Arecanut Varieties And Methods Of Cultivation And Harvesting

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Abstract:

Agriculture is now one of the most importantsectors in the Indian economy. Areca nut cultivation is one ofthe major livelihoods of farmers of Andaman and Nicobar Islands.

Areca nut cultivation is a long process involving harvesting, separating the fruits from bunches, moving the areca nut toground, drying, de-husking, separating, bagging. Severalmachines are being developed to help farmers to aid theaforementioned processes. Areca nut collecting and baggingmachine is a new one among them.

The machine is intended to collect areca nuts fromground directly to gunny bags fixed in a moveable trolley.

After the bag is filled the trolley can also be used tomove the bags to store rooms. The machine is operated bysingle person so that farmer himself can use it. In addition,since the machine doesn't use any power units, it can be usedanytime.

Since the machine is manually driven, the machine ismade lightweight materials to reduce the user effort. Themajor enabling mechanism in the machine is an inversion ofslider crank mechanism that pulls the areca nuts fromground. A belt driven Conveyer carries the collected arecanuts up into the bags.

Keywords: Arecanut growers, Arecanut cultivation and Arecanut varieties.

1. INTRODUCTION

Study has been conducted based on available literature on varieties and cultivation methods. Areca Nut is one of most

important commercial crops also known as betel nut and it is the seed of the areca nut palm.

Arecanut cultivation

Climate -The cultivation of Arecanut is mostly confined to 28º north and south of the equator. It grows well within the temperature range of 14ºC and 36ºC and is adversely affected by temperatures below 10ºC and above 40ºC. Extremes of temperature and wide diurnal variations are not conducive for the healthy growth of the palms. Arecanut can be grown in areas receiving annual rainfall of 750 mm in Maidan parts of Karnataka to 4,500 mm in Malnad areas of Karnataka. In areas where there is prolonged dry spell, the palms are irrigated. Due to its susceptibility to low temperature, a good crop of Arecanut cannot be obtained at an altitude of more than 1000 m MSL.

Soil- The largest area under the crop is found in gravelly lateritic soils of red clay type. It can also be grown on fertile clay loam soils. Sticky clay, sandy, alluvial, brackish and calcareous soils are not suitable for Arecanut cultivation.[1]

Raising of Seedlings Arecanut is propagated only by seeds - There are four steps in selection and raising of arecanut seedlings viz., selection of mother palms, selection of seed nuts, germination and raising the seedlings and selection of seedlings.

Selection of seed nut - Fully ripened nuts having weight of above 35 g should be selected. The weight of seed nuts for red varieties should be 20-25 gms. The middle bunches should be selected for seed purpose leaving the first and the last bunch. The nuts selected should float vertically with calyx-end pointing upwards when allowed to float on water. These nuts produce the seedlings of greater vigour.

Spacing - This depends on the rooting pattern of the crop along with the fertility and depth of the soil. The studies conducted at different places with different spacing have revealed that a spacing of 2.7 m X 2.7 m is optimum for arecanut. Depth of planting in well-drained soils and in the fields where proper drainage can be provided, deep planting is preferred. Deeper planting provides a firm anchorage and larger volume of space

for root development. In areas where water table is high, shallow planting is preferred. Thus, in well-drained soils, planting at a depth of 90 cm is recommended and in heavy soils planting at a depth of 60 cm is recommended.

Season of planting - In areas where South-West monsoon is severe, planting in the month of September October is recommended. In other areas planting can also be done in the months of May-June after onset of monsoon. In low laying areas where water logging is a common planting during September – October after south west monsoon is of the crops. Planting should be followed by provision of irrigation immediately after planting if there are no rains. Method of planting the pits should be opened 2-3 months in advance of planting season. The pits are filled up with a mixture of top soil and FYM / Compost in equal proportion to half portion of the pit and planting is taken up in the centre of the pit and properly staked. The remaining half portion of the pit is filled up gradually during the first 2-3 years manuring with soil and farm yard manure. This method of planting helps in better anchorage of roots and better roots spread and development.

Local Varieties –

Theerthahally Local –

a) Tall Variety
b) Takes 6-7 years for bearing
c) Medium sized oblong nuts
d) Drooping bunches
e) Suitable for tender processing
f) Suitable for malnad and maidan area
g) Average yield/palm 2.6 kg/palm

h) Susceptible for hidimundige disorder in maidan area

Maidan Local

a) Medium sized round nuts
b) Erect bunches
c) Takes 5-6 years for bearing
d) Suitable for maidan area
e) Suitable for tender processing
f) Average yield/palm 2.6 kg/palm
g) Less susceptible for hidimundige disorder

Mangala

a) Medium sized tree
b) Starts bearing in 4-5 years
c) Medium sized round nuts
d) Average yield 3.0 kg/palm
e) Suitable for Chali preparation
f) Recommended for coastal belt

2. REVIEW OF LITERATURE

Dr. K.S. Sheshagiri Principal Investigator, Dr. H. Narayanaswamy Prof. of Pathology, and Dr. B.K. Shivanna Asst. Prof. The areca nut palm is the source of common chewing nut, popularly known as betel nut or Supari. In India it is extensively used by large sections of people and is very much linked with religious practices. India is the largest producer of areca nut and at the same time largest consumer also. Major states cultivating this crop are Karnataka (40%), Kerala (25%), Assam (20%), Tamil Nadu, Meghalaya and West Bengal.[1]

M.M. Badhe and R.G. Tambat (2009),The study was conducted in Dapoli and Guhagar tahsils of Ratnagiri district of Konkan region. The sample was constituted 100 arecanut growers drawn from 10 villages. The respondents were interviewed with the help of a specially designed schedule. The exploratory survey design was used for the present study. Major problems faced by the respondents were 'intercropping decreases the yield of main crop' 'did not get minimum price to the Arecanut by middle man', 'possibility of transferring disease from intercrop to main crop', 'lack of knowledge about pest and disease [2]'

The findings pertaining to constraints experienced by the Arecanut growers imply that the concerned organizations and experts may give attention to help the Arecanut growers to overcome the constraints related to agriculture in general and Arecanut cultivation in particular.

3. RESEARCH OBJECTIVES

Arecanut Varieties and Methods of Cultivation

4. RESEARCH METHODOLOGY

Research methodology is one of the most systematic ways to take care of an issue. Itis methodical in nature. It is an exploration of studying various availeble oitretures.Basically, reveiwing of litreture is the systems by which researchers approach availblework.

Research Design –Reviewing litreture is a type of research which is factual in nature. The primaryobjective of this type of research is to analysis the information and qualities about whatis being examined.

Primary Data –No primary data was collected for the purpose of the study.

Secondary Data - Secondary data is the data, which already exists. Secondary data was collected mainly through the internet, websites and some are taken from books and articles.

Sampling Design –Reviewing of available literatures.

5. CONCLUSION

The reviewing indicates that India is the largest producer of areca nut and at the same time largest consumer also.Major states cultivating this crop are Karnataka (40%), Kerala (25%), Assam (20%), Tamil Nadu, Meghalaya and West Bengal. The cultivation challenges of arecanut in Kadamtala, Andaman and Nicobar Islandsplanters are not uniformly distributed over the population. the six categories Water Problem, Fertilizer Issues, Trees Cleaning and Trimming, Labor Issues, High Temperature in summer session and Govt. or Private Agencies not supported of study.As on present scenario farmers are applied techniques and quality improvement practices. Processing of arecanut is increase jobs which help them for survive and fulfil the need of their family. During survey it was observed that export of arecanut creating direct and indirect jobs.

6. LIMITATIONS

1) Confidentiality – Confidentiality of the employees in institution, and it may be the one of the reason respondents may not give the factual information.
2) Authenticity of the information supplied –To check authenticity of responses, some questions were repeated in the different form and crosschecking was done wherever it was possible.
3) Respondent bias – As often experienced in personal interview-based questionnaire, it may bias the respondent's replies and the personal interests. Attitudes of interviewers can cause them to interpret responses differently.

REFERENCE

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