

Development of Arecanut and Spices

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ARECANUT:

Arecanut is an important cash crop of India. It is used extensively in all parts of the country for chewing purposes in tender, ripe or processed form. At present about 1.4 lakh hectares of land in India are under cultivation of Arecanut producing 1.26 lakh tonnes of processed arecanut. The major arecanut growing states in India are Kerala, Mysore and Assam. Arecanut is also grown in West Bengal, Tamil Nadu, Maharashtra and other States. State-wise figures of area and production are given elsewhere in this bulletin. Besides India, Pakistan, Ceylon and Malaysia also grow arecanut, but Indian production is much more than the combined total production of other countries.

Although Arecanut is not exported from India in large quantities, the significance of this crop in the economy of the nation will be realised from the fact that the total value of the

crop produced in India is of the order of 90 crores and that nearly four million people in India are engaged in its cultivation and trade, earning their livelihood from this crop. Small quantities of arecanut are exported to Nepal, Africa and other countries mainly for the use of Indian settlers abroad.

As a result of the partition of the country in 1947, vast arecanut growing areas in Bengal were lost by India and the country was forced to import large quantities of arecanut from outside to meet the internal demand. However, owing to the steady progress in development work of this crop during the second and third Plan periods it was possible to substantially reduce the imports which are now practically nil. The embargo placed on imports of arecanut enabled the cultivators of the crop in India to obtain better prices for their produce and this in turn acted as an incentive for further increase in production.

The following figures will indicate the extent of reduction in imports, and consequential increase in prices obtained by the cultivators.

ARECANUT

| | Imports in tonnes | Price of arecanut in Indian markets in Rs. per tonne |
|---------|-------------------|--|
| 1956-57 | 39,903 | 3430 |
| 1957-58 | 30,838 | 3750 |
| 1958-59 | 18,364 | 4420 |
| 1959-60 | 14,175 | 4610 |
| 1960-61 | 11,170 | 4980 |
| 1961-62 | 10,041 | 5690 |
| 1962-63 | 8,978 | 5810 |
| 1963-64 | 2,810 | 5550 |
| 1964-65 | 3,275 | 5720 |
| 1965-66 | 3,323 | 6510 |
| 1966-67 | 597 | 6880 |
| 1967-68 | 136 | 7410 |
| 1968-69 | — | 7550 |

Although the targets fixed for the end of the III Plan has been actually exceeded in respect of both area and production of arecanut, the per acre yield is still very low in some of the major arecanut growing areas mainly due to the incidence of pests and diseases. India is still not self-sufficient in this commodity. Concerted efforts are, therefore, being made to increase the production further.

During the earlier period of developmental activities, a number of Research Stations were established in different arecanut growing areas. These Stations apart from producing and distributing quality seedlings to the cultivators, worked on the control of pests and diseases and on laying down suitable manurial schedules for application in different arecanut growing areas.

During the last 10 years, arecanut production has increased from 74,750 tonnes to 1,26,000 tonnes, an increase of about 70%.

Based on the present position and providing for an annual increase of about 4 to 5 per cent in consumption it will be necessary to increase the annual production to 1.5 lakh tonnes by the end of the IV Plan period. It is proposed to achieve this as far as possible by intensive cultivation in existing areas rather than by expansion of the area, particularly in view of the need for conserving as much area as possible for food crops. Adoption of improved cultural practices, establishment of demonstration centres and control of pests and diseases are the measures proposed for obtaining increased yields from existing plantations.

As a result of the work done at the different Research Stations, optimum cultural practices have already been laid down and effective remedies have also been found for most of the pests and diseases affecting the crop. Attention is, therefore, required to be concentrated now on large scale adoption of these practices by the cultivators. In addition to the proposed demonstration centres, large scale propaganda amongst the cultivators is, therefore, contemplated during the IV Plan period.

SPICES:

Spices are important foreign exchange earners for India. India occupies a special position in the matter of spices and produces almost all kinds of spices in different parts of the country. Apart from the quantum of foreign exchange earned by spices, the more significant aspect of the crop is that spices introduced us to the world outside and laid the foundations for the country's foreign trade and exports.

During the year 1967-68, India exported 52,000 tonnes of spices valued at Rs. 27 crores. Of this, Pepper, Cardamom, Ginger, Turmeric and Chillies accounted for nearly 80 to 90 per

cent of the total earnings. At the same time India has been importing certain spices like Nutmeg, Clove etc., in which the country is not self-sufficient. The development of spices has, therefore, the twin objective of earning more and more foreign exchange for the items in which we are surplus and effecting possible savings in foreign exchange in respect of other items. Figures pertaining to area and production of important spices in India and export and import of spices are given elsewhere in this bulletin. The Indian production compares as under with production in other countries.

Production in tonnes

| | Pepper | Ginger | Chillies |
|-----------|--------|--------|----------|
| India | 23,000 | 21,000 | 4,86,000 |
| Indonesia | 30,000 | — | |
| Sarawak | 14,800 | — | |
| Taiwan | | 12,100 | |
| Pakistan | | | 51,800 |
| Ethiopia | | | 90,000 |
| Thailand | | | 74,000 |
| Mexico | | | 20,000 |
| Burma | | | 15,000 |
| Syria | | | 14,800 |
| Japan | | | 6,100 |
| Hungary | | | 9,100 |
| Others | 17,000 | 5,100 | 500 |

Pepper is the most important of all the spice crops. On the basis of official statistics pepper covers an area of about one lakh hectares producing about 23,000 tonnes of Black pepper. However, considering the fact that the export trade in pepper itself account for nearly 23,000 tonnes and making allowance for internal consumption of this commodity, the actual production of pepper is likely to be in the neighbourhood of 30,000 tonnes. Whatever the actual figures of production may be, the fact remains that we have not made sufficient progress in increasing the production of pepper in the country. The high cost of cultivation of pepper, lack of proper awareness on the part of the cultivators in adopting modern methods of cultivation, plant protection etc. and the consequent low yields are the main factors responsible for the present state of stagnation. The only effective way of dealing with this problem will be an attempt to increase the yield per acre by adopting proper cultivation practices, taking measures for prevention of pests and diseases and use of improved planting materials.

An improved hybrid variety of pepper called Panniyur-I has been evolved in Kerala. This hybrid pepper is found to be capable of giving more than 4 times the yield from the other varieties as indicated in the table below:

| | Panniyur-I | Local variety |
|-------------------------------------|---------------------|------------------|
| Maximum yield per tree | .. 10.5 kg. (Green) | 5.59 kg. (Green) |
| Minimum yield per tree | .. 5.325 kg. („) | 0.931 kg. („) |
| Mean yield | .. 7.331 kg. | 1.751 kg. („) |
| Mean length of spike | .. 16.2 cm. | 10.8 cm. |
| Mean number of berries per spike | .. 98 | 65 |
| Weight of 100 green berries | .. 16.8 gm. | 12.4 gm. |
| Volume of 100 green berries | .. 17.0 c. c. | 12.0 c. c. |
| Percentage of black pepper obtained | .. 32.8 | 31.4 |

Realising the importance of this variety of Pepper, Government have already started a Central Nursery at Neri Mangalam, in Kerala State for the rapid multiplication of planting materials of this variety. Demonstration plots for popularising this improved variety of pepper have also been contemplated during the IV Five Year Plan. In addition, funds have also been provided for effective pest and disease control and for package programmes for the benefit of the cultivators.

Ginger is the another important spice crop, although in terms of exports, the quantity is very small when compared to Pepper. There are a large number of local varieties of Ginger in cultivation in different parts of the country. Two exotic varieties viz. Rio-de-Janeiro and China are also being cultivated. The yield from these exotic varieties is found to be of the order of about 25,000 kilos per hectare as against only about 10,000 kilos obtained from the local varieties. Steps have been taken for distribution of planting materials of the exotic varieties to the cultivators on a large scale and a nursery for the purpose has already been started.

Among other major spices, Turmeric and Chillies are more important. The developmental programmes contemplated during IV Plan period for spices development include also provision for package programmes for these crops. Various improved varieties of Turmeric and Chillies are now being cultivated in different parts.

In the case of all these spice crops it is

necessary to increase our production during the IV plan period so as to enable us to have larger exports after setting aside sufficient quantity for internal consumption. The present level of production and the targets proposed are as under:—

| | Present level of Production in tonnes | Target by the end of IV Plan in tonnes |
|----------|--|--|
| Pepper | 23,000 | 42,000 |
| Ginger | 21,000 | 26,000 |
| Turmeric | 1,13,000 | 1,28,000 |
| Chillies | 4,86,000 | No target has been fixed |

Concerted efforts are being made to achieve the targets.

In addition to the crops mentioned above, the following are some of the other spices grown in different parts of India.

| | |
|-----------|-----------|
| Cardamom | Garlic |
| Cumin | Coriander |
| Fennel | Clove |
| Celery | Cinnamon |
| Fenugreek | Nutmeg |

Of these, Cardamom is very important and earns considerable foreign exchange. A separate Cardamom Board has been set up by the Government of India to look after the development of this crop.

In the case of the others, whilst we are exporting most of the items, we are particularly in short supply in the case of Cloves and Nutmeg. The development of these crops, therefore, requires special attention.

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