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# MARKETING VEGETABLES IN SURINAM
## parts I and II

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# MARKETING VEGETABLES IN SURINAM *)

C.B. Houtman and G.W. Cellarius **)

As part of an overall study of the production and marketing of vegetables in Paramaribo and its surroundings, an investigation of the marketing structure was initiated in october 1971.
In this article a general description of this structure is presented. In a subsequent article some aspects of the structure will be discussed in more detail. In a final contribution possible solutions to overcome the present problems will be suggested.

## 1. INTRODUCTION

To understand more clearly the marketing of vegetables in Surinam a general description is provided of the production of these commodities.
The vegetable producing areas are found within a radius of 50 kilometers around the capital Paramaribo (see fig. 1). This city and its surroundings, inhabiting more than half of the total population, is situated in the wet coastal area. Vegetable production is therefore restricted to the higher places such as the sandy ridges, with or without shells, the well-drained, mostly sandy soils or to polders, where drainage can be expected to be good. The growers are full-timers or part-timers.
The most important production area is situated West of Paramaribo and comprises the flanks of the ridges on which one of the main roads („Garnizoenspad") lies that leaves the capital going westwards (fig. 1). Nearly all farmers here are full-timers, especially if in combination with animal husbandry. They sometimes grow more than two hectares of vegetables (mostly cabbage, tomatoes, French beans, egg-plant and, often as an intercrop, Chinese cabbage). Mostly rather old farmers of Javanese origin live on the poorer sandy soils along the East West Connecting Road (see fig. 1); they are small scalers and full timers. As the farmers from Lelydorp, also full timers, they grow yard long beans, French beans and cassava. On the clay soils of the Uitkijk polder yautia, a rather water-resistant plant, is the most important cultivated vegetable. In the remaining areas a mixture is found of all in Surinam cultivated vegetables. In the district of Saramacca also groundnuts are being grown.

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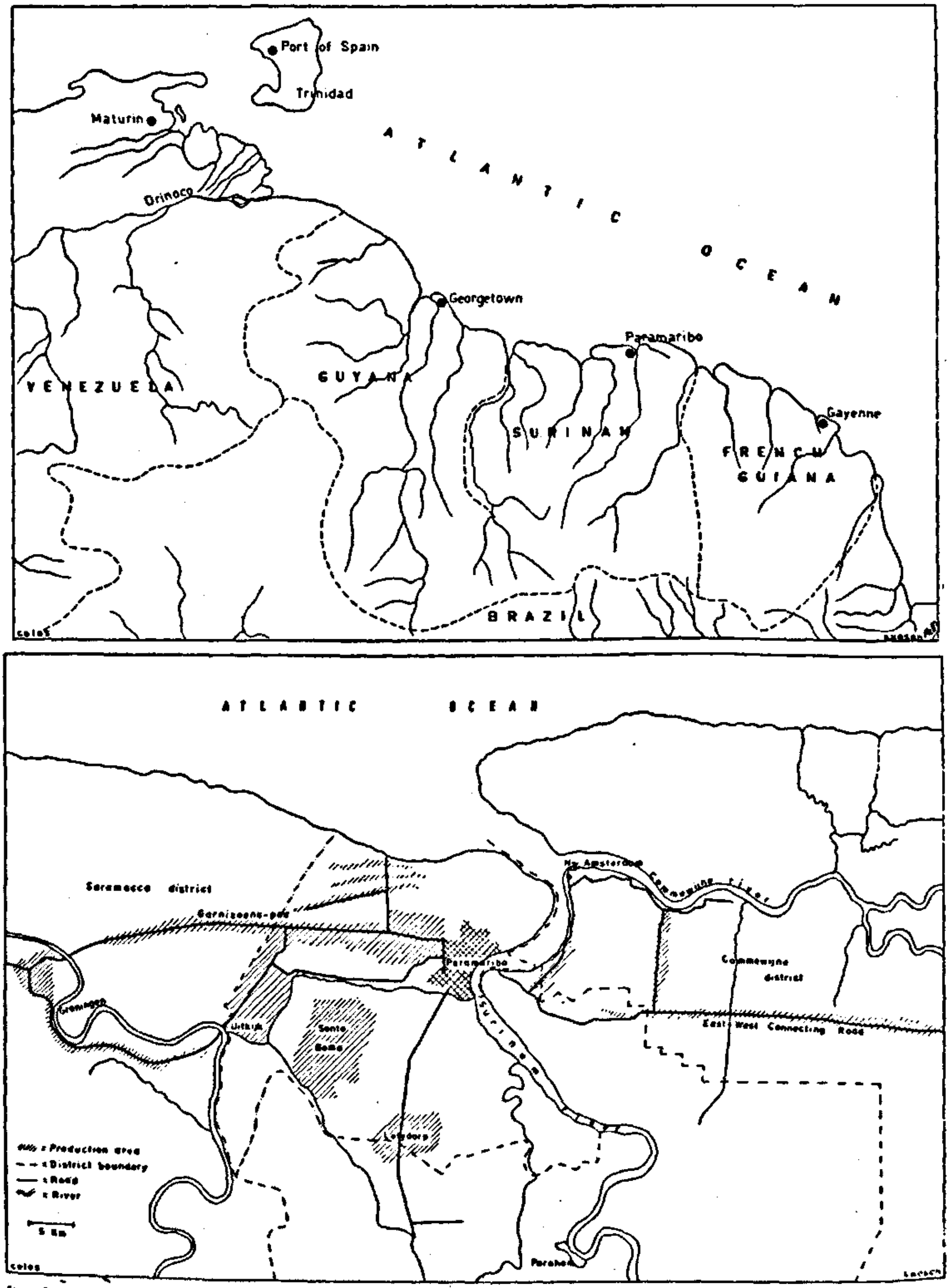
Port of Spain
Trinidad
Maturin
Orinoco
ATLANTIC OCEAN
Georgetown
Paramaribo
Cayenne
VENEZUELA
GUYANA
SURINAM
FRENCH GUIANA
BRAZIL
ATLANTIC OCEAN
Saramacca district
Garnizoens-pad
Nw Amsterdam
Commewijne river
Paramaribo
Commewijne district
East-West Connecting Road
Uitkijk
Santo Boma
Lelydorp
Suriname
Paranam
= Production area
= District boundary
= Road
= River
5 Km
fig. 1

The vegetables are grown with varying results.
Nearly every farmer uses fertilizers and insecticides. Apart from ploughing, which is mostly done by contractors, there is little mechanization. Last year, however, some two-wheel tractors have been introduced. Nevertheless most activities are still being done by hand.
Apart from the earlier mentioned vegetables other commodities produced are cucumber, okra, hot and sweet pepper, pumpkin, squash, celery, lettuce, bitter cucumber and Ceylon spinach. The most important vegetables are listed in table 1. Pulses such as pigeon pea and cowpea, and root crops like sweet potato, cassava, yam and dasheen are also being grown. Besides, some wild plants that are used as vegetables are collected and sold.

*Table 1*

MOST IMPORTANT VEGETABLES IN SURINAM

| **Common name** | **Botanical name** |
|---|---|
| Bitter cucumber | Momordica charantia |
| Bitter greens | Cestrum latifolium |
| Black nightshade | Solanum nigrum |
| Cabbage | Brassica oleracea |
| Calaloo (Amaranth) | Amaranthus spp. |
| Cayenne (hot)pepper | Capsicum frutescens |
| Celery | Apium graveolens |
| Ceylon spinach | Basella rubra |
| Chinese cabbage | Brassica chinensis |
| Chinese (Indian) mustard | Brassica juncea |
| Cowpea (pods) | Vigna unguiculata |
| Cucumber | Cucumis sativus |
| Egg-plant | Solanum melongena |
| French bean | Phaseolus vulgaris |
| Lettuce | Lactuca sativa |
| Okra | Hibiscus esculentus |
| Parsley | Petroselinum crispum |
| Pumpkin | Cucurbita spp. |
| Purslane | Portulaca oleracea |
| Shallot | Allium ascalonicum |
| Swamp cabbage | Ipomoea reptans |
| Sweet pepper | Capsicum annuum |
| Tomato | Lycopersicon esculentum |
| Yard long bean | Vigna unguiculata var. sesquipedalis |
| Yautia (leaves) | Xanthosoma sagittifolium |

## 2. STANDARDIZING AND GRADING

These two very closely related activities, both of the so called physical handling functions, only exist in rudimentary form.

As for Surinam this marketing function may be observed at three levels.

*Table 2*

WHOLESALE UNITS AND THEIR WEIGHTS

| Common name | Wholesale unit | Weight in kg for different qualities * | | |
|---|---|---|---|---|
| | | low | medium | high |
| Bitter cucumber | crate | 16—20 | 14—18 | 12—16 |
| Bitter greens | bundle | | 3—5 | |
| Black nightshade | bundle | | 3—7 | |
| Cabbage | kg | | — | |
| Calaloo | bundle | | 4—8 | |
| Cayenne pepper | crate | 14—16 | 12—14 | 11—13 |
| Celery | bundle | | 0.3—0.5 | |
| Ceylon spinach | basket | | 5—7 | |
| Chinese cabbage | bundle | | 4—8 | |
| Chinese mustard | bundle | | 3—5 | |
| Cowpea (pods) | bundle | | — | |
| Cucumber | sack of 100 pieces | 20—40 | 30—50 | 50—70 |
| Egg-plant | sack | 40—46 | 36—44 | 30—36 |
| French bean | kg | | — | |
| Lettuce | basket | | — | |
| Okra | 100 pieces | | — | |
| Parsley | bundle | | — | |
| Pumpkin | sack | | 60—70 | |
| Purslane | bundle | | 5—7 | |
| Shallot | bundle | | 0.4—0.8 | |
| Swamp cabbage | bundle | | 4—6 | |
| Sweet peper | crate | | — | |
| Tomato | box | 4—5 | 4—6 | 5—7 |
| Tomato (green) | crate | | 25—30 | |
| Yard long bean | bundle | | 2—4 | |
| Yautia (leaves) | bundle | | 3—5 | |

* With vegetables like bitter cucumber, pepper and tomatoes the general rule is: the smaller the size the lower the quality. However, quality is not clearly defined, hence the large variations within and the overlapping of quality classes.

1) Farmers' level.
   Here only traditional units are used. The products may be sold in this form as far as the retailer (for weights etc. see table 2).
2) Wholesalers' level.
   At this level sorting and grading only take place if necessary for so-called contract delivery. This is done almost exclusively for export.
3) Retailers' level.
   Some products are sorted and graded by the retailers themselves, although also traditional units are used.

Only cabbage and French beans are sold by weight, all other vegetables being offered in little heaps, bundles or bunches, which of course vary much, not only in weight, but also in quality, especially between retailers. Yard long beans and some leaf vegetables are sold by the bundle, vegetables like egg-plants, bitter cucumbers and peppers by the crate. Tomatoes are handled in two packing forms: crates for green tomatoes, boxes of various sizes for ripe ones. Vegetables such as Ceylon spinach, lettuce and celery are sold in baskets of various dimensions (see table 2).

Because farmers and wholesalers do not assort and grade for the local market it is very difficult for the wholesaler and the retailer to buy a parcel of a uniform quality. Moreover, the farmer always packs in such a way that the part to be seen is of first quality. For instance, tomatoes are packed in two-layer boxes showing the best quality in the top layer. Packing in this way necessarily slows down the marketing of the products.

## 3. ASSEMBLING AND TRANSPORTING

### 3.1 Assembling

Assembling is defined as the gathering of the products at the Central Market in Paramaribo.

Paramaribo and its surroundings are provided with vegetables from the producing areas mentioned before (see fig. 1). Little is transported to other, smaller consumer centres elsewhere in the country (e.g. Paranam).

At the Central Market there is a special section for the wholesale trade which officially is open from about 2.00 — 8.00 a.m. Recently, the wholesale section is also used for retailtrade.

Nearly all products are brought to this market. The transport to the market is taken care of by transporters, buyers-up or farmers. They use trucks, pick-ups, so-called wild busses, delivery vans and autobikes. Final supply and demand come together at this market.

About the transport to the Central Market it should be noted that some years ago the Ministry of Economic Affairs started a 'Buying and Selling Service'. This was done to enable the distant farmers to dispose of their products against reasonable prices. As a result of irregular deliveries from the farmers

and of imperfect organization, this service at the moment is of little practical importance.
As regards the cost of transportation, as a rule rates depend on the distance to the market.

### 3.2 Transporting

With transporting is meant the transport from the Central Market to retailers and large scale consumers. Special provisions are absent, because most of the consumers live within a reasonable distance from the market and the majority of the retailers are in the market building or its neighbourhood. In most cases the retailer takes care of his own transport; he uses either hand-cart, delivery van, bicycle or porter. Occasionally wholesalers transport from the Central Market to the large scale consumers; generally this is part of the delivery contract.
A few times per week vegetables are shipped to West Surinam. To other consumption areas, like Paranam, transport is done by truck.

## 4. BUYING AND SELLING

At the Central Market, where growers, wholesalers and retailers come together, one can meet all possible kinds of traders.
The results of a recent investigation suggest the following classification.

1) The commission-agent/buyer-up, retailer and exporter. He is a trader who collects products as a commission-agent (commission: 5—7.5% of wholesale price), buys from his own as a buyer-up against wholesale price and sells for instance to a retailer. The total profit is for this buyer-up.
   So in this person several kinds of trader are combined. For the farmer it is difficult to check the price the commission-agent receives.
2) The commission-agent, buyer-up, retailer and exporter. This trader keeps the various types of transactions separate. For instance he is not selling as a commission-agent to himself as a buyer-up.
3) Buyer-up and exporter.
   He is a large scale buyer and a large scale seller.
4) The buyer-up and retailer.
   Het is a large scale buyer and seller, but at the same time he is a retailer.
5) The farmer, buyer-up and retailer.
   He takes his products to the Central Market, is a large scale buyer and seller, and a retailer at the same time. He generally visits the market daily.
6) Farmer and retailer.
   He takes his products to the Central Market, is a large scale seller, and a retailer. He visits the market only a few times per week.

MARKETING VEGETABLES IN SURINAM

FARM, WHOLESALE AND CONSUMER PRICES OF YARD LONG BEAN

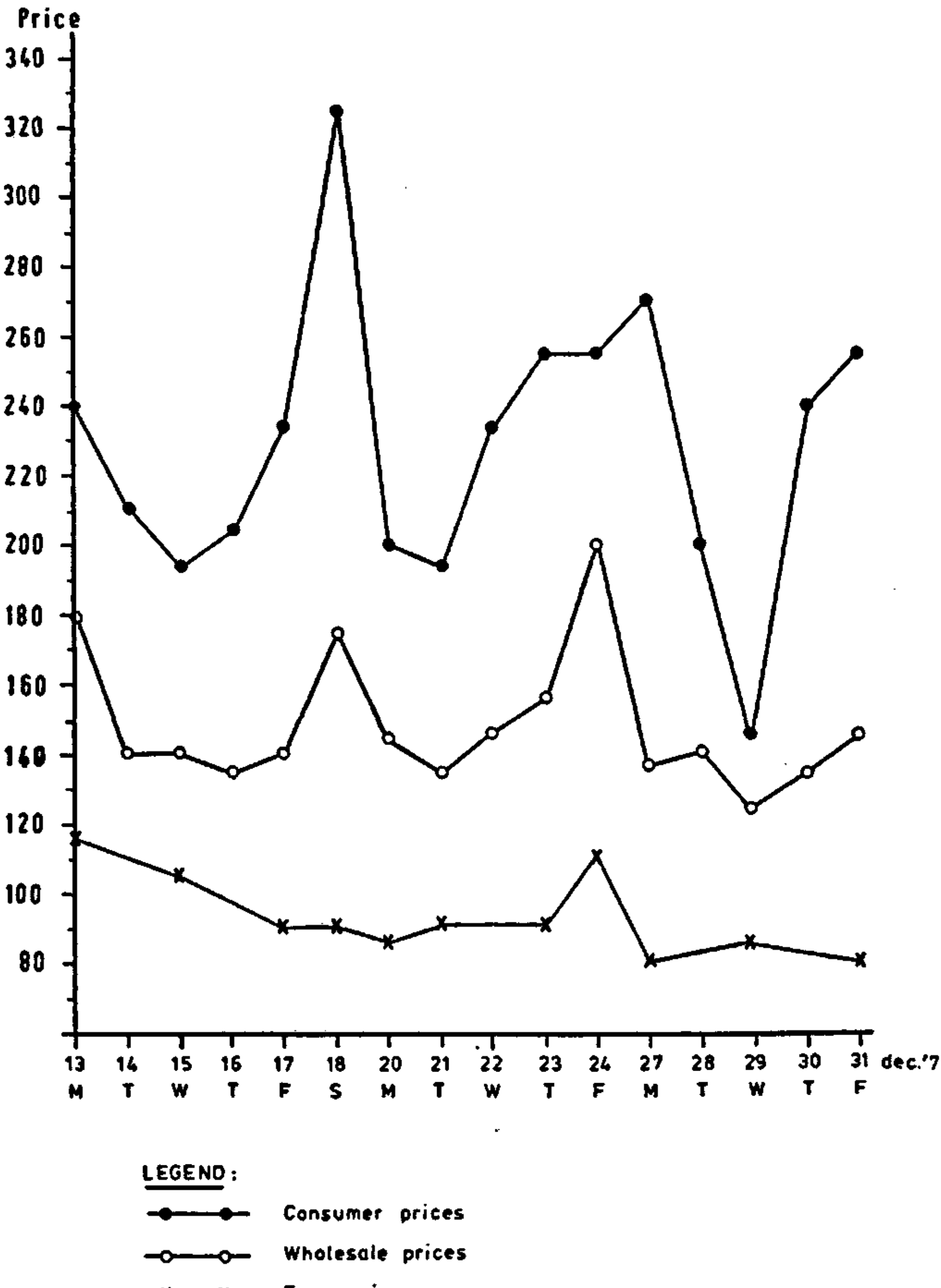


fig. 2

7) Farmer and buyer-up.
   He is a large scale buyer and seller and occasionally visits the market.
8) Farmer.
   He is a large scale seller. He only sells on a large scale because he wants to return to his farm as quickly as possible.

A few commission-agents have a very dominating position. This is possible because some of the largest commission-agents (about 5) are more or less specialized, dealing only in a few products (sometimes 1). All other products they receive or gather go to other product-specialists who are also commission-agents. Of course it is not possible to check the prices these middlemen arrange.

With this system, supply and demand of one product are in the hands of one or a few middlemen. Hence it is clear that free determination of prices is completely absent.

As mentioned before, wholesale hours are officially from about 2.00 — 8.00 a.m. Because there is hardly any control on the observance of the market rules, it is possible that the wholesalers can retail their products in the wholesale section.

This is very attractive for the wholesalers because of the fairly high profit percentages the retailer makes, a fact explained by the very low turnover of the retailer. For the wholesaler the profit percentage is higher when he sells own stock, even when he sells at retail prices lower than those of the actual retailer.

There are two marketing co-operatives, the larger of which already exists several years; the second, smaller one is only a few months old. However, because of lack of proper management these co-operatives do not operate successfully.

## 5. PRICES AND PRICE FLUCTUATIONS

### 5.1. Consumer prices and their fluctuations

As mentioned before, the profit percentages of the retailers are fairly high. Depending on wholesale prices and products these percentages vary from 50-125. Generally the relative fluctuations in consumer prices are not as sharp as those in wholesale and farmer prices. This is caused by the stocks of the retailers, and the „profit motive". When wholesale prices fall, the retailer will not immediately lower his prices.

There are marked fluctuations during the week. On Mondays prices are fairly high. They drop during the following days and are very high on Saturdays (see fig. 2).

On Saturdays and at days before a holiday when the market is open till 6.00 p.m., it is possible that in the afternoon consumer prices drop considerably, especially for leaf vegetables.

### 5.2. Wholesale prices and their fluctuations

As already stated free determination of prices is almost absent. Owing to many years of experience some commission-agents know the market situation very well. During wholesale hours as soon as all middlemen have had contact about the supply expected, the prices are fixed. They are fixed as high as possible. Retailers take the products without knowing the prices. They are informed about them later during the day.

Fluctuations in the wholesale prices occur during the day, and from day to day.

Fluctuations during the day mostly concern a drop in prices. This happens particularly when the expected supply exceeds demand. Storing the product may not give an extra profit, because next day wholesale prices might even be lower.

Prices fluctuations from day to day are the result of sharp variations in supply, the cause of which may be prolonged or heavy rainfall.

At this point it may be noted that the middleman advises the farmer on matters like time of harvesting and consequently on marketing his products.

### 5.3. Farm prices and their fluctuations

In contrast with consumer and wholesale prices farm prices are fairly constant. If fluctuations occur, they are usually very sharp as a result of seasons or extremely bad weather conditions.

## 6. STORING

At the Central Market there are cold-storage facilities, which generally are used for about 80%. When there is much supply and prices are low, not much use is made of these facilities, since the user has to pay fixed rates which then means a higher percentage of the price.

## 7. FINANCING

The general situation is as follows. The commission-agent collects the products at the Central Market and normally pays the farmer once a week, i.e. on Saturday. The farmer comes to the market to receive the money. So in fact he gives credit to the middleman. However, it cannot be concluded that the farmer is financing the trade in vegetables: this settling of accounts once a week is done merely for practical reasons.

In some cases the middleman gives the farmer short term credit, lent on the security of the vegetables he then is obliged to deliver. Often one can rightly state that the middleman finances the retail trade. The retailer buys early in the morning paying later that day from his earnings; sometimes he even pays the next day.

This system exists because of the following:

1) For profit reasons of the retailer.

When turnovers are low, he can try to lower his buying prices as yet.

2) In the early morning the middleman is busy, and does not have time to settle accounts.
3) In view of the activity of pickpockets at the market, the trader does prefer not to carry money along.

## 8. RISKS

Only the persons who own the products are running risks, e.g. buyer-up and retailer. However, since they are the people that normally fix the prices (see 5.1 and 5.2) the risks are not as great as is generally pretended.

A fact is that the commission-agent passes a possible price fall on to the farmer, though this may not be complete, because he does not like to lose the little confidence he enjoys.

## 9. MARKET INFORMATION

Any form of information on wholesale prices to the farmer is absent. It is therefore impossible for the farmer to check whether he received the current wholesale prices for his products.

Since farmers are not organized this situation, though very unsatisfactory, is not likely to change in the near future.

## 10. DISTRIBUTION

Most of the Central Market vegetables are sold at this market by retailers. There is a second market place in Paramaribo, which is not very important though. Apart from this, vegetables are also being sold in little vegetable shops, along the streets, particularly in the vicinity of the Central Market, and in some supermarkets. All these places are supplied with vegetables from the Central Market.

Large scale consumers like hospitals buy directly from the wholesalers. Generally this concerns contract deliveries.

## 11. PROCESSING

Except for the salting of Chinese cabbage there is no processing of vegetables. One of the reasons of this is that for an economically sound industry a minimum quantity cannot be guaranteed.

In the past some investigations were carried out to make tomato ketchup, chilly sauce and sauerkraut, but these never left the experimental stage.

## 12. EXPORTS

Surinam is exporting small quantities of vegetables, particularly for Surinam people abroad. Regular exports take place to the Netherlands and French Guiana (Cayenne), whereas sometimes certain quantities go to the Netherlands Antilles.

# MARKETING VEGETABLES IN SURINAM (II)

C.B. Houtman and G.W. Cellarius *

**Summary**

To continue a former article (HOUTMAN and CELLARIUS, 1972) the price structure is discussed in more detail. Next, turnovers and margins of wholesalers and retailers are treated. From these data and from other sources estimations are made of the value of the vegetables marketed at the Central Market on a normal day. Finally, attention is paid to the total lack of market information and its repercussions on the marketing structure in Surinam.

## The price structure

*Consumers' prices (C.P.)*

The Departments of Agriculture, Animal Husbandry and Fisheries, and of Economic Affairs collected consumers' prices of vegetables daily. Originally these prices were thought to suit our purpose. However, a comparison of our own observations with the official figures showed such differences that for some vegetables the latter could not be used without correction. Generally, the easier prices can be collected, the more reliable they are. French beans and cabbages for instance are sold by weight and prices are shown on tags. It is also rather simple to collect prices of products sold by heaps of fixed prices of 25 or 50 cents. This occurs with vegetables as e.g. egg-plant, pepper, and okra. However, if the price of the product depends on bargaining it is more difficult to get good information. This occurs with vegetables sold by bundles of different sizes and forms. Only careful observation of the transactions can provide reliable prices.

*Wholesale prices*

For vegetables the line from producer to consumer often is the following: producer — commission agent — wholesale agent — retailer — consumer. At each step a price is formed. To collect price margins in a satisfactory way, all parties should be interviewed. Collecting prices is more difficult if different steps are taken by the same person. This situation exists at the Surinam vegetable market at he wholesale level. It was found that in most cases the commission agent was also a wholesaler. These practices were revealed because the prices paid by the retailer to the commission agent appeared to be dissi-

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milar from the prices on which the commission was charged to the farmer. To get a better idea of this situation, besides the retailers also the commission agents and wholesale agents were interviewd about the prices, at which they sold and purchased respectively (P.R.C.). In a normal situation these prices

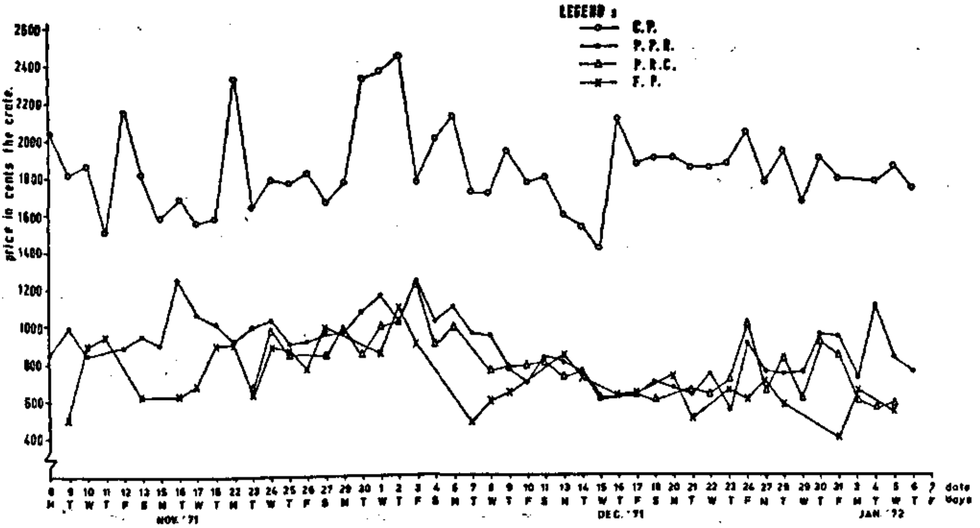


Fig. 1 The pattern of the pepper price (Nov. — Jan.)

should be equal to the gross farm prices (F.P.). Fig. 1 illustrates the last mentioned situation. A possible conclusion is that the wholesale trade in pepper is a rather fair trade, which seems to be true. The opposite situation, the more usual one in Surinam, is shown in fig. 2. A gap exists between the farmer

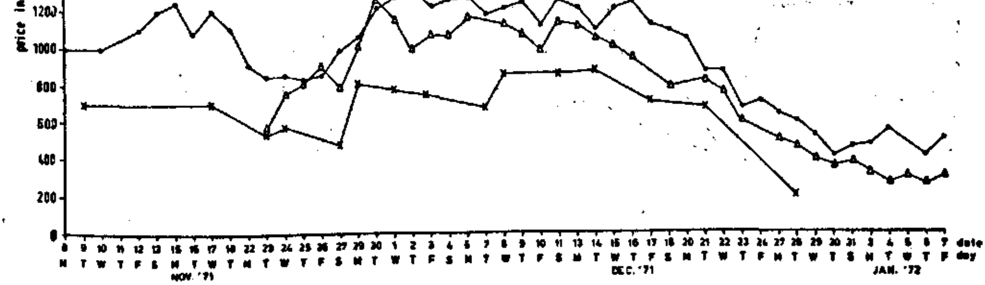


Fig. 2 The pattern of the egg-plant price (Nov. — Jan.)

price (F.P.) and the P.R.C., due to the practices of the wholesalers. It even occurs that a commission agent selling against a certain price to a wholesaler settles accounts against lower prices than he actually made. The difference between the price paid by the retailer (P.P.R.) and the buying price of the wholesaler (P.R.C.) can be called the wholesale margin. The small margin in the case of pepper is explained by most of this trade being done by one commission agent, who trades in a rather fair way indeed.

## Turnovers and margins

### *Retail turnovers and margins*

About 60 retailers, out of a total of 550, were interviewed about quantities of vegetables they bought and prices they paid. At the same time the number of absent and non-buying retailers was registered. The results of this registration can be found in fig. 3. It shows a weekly cycle with maximum buying activity on Saturdays or days prior to holidays and with lowest activity on Wednesdays.

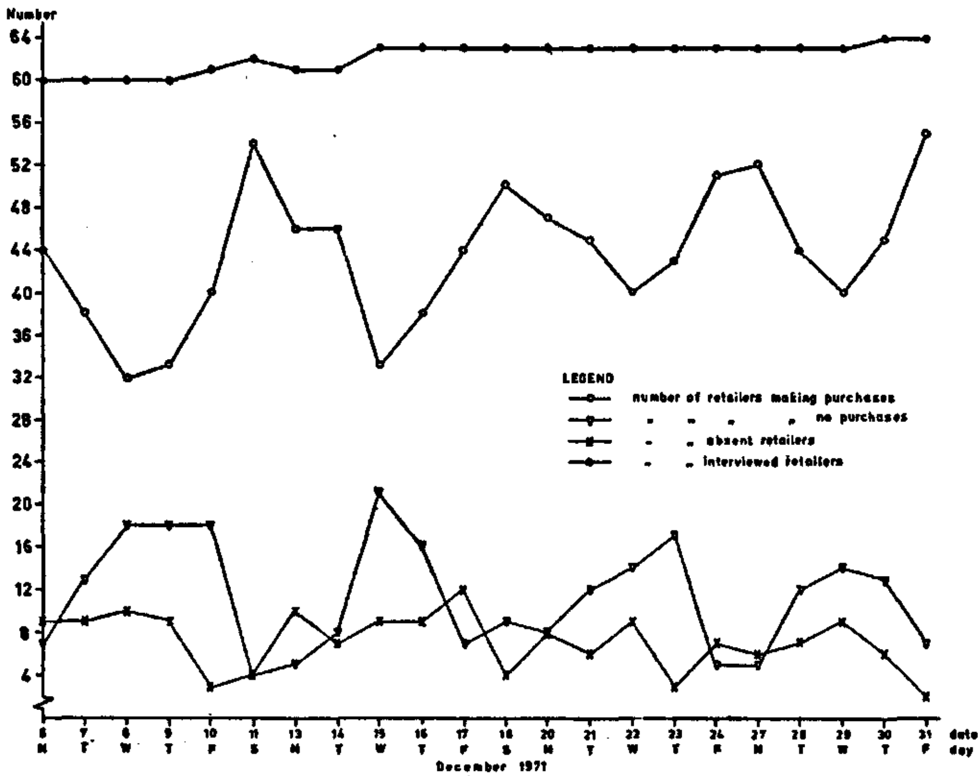


Fig. 3 Pattern of retailers' purchases at the Central Market

From the quantities bought and the prices paid the average amount purchased per buying day was calculated for each retailer. The frequency distribution of these average amounts is given in fig. 4. (The terms "buying day" and "selling day" are used for the days the retailer actually buys or sells. These terms are thus dissimilar from „market days").

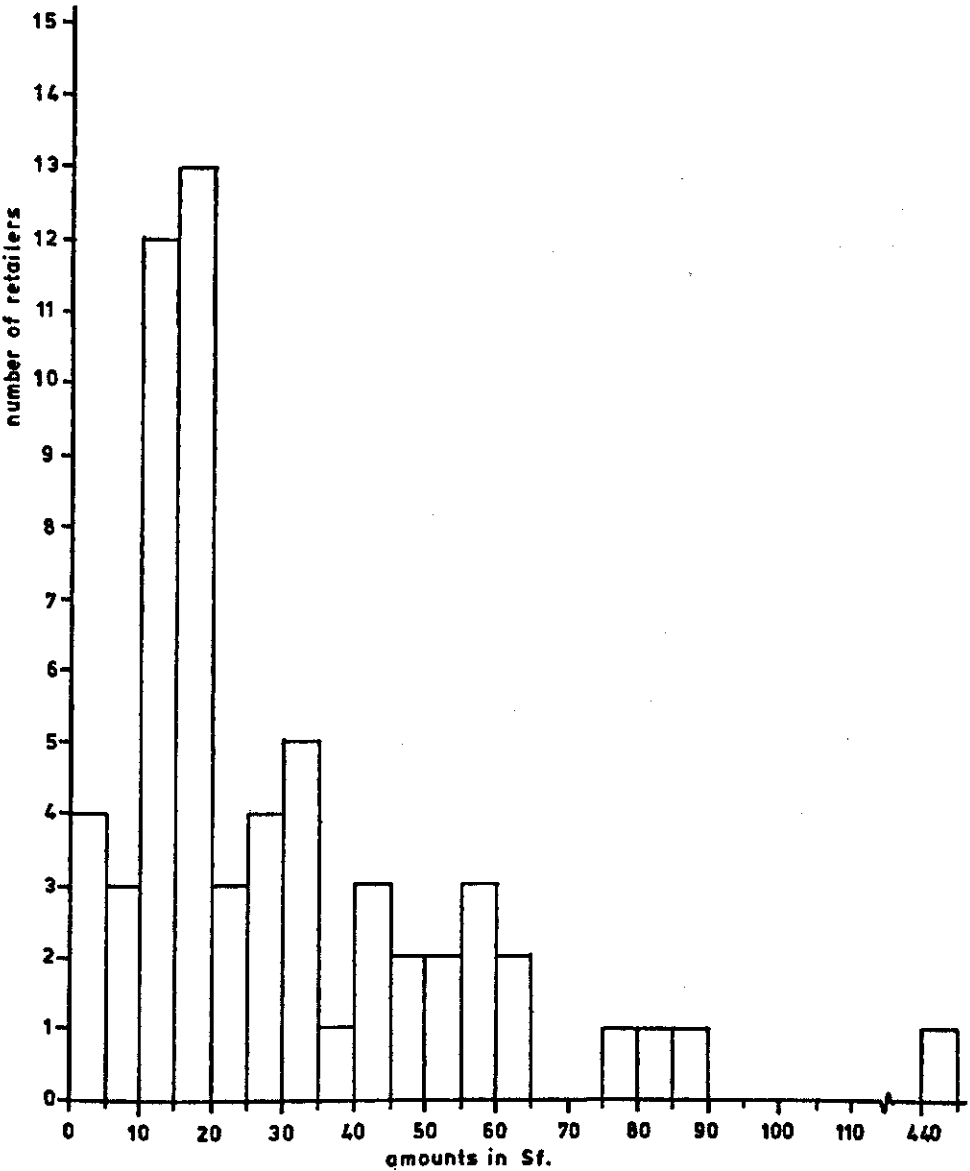


Fig. 4 Frequency distribution of the average amounts of vegetables purchased by the interviewed retailers per buying day

We already explained how consumer prices were obtained. From consumer prices and prices paid by the retailers a rough estimate of the margin can be obtained. It appeared to be necessary to check these figures. This was done by multiplying the number of heaps from one box with the price per heap, thus obtaining the sales prices of the whole box. The margin is the difference between the purchase and the sales price, expressed as a percentage of the purchase price.

Margins were found to be 100% or more for the following vegetables: egg plant, okra, pepper, celery, parsley, swamp cabbage, black nightshade and tomato. The remaining vegetables appeared to have a margin of about 75%.

Fig. 4 shows that high turnovers are made, so even taking into account a 20—30% absenteeism or non-buying high incomes are possible. At the same time it should be emphasized that especially the retailers with high turnovers are nearly all "every-day-buyers", while absenteeism and non-buying occur most frequently in the group of retailers with low turnovers. Without such high margins retailers with low turnovers per selling day would not be able to earn a living from their trade, the more so because for this group absenteeism is high.

*Wholesale turnovers and margins*

The practices of the most important group of wholesalers, the commission agent/wholesaler, has been described earlier (HOUTMAN and CELLARIUS, 1972, there "commission agent/wholesaler" was written as commission-agent/buyer-up). The margins vary for the different vegetables as well as within the commodity itself. This depends strongly on the number of transactions between the commission agents and the wholesalers before the products reach the retailer. It was found that absolute earnings for individual wholesalers can be high due to their great turnovers, but not because of the great margins.

To give an example we may take a commission agent selling 500 boxes of tomatoes one day at f. 4.— a box, which means a turnover of f. 2,000.—. He earns 5% commission, i.e. f. 100.—. He sells the tomatoes to a wholesaler (who can be another person or himself). This wholesaler sells to the retailer at f. 4.50 a box. So the earnings at this stage are f. 250.— or 12.5%. The total wholesale margin is thus 17.5%. Such figures are high, yet not exceptionally high.

The absolute earnings for the wholesaler can be rather high, especially if the commission agent and the wholesaler are the same person, which is the normal situation. The earnings become very high if the commission agent/wholesaler also acts as a retailer. The total margin then also includes the retail margin, although in this case the latter often is a little lower than the margin of the pure retailer.

Since both big and small wholesalers operate at the Central Market accurate individual turnovers cannot be given, but in the next section the overall daily wholesale turnovers are estimated.

From the foregoing the conclusion can be drawn that the number of retailers is too high, resulting in excessive margins and hence in too high consumer prices. Primarily the practices of the retailers and not those of the wholesalers cause the high consumer prices of vegetables.

## Estimates of the value of the vegetables marketed at the Central market on a normal day

*Estimate based on a budget study in 1968/69*

The "Stichting Planbureau Suriname" (ANON., 1970) has published the results of a household budget study carried out during 1968/69. The monthly consumption of locally produced fresh vegetables amounted to f. 10.25 per household. Although this amount may not be completely representative because this study only applied to 60—65% of the households, i.e. 80% of the population of the investigated area (Paramaribo and surroundings), it will be used here. However, a correction for changes in prices is necessary. The basic amount changes from f. 10.25 to f. 11.28 because index figures of prices calculated by the „Algemeen Bureau voor de Statistiek" indicated a correction of 10% to be reasonable. The total number of households in the area was approximately 40,650 in 1971, according to figures from the 1964 Census and assuming a growth rate of 4%. The value of the fresh vegetable consumption then amounts to 40,650 x f. 11.28 or f. 458,532.— a month.

If Saturdays are considered as two normal days because of the high turnovers, the total amount should be divided by 30 to obtain a daily value of f. 15,284.— at consumer prices. Using a retail margin between 75 and 100% this value at wholesale prices is about f. 8,250.—. A correction has to be applied because vegetables like bitter greens, purslane, spinach, „antroewa" (a bitter species of the egg-plant), lettuce, okra, celery, parsley, some types of chinese cabbage, black nightshade and shallot have been omitted in the budget study. These vegetables appeared to amount 16—20% of the turnovers of the retailers, so a correction of 20—25% results in approximately f. 10,200.— at wholesale prices. From data on exports and vegetable transports to other districts it was considered reasonable to estimate the consumption of vegetables outside the Paramaribo area, yet marketed at the Central Market, between f. 2,000.— and f. 2,500.—. The value of all vegetables marketed at the Central Market on a normal day is thus estimated to be f. 12.500.— at wholesale prices. This amount is rather low, because the high income classes were not included in the "budget study".

*Estimate based on the turnovers of the interviewed retailers*
A second estimation can be made from the data of the interviewed retailers, viz. quantities bought, prices paid, absenteeism and the buying pattern.
The number of vegetable selling retailers is about 450 inside and, on normal days, about 100 outside the market hall. On Saturdays these 100 can increase to about 500. For further calculations a number of 550 retailers was used. The buying pattern shows that 20—30% of the retailers are absent or do not buy. Therefore the number of retailers needs correction. A 20% correction was applied, as in particular the retailers with low turnovers are often absent or do not buy. This results in a number of 440 (active) retailers.
From the above turnover data an average buying amount of f. 37.— per buying day per buying retailer was found. However, a correction has to be made because on Saturdays turnovers are twice as high as on normal days. A number of five buying days a week was found as a weighed average so the number of „normal" buying days amounts to six; the amount of f. 37.— thus decreases to f. 30.— for a normal buying day. Multiplying this f. 30.— per retailer with the above mentioned 440 retailers makes a total amount of f. 13,200.—. Adding about f. 2,300.— for consumption outside the area considered, the total value at wholesale prices equals f. 15,500.—.

*Table 1 Estimate of wholesalers' supply of vegetables on a normal day based on prices paid by retailers*

| quantity | unit | vegetables | unit price | total price | |
|---|---|---|---|---|---|
| 70 | sacks | egg plant | 6.40 | Sf. | 450.— |
| 40 | crates | bitter cucumber | 6.50 | „ | 260.— |
| 40 | crates | egg-plant | 5.40 | „ | 220.— |
| 700 | bundles | yard long bean | 1.40 | „ | 980.— |
| 400 | bundles | chinese cabbage | 1.40 | „ | 560.— |
| 50 | crates | pepper | 7.55 | „ | 380.— |
| 1500 | kg | French beans | 0.50 | „ | 750.— |
| 1000 | kg | cabbage | 1.20 | „ | 1,200.— |
| 200 | boxes | tomatoes | 10.50 | „ | 2,100.— |
| 60 | bundles | shallots | 2.50 | „ | 150.— |
| 100 | bundles | celery | 1.60 | „ | 160.— |
| 75 | bundles | chinese cabbage | 1.35 | „ | 100.— |
| 10,000 | pieces | cucumbers | 7.50/100 | „ | 750.— |
| 10,000 | pieces | okra | 2.35/100 | „ | 235.— |
| 200 | bundles | yautia leaves | 1.30 | „ | 260.— |
| 5000 | bunches | yautia leaves | 0.04 | „ | 200.— |
| 10 | sacks | pumpkin | 10.00 | „ | 100.— |
| | | | | Sf. | 8.855.— |

*Estimate based on statements by wholesalers*
On a normal day wholesalers was asked to estimate the total quantity of the different vegetables they delivered at the Central Market. The average of their estimates is presented in table 1.
Only the vegetables important at that time have been listed. The amount of all vegetables should be a little higher, say about f. 9.000,— of which approximately f. 7.000,— is sold to the retailer, the remaining f. 2.000.— being consumed elsewhere. From the data of the "retailer study" it was concluded that about half the quantity of the vegetables is bought from wholesalers and the second half from farmers (see also: CELLARIUS, 1972). This implies that approximately f. 7.000,— should be added. So the total value estimated this way equals about f. 16.000,—.

From the three estimates it can be concluded that the value of the vegetables marketed on a normal day lies between f. 13.000,— and f. 16.000,— at wholesale prices. On Saturdays or days before holidays this amount is twice as high as on normal days.

## Market information

One of the most important causes of the existing marketing situation is the total lack of information for consumers as well as for producers.
The consumer is not "price-conscious". To be so, however, would be very difficult for him since no information on prices is given and a comparison of prices is nearly impossible because of the many differences in quality and forms in which the vegetables are sold. There is no uniformity in weight and measures (except for cabbage and French beans), and there are no standardized grades and classes.
The same situation holds for the producer. Moreover, each information on supplies and demand is lacking, so that a production plan directed to the demand can neither be drawn up on short term nor on the long run.
In the Report on the FAO Technical Conference on Agricultural Marketing Information Services in Latin America, held in Lima, Peru, (FAO, 1970), some obstacles in establishing efficient market information services in Latin America were mentioned:

1. Lack of demand for market information since potential users are not yet able to appreciate accurate information fully, even if it did exist. For the same reason, some governments are not sufficiently interested in the development of a market information service since it may not produce immediate and spectacular results;
2. As a consequence of the lack of full appreciation of the market information service, insufficient funds are allocated to finance the service; or funds are spread over a number of different agencies, with insufficiently

coordinated activities, with the result that the information collected and distributed by each agency is inadequate.
3. Lack of trained personnel in Latin America able to establish and operate an efficient market information service.
4. Lack of uniform weights and measures and of standardized grades and classes resulting in lack of precision of market data and their comparability.

These obstacles are also more or less applicable to the Surinam situation. However, knowledge of these possible obstacles is useful in case a market information service would be founded in Surinam.

The Conference distinguished between the following types of market information:

1. Daily and weekly information.
2. Short-term or annual market information.
3. Medium and long-term market outlook.

The daily and weekly information, concerning "information on supplies, demand and prices covering the present situation with a forecast for the next, or next few, weeks", is important on consumer as well as on producer level. In both cases the bargaining position will be improved.

The short-term outlook, concerning "information covering mainly the future trends of supply, demand and prices during a period...... depending upon the production cycle of the commodities......", is particularly important to enable the producer to make, and the Extension Service to assist in making a good farm plan.

The medium and long-term outlook, concerning „information covering a future period between one and eight years, or more than eight years, respectively", provides the basis for more drastic decisions, e.g. in the field of changes in production, marketing and investments.

The reason why we stressed the need for this information is that in our opinion any plan to improve the marketing structure of vegetables, or even the whole agricultural marketing structure in Surinam, can only succeed if market information is improved at all levels.

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