

PROCESSING, GRADING, STORAGE AND MARKETING OF ARECANUT—A SAMPLE STUDY

By

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Introduction

INDIA is the largest producer of arecanut in the world, with 1.83 lakh hectares of area and employing about 4 million persons in its production, processing and marketing. Until recently, India used to import a large quantity of arecanut. Such imports amounted to Rs. 26 crores during the period 1951-60. However, exports of arecanut from India commenced during the second plan itself and by 1978-79, total exports amounted to 580 tonnes valued at Rs. 79 lakhs, accounting for 0.013% of the total export earnings of the country. Marketing of arecanut in India, however, suffers from a number of imperfections. The need to conduct micro-studies in various aspects of marketing of arecanut in India, therefore, need not be over-emphasized. The present study is an attempt in this direction.

Objectives

Objectives of the present study are to analyse the processing, grading, storage, transport, methods of sale, marketing channels and the price spread for arecanut for the sample farmers in Jalpaiguri district of West Bengal.

Materials and Methods

The study is based on the data collected from a stratified random sample of 190 arecanut growers—50 small (2 hectares and below), 67 medium (above 2 hectares to 4 hectares) and 73 large (above 4 hectares)—selected from 37 Panchayats of 7 Blocks in Jalpaiguri district. Data were collected by survey method for a period of 2 years. 1978-79 and 1979-80.

RESULTS AND DISCUSSION

Processing of Arecanut

Arecanut is harvested in the district mainly in the months from April to July. After harvesting, processing of arecanut is done in 5 different ways.

1. Falla, Supari (Split nut)

In this method well ripened nuts are harvested and split into two halves by chopper (Dao) or cutter and spread in the sun for one day. Then husk is removed by hand or by means of knife. After dehusking, kernels are spread in the sun partially for 2-3 days and fully for 7-10 days, after which dried kernels are obtained. About 75 per cent of the arecanut produce is processed by this method by the arecanut growers themselves or by village traders.

2. Gota Supari (Whole nut)

In this method fully ripe nuts are harvested and spread in the sun, preferably on pucca floor or roof for 20-25 days depending upon the intensity of sunlight. When nuts are fully dried, husk is removed and the dried nuts are obtained. Such whole dried nuts fetch better price than the split nut. About 10 per cent of the arecanut produced is processed by this method.

3. Chikni Supari (Under-ripe boiled nuts)

In this method unripe nuts (nearly 3 months in advance of ripening stage) are harvested and boiled in water. After boiling they are dehusked and dried in the sun for about 15-20 days. About 5 per cent of the arecanut produce in the district is processed by this method.

4. Maja Supari (Pit cured nuts)

In this method the pit is dug in the shape of close-necked vessel with about 1.5 m depth, 1.5 m diameter in the middle and bottom and 75 cm to 1 metre diameter at the top. Normally 18-20 thousands nuts are accommodated in a pit of the above size. The well ripened nuts are harvested and undersized (small) and diseased nuts are separated before putting the nuts in the pit. Finally such selected nuts are dumped in the pits. Care is taken to cover the nuts by arecanut leaf sheaths

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from bottom to top and all sided so that they do not come in direct contact with the soil (inner surface of pit). After about every 30 cms layer of nuts turmeric powder is spread for giving attractive colour to the nuts. Some times unripe mangoes are also put in the pits. When the pit is fully packed with nuts arecanut leaf sheaths are placed above and the pit is closed with soil cover which is compacted so as to prevent rain water from entering in the pits. Within a few days because of fermentation, soil level goes below the ground level at the mouth of the pit, then again fresh soil is applied till it covers the pit a little above the ground level. The main objective of this method is to allow anaerobic fermentation wherein only limited micro-organisms are involved to ferment only the husk and not the kernels inside. The pits are usually made on uplands. The pits are opened after a period of 4-5 months and nuts are ready for market. They are not dehusked before selling. Such nuts give a peculiar flavour which is liked by the local consumers particularly the tribal consumers. Husk portion of such nuts is completely rotten. These nuts fetch the highest price among the different types and about 5 per cent of the arecanut produce is processed by this method.

5. Tipni Supari

In this method 6 months old tender nuts (preferably lower most bunches) are harvested and diseased injured or husk broken nuts are separated from the lot, since they are not suitable for processing. Such nuts constitute about 5 per cent of the total lot. Selected good nuts are then boiled in metallic vessels for about half an hour, when these green nuts change to pale yellow colour. No chemical is added in the water while boiling the nuts. The boiled nuts are then dehusked by means of cutter (booty). Care is taken to complete the dehusking process within 6-8 hours after boiling and without injuring the kernel portion since injured or cut nuts give lower weight as well as inferior grade with the consequent low market price. Such inferior nuts fetch Rs. 600 to Rs. 800 less per quintal as compared to the superior grade nuts. The dehusked nuts are again boiled for about 15 minutes by adding alum in the water at the rate of 100 grams per 10 kg of kernel weight. They are then dried in the sun for about 3 days on bamboo platform. After drying they are packed in gunny bags and pressed with some weight in order to obtain desired shape for about a day. Next day the weight is lifted and every nut is pressed either by forcep or by the tip of the fingers to obtain still fine desired shape and hence, it is called as tipni supari since without such

pressing by finger tips the nuts do not acquire proper shape to fetch better price. Such pressed nuts are again dried in the sun for about 12-15 days. Arecanuts processed by this method have very good market in Assam. Among all the above discussed methods of processing this method gives nuts which fetch maximum price. Such processing is done mainly by the village traders and not by growers themselves. About 5 per cent of the arecanut produce in the district is processed by this method. Such processed nuts are graded into 3 grades

Grade I Tipni (soft nuts)

Grade II Rutha (hard nuts)

Grade III Gomla (broken nuts)

Processing by the Whole-salers

The wholesalers purchase arecanut produce from the producers, village traders or itinerant dealers. Before selling the produce to retailers they store the produce in their godowns located generally in the market centres. In these godowns they fumigate the produce with sulphur-di-oxide to give it a better colour and to protect from pest attack. After their processing by the wholesalers the produce is sold to retailers.

Grading

Grading is not usually done by arecanut growers however the wholesalers grade the produce but not on any scientific basis. The nuts are graded by them according to size, colour and quality.

Storage and Transport

Growers usually sell their produce immediately after harvest or after drying in the sun. There is no scientific storage at the producer level. The produce is collected by the village trader or itinerant dealers from the producers and sold to the wholesalers. The wholesalers store the produce in their godowns mostly at the market centres. The produce is transported from the villages to the marketing centres by the producers, village traders or itinerant dealers by rickshaws or bullock carts, to the wholesalers in the market centres. Most of the produce is then sold by wholesalers to the retailers in the market centres or in the neighbouring districts and very small portion (about 30-40 per cent) of the produce from the district is exported from the wholesalers to the outside markets such as Calcutta, Patna and Bhubaneshwar etc. mostly by trucks.

METHODS OF SALE

Following four methods of sale are usually adopted by the arecanut growers in the district:

1. Contract Sale of Gardens to the Traders

This is the most common method of sale under which more than 60 per cent of the produce is sold by growers. Under this method the arecanut growers enter into oral contract with the village traders or the itinerant dealers for the sale of the whole of arecanut produce of their gardens for one year at a price dictated by the traders depending upon the prospects of yield in the season and previous years price. After the nuts are ripe the traders arrange for harvesting, transport and sale of the produce to wholesalers. Traders usually advance loans to the growers to the extent of 40-50 per cent of the prospective returns even before the harvest season. Thus the main advantages to the producer of this method are timely availability of loans even before the harvest is ready and the relief from the botheration of harvesting, transport and sale of produce as well as an assured market for produce. However, one main disadvantage in this method is that the producer gets much less price for his produce than the market price since he has practically no bargaining power with the trader with whom he is under debt bondage because of the advance loan received by him.

2. Sale to the Traders in the Village after Harvest

Under this method arecanut growers harvest their produce and then sell it in the village itself to the village traders, or to the itinerant dealers. The traders arrange for transport and sale of produce to the wholesalers in the market centres. Under this method the producer gets better price than in the first method. A little more than one third of the produce in the district is sold by this method.

3. Sale in the Market by the Producers

Under this method the producers harvest the produce and transport it for sale in the nearby market to the wholesalers or commission agents. Thus they have to arrange for transport themselves. But this method gives them still a better price than the earlier two methods. Less than 5 per cent of the produce in the district is sold by this method since most of the arecanut gardeners are of small size and individual arecanut growers' marketable surplus is not large enough to benefit from the economies of bulk sale in transport, handling, bargaining etc.

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4. Sale in the Market by the Cooperative Societies

There is no arecanut cooperative marketing society in the district. However, the general purpose marketing societies or the service cooperative societies advancing loans to arecanut growers, collect arecanut produce from the farmers and sell it in the market, through the commission agents to the wholesalers. This method thus confers benefits of cooperative marketing to the arecanut growers and they get much better price under this method than the above 3 methods besides the facilities of pledge loans as well as supply of inputs such as fertilizers, insecticides etc. from the cooperative societies. However, under this method less than 3 per cent of the produce in the district is sold.

5. Direct Sale to Consumers by the Producers

Under this method producer sells his produce directly to the consumers in his village or nearby village or in the primary markets. Under this method usually pit cured or tender nuts (un-ripe supari) is sold. Less than 3 per cent of the produce is sold under this method.

MARKETING CHANNELS FOR ARECANUT

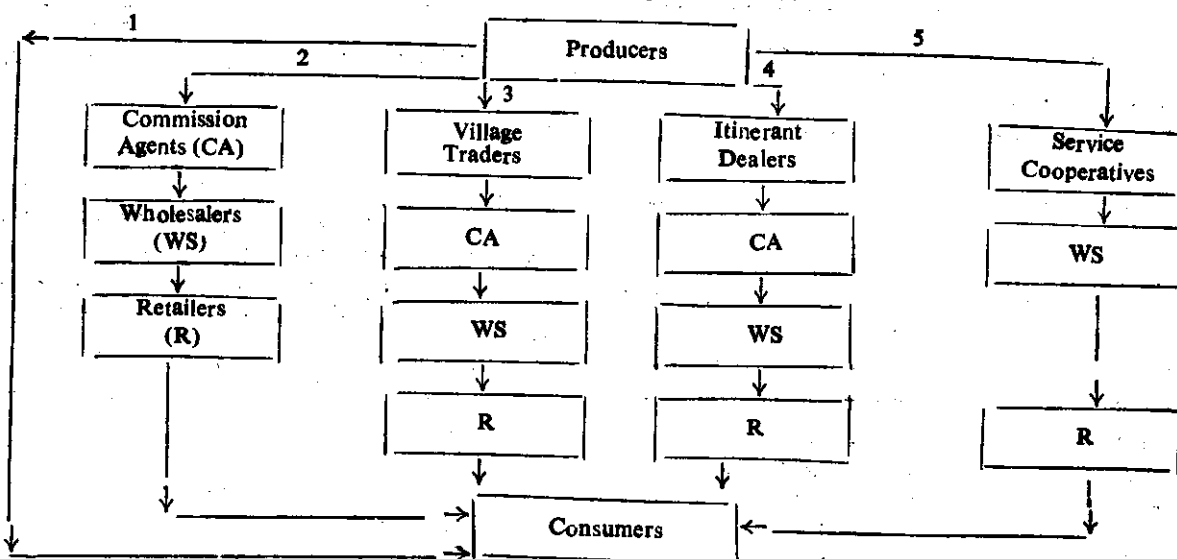
Marketing channels for arecanut for the above four methods of sale are depicted in chart 1. The chart indicates that: (1) The producers directly sell the produce to the consumers, or (2) The producers sell the produce through the commission agents to the wholesalers, or (3) The producers sell the produce to the wholesalers through the village traders, or (4) The producers sell the produce to the wholesalers through the itinerant dealers, or (5) The producers sell the produce to the wholesalers through the cooperative societies, mostly service cooperatives.

Price Spread

Price spread refers to the difference between the price received by the producer and that paid by the consumer. It includes the cost of transport, storage, processing, handling and weighing commission, octroi, market fee, margins of the village trader, wholesaler and retailer etc. Details of these charges were collected from the sample farmers, village traders, commission agents, wholesalers and retailers and are presented in Table 1. The table indicates that the arecanut producers received only 61 per cent of the price paid by the consumers while the price spread was 39 per cent of the consumer's price.

CHART 1

Marketing Channels for Arecanut



CONCLUSION

The foregoing analysis reveals that there is considerable scope for improving the efficiency of grading, processing, transport, storage and marketing of arecanut in the region. This is confirmed by the low share of the producer in the consumer's rupee. To increase this share, cooperative action is necessary. Presently, arecanut marketing co-operatives are not organised in the region. However, such cooperatives have been organised with success in some states like Karnataka, Kerala and Maharashtra. Thus, cooperativisation of storage, transport, processing and marketing of arecanut in the region can deliver the goods.

TABLE 1
Price Spread in Arecanut

Sl. No.	Particulars	Rs./quintal	Percentage
1.	Producer's price	800.00	61.07
2.	Commission	19.50	1.49
3.	Octroi	3.25	0.25
4.	Market fee	19.75	1.50
5.	Weighing and handling charges.	6.50	0.50
6.	Storage charges	18.00	1.37
7.	Processing charges	65.00	4.96
8.	Transport charges	36.00	2.75
9.	Village trader's margin	115.00	8.78
10.	Wholesaler's margin	105.00	8.02
11.	Retailer's margin	122.00	9.31
12.	Consumer's price	1310.00	100.00