 1st Stage	End of 1st Stage	Middle of 2nd Stage	End of 3rd Stage
Chilli	125	150	200	100
Long beans	200	275	375	150
Ladies Finger	200	250	350	150
Pumpkin	800	900	1,100	600

From table 4.5 above it can be seen that the volume marketed steadily increased from the beginning of the harvesting period to the middle of it when the volume marketed was maximum, after which the volume declined until it reached the minimum at the end of the third stage.

The above figures exclude the volume kept for own consumption, which was between 2 to 3 katies at every harvest.

Supply and Demand

Supply of and demand for vegetables are both inelastic in the sense that changes in price do not normally result in the same degree of changes in quantity supplied and demanded, though demand is more inelastic than the supply. When for example the price of chilli falls say by 10%, the demand for it does not normally rise by the same proportion, but only by say 1%. This is especially so when the original price is already quite low. The reason is that the vegetables are regarded by most people, especially town dwellers, as necessities.

The supply is less inelastic but with a time lag, thus cycle of supply is created. So, if the price of chili falls say by 10%, its supply does not fall by the same proportion but by say 2% or 3% only. The reverse is true if price rises except that the degree of elasticity is greater (or degree of inelasticity is lesser still).

Such being the nature of supply and demand for vegetable products, during the second stage of harvesting period when the yield was maximum, the price in the satiated markets fell to a very low level in order to absorb the surplus products. The reverse was true at the beginning or at the end of the harvesting period when the supply was minimum and markets in Kuala Lumpur, Klang etc. were "crying" for them.

SELLING

Due to memory failure, it was difficult for the farmers to indicate the number of times they sold their produce to local dealers, to dealers from other towns or through agents. Thus a general pattern of selling was the only solution left.

This general pattern of selling, the writer was told, was not only applicable to any one particular type of produce (except padi) but for most if not all the off-season crops grown in Block 84 and Sekinchan.

There were two main types of selling followed:-

- (a) Direct Selling
- (b) Indirect Selling

Direct Selling

This type of sale made up only a very small proportion¹ of the total volume marketed. This was no surprise since the non-agricultural population of Sekinchan made up only a small percentage of the total. The farmers brought the vegetables together with other products to the local market place and sold them direct to consumers. Only about 10% of the farmers interviewed ever engaged in this direct selling.

Indirect Selling

The remaining volume was sold under this category. These were the outlets through which farmers normally sold their produce:

¹The writer's rough estimation was about 5%

(a) Sold to local dealers who were and still are wholesale merchants/agents.

(b) Sold to dealers coming from surrounding towns like Kuala Lumpur, Kuala Selangor etc who were mostly if not all wholesale merchants/retailers.

(c) Sold through local wholesale merchants/agents or local transport agent, that is Sharikat Pengangkutan Ra'ayat Sekinchan.

(d) Sold to retailers in Sekinchan Market. A

All the 24 farmers interviewed who grew off-season crops for sale made use of the first three sale outlets while the fourth outlet was used by only 10 or 41.67% of the total. The degree of usage of each marketing channel by each of the farmers was not possible to determine because of memory failure and complexity of the case. From what could be gathered, a greater proportion of the total volume marketed passed through the first and second outlets than third and fourth.

PRICING

The pricing of vegetable products can be seen in terms of the following:-

- (a) Price Fixation
- (b) Maximum Price
- (c) Minimum Price
- (d) Second Maximum Price.

Price Fixation

The forces of supply and demand determined the prices of off-season crops, including vegetables, grown in 1964. The supply, even during the harvesting period, varied between the three stages. The demand, on the other hand, remained more or less the same or that the quantity demanded changed only slightly as a result of prices change. Thus during the first stage of harvesting period, the price was high due to the fact that supply was low. During the second stage, the price was low because the supply was high while the third stage witnessed the rising price due to the fact that supply or yield was declining again. There were thus two maximum prices experienced by the farmers. ~~Of the two maximum prices experienced by the farmers.~~ Of the two maximum prices, the first was higher because during the first stage not all farmers were harvesting the produce with the result that volume marketed was smaller.¹

¹ Some farmers were yet to enter the first harvesting stage.

During the third stage, however, all farmers were harvesting the products, some were already in the third stage while others were still in second stage resulting in the volume marketed much larger than the first stage. For an individual farmer, the second stage produced the largest yield, the first stage the second largest and the third stage the lowest. Taking all the farmers together, the second stage still produced the largest yield, but first stage the lowest while third stage the second lowest due to overlapping of second and third stages of different farmers.

It must be remembered that the price during each of the three stages did not remain fixed but varied since the supply also varied with each stage.

The prices at which the farmers sold the produce were actually fixed by the dealers,¹ local as well as outside, on the basis of supply at Sekinchan and forces of supply and demand in different markets like Kuala Lumpur, Klang, etc. The forces of supply and demand, especially the farmer, were not the same between the different markets, which accounted for the differential price even on the same day. Personality and knowledge of the farmers also contributed to price differential. ~~markets, which accounted for the differential.~~ Moreover, dealers were always in a strong bargaining position that farmers were forced to sell the produce even at a distressed price, or else wasted.

Maximum Price

Different farmers experienced different "maximum prices" due mainly to the differences in time of first few harvests. The maximum price at producers' level refers to the average of the "maximum prices" at which farmers sold the products to local or outside dealers.

The maximum price at local dealers' level refers to the average of the "minimum prices" at which local wholesale dealers sold the products to Kuala Lumpur wholesales/retailers. This was obtained by interviewing two important vegetable dealers in Sekinchan, Chop Eng Huat and Chop Sun Ngan.

The maximum price at Kuala Lumpur wholesalers/retailers' level or consumers' level, was obtained indirectly through local dealers. According to them, Kuala Lumpur wholesalers/retailers normally would normally make the same profits as local dealers, though occasionally their profits might be higher due to incessant rains etc. Bearing this in mind, consumers' price was calculated on the basis of equal gross profits made by the two groups of middlemen.

¹Local dealers were wholesale merchants/agents while the outside dealers were mostly if not all wholesale merchants/retailers.

Minimum Price

Similarly, the minimum price here refers to the average of the "minimum prices" experienced by ^{different producers,} different local dealers and different consumers at producers' level, local wholesalers' level and Kuala Lumpur wholesalers'/retailers' (or consumers') level, respectively. The minimum price at consumers' level was obtained in the same way as maximum price.

Second Maximum Price

The second maximum price also refers to the average of the "second maximum prices" experienced by different producers, different local dealers and different consumers at the respective levels. The second maximum price at consumers' level was also obtained indirectly through the local wholesale merchants/agents, and based on equal gross profit as at local dealers' level.

Table 4.6 shows the maximum, minimum and second maximum prices of the four types of vegetable at the three levels. The last column shows the estimated marketing margin at the various prices. From the table it can be seen that the difference between maximum and minimum prices was great, particularly in the case of red chili. Note also that the second maximum price was lower than the maximum price.

FINANCING

This is considered under the following:

- (a) Financing the Farmers
- (b) Financing the Dealers.

Financing the Farmers

When harvesting season of padi was over, the farmers normally had some money left over to spend after deduction of previous year's debt was made. But this money was normally not enough to support the farmers during the planting of off-season crops. Even if there was sufficient cash, the farmers would rather reserve it for some emergencies than to spend it on foodstuffs or other necessities which they could take on credit from the shops. From field investigation it is known that most of the farmers took goods on credit not only during the planting of padi as was seen earlier but also during the planting of off-season crops. Most of goods were foodstuffs, other consumer goods, farm implements, fertilizer etc. which were worth between \$200 to \$500 for a farmer. This they paid after harvesting period was over, which was between four and five months.

TABLE 4.6

PRICE OF VEGETABLES SOLD IN SEKINCHAN

Price Variation	Sale price (s per kati) at			Gross Profit (s per kati) by		Marketing Margin (Estimated)
	Producers' level	Local Dealers' level	K.L. Wholesaler /retailer's level (Consumers' level)	Local Dealers	K.L. Wholesaler /retailer (Estimated)	

(A) Red Chili

Maximum	90	100	110	10	10	20
Minimum	5	8	11	3	3	6
2nd. Max.	20	25	30	5	5	10

(B) Green Chili

Maximum	20	29	38	9	9	18
Minimum	4	6	8	2	2	4
2nd. Max.	10	14	18	4	4	8

(C) Long Beans

Maximum	20	30	40	10	10	20
Minimum	5	7	9	2	2	4
2nd. Max.	10	14	18	4	4	8

(D) Ladies Finger

Maximum	25	35	45	10	10	20
Minimum	7	11	15	4	4	8
2nd. Max.	15	21	27	6	6	12

(E) Pumpkin

Maximum	20	30	40	10	10	20
Minimum	5	10	15	5	5	10
2nd. Max.	8	15	22	7	7	14

Out of 24¹ farmers interviewed, 21 or 87.50% of the total took goods on credit during the planting of off-season crops in 1964. Of the remaining 3 farmers or 12.50% of the total one took goods only during the planting of padi while the other two never at all.

Most of the farmers (18 out of 21 or 85.71% of the total) agreed that the prices of the goods tended to be higher than the normal price quoted in the market. This was especially so with more "expensive items" like fertiliser, farm implements etc. The shops they normally approached were:

- (i) Luen Seng and Co., 6, Jalan Tengah, Sekinchan.
- (ii) Yong Kee Chan, 57 Jalan Tengah, Sekinchan.
- (iii) Tong Ho.

Slightly more than three quarters of the farmers (16 out of 21 or 76.19% of the total) took goods on credit from only one shop while the rest from two shops, either Luen Seng and Yong Kee Chan or Luen Seng and Tong Ho.

None of the 24 farmers interviewed borrowed any money from anywhere, though occasionally Luen Seng gave out small loans of about \$100/- in emergencies.

Financing the Dealers

The farmers financed the dealers² or middlemen when they sold the produce to them, in the sense that they allowed the dealers one or two day's credit, sometimes even three days. The credit terms were in most if not all cases, fixed by and at the convenience of the buyers (dealers), since the producers had full confidence of the dealers' financial position and honesty and that they did not want money so badly except in emergencies. Sometimes if the produce was small, then the dealers paid straight away.

CLEANING AND GRADING

Except for pumpkin there was no cleaning done for chili, long beans and ladies finger as they were already quite clean, unless of course they were dropped on the ground or put on the ground as some farmers did. The farmers brought the produce straight to the local dealers' shops or to the market place where dealers from other towns were waiting with their lorries. Occasionally the farmers might bring the produce to their houses first, in which case they often sprinkled water on it to maintain freshness.

¹One farmer cultivated off-season crops only for home consumption, so no consideration was taken.

²Dealers here refer to vegetable dealers and not private padi dealers who were and still are shopkeepers.

There was also no grading done for chili in the true sense of the words for red and green chili were picked from separate portions of the chili plot.¹ As for the others there was no grading at all.

PACKING, STORING, WEIGHING AND HANDLING

All the four types of vegetables were first put in the containers owned by the farmers, either a large bamboo basket or a large rattan basket or any other containers they might possess. At the dealers' shops or at the market centre they were taken out and put in the large bamboo baskets owned by the dealers. These bamboo baskets were first wrapped with newspapers from inside, while at the top a thick newspaper covering was placed. All these were meant, so it seemed, to preserve quality and freshness of the produce. To make matters worse, these bamboo baskets were then placed on the lorry one on top of the other, without any attention to precooling or ventilation. Sometimes these ready packed bamboo baskets had to be stored away in the dealers' shops for half a day or so before they were taken by lorry to Kuala Lumpur or other towns, due to insufficient lorries. The storage facilities were highly inadequate. Weighing was done by means of an instrument called "Daching" in Malay.

From observations, the handling of chili, long beans and others, both on the farm and at the dealers' shops was far from satisfactory.¹ There was little regard, so it seemed, for quality maintenance at the two levels. The farmers also helped in packing and weighing.

TRANSPORTING

Under this sub-heading, the following will be considered:-

- (a) Means of Transport from field to Sekinchan Town,
- (b) Means of Transport from Sekinchan Town to K. Lumpur,
- (c) Cost of Transport.

Means of Transport from Field to Sekinchan Town

The vegetable products were put in rattan or bamboo baskets or other forms of containers owned by the producers and then transported by bicycle to the producers'/farmers' houses or direct to the dealers' shops or to the market centre which is about a mile from Block 4. If the producers brought the produce to their houses first, which were on their way to Sekinchan town, then it would be taken later to the

¹ This is based on what was actually seen during the survey. The method of handling was certainly not much different between then and 1964, nor between the farmers. (At the time of survey some farmers harvested off-season crops planted on State land.)

dealers' shops, also by bicycle. There was no hired labour engaged; farmers carried the produce themselves. There was little or no apparent difficulty in transport from the field to the houses or market centre due mainly to the fact that they were expert cyclists. Otherwise, the rather poor paths would have given them quite a problem.

Means of Transport from Sekinchan Town to Kuala Lumpur

From Sekinchan town the produce was taken to other towns by lorries which were either owned or hired by the local dealers or dealers from those towns. Unlike maize and sweet potatoes, chili and long beans were taken to surrounding towns like Kuala Lumpur, Klang, Kuala Selangor, Teluk Anson and few others.

Cost of Transport

As approximately more than half of the total products were sent to Kuala Lumpur, then it is justified if only transport cost from Sekinchan to Kuala Lumpur is considered.

The transport cost by lorry from Sekinchan to Kuala Lumpur Central Market or Maxwell Road Wholesale Market was \$1.00 per pikul for the vegetable products, as they were transported in bamboo baskets. This meant that it was one cent per kati regardless of price fluctuations. This cost was paid by the farmers if they sold the products through the local dealers or paid by the local dealers if the farmers sold the products to the dealers.