

Ball Copra- a hot cake for the farmers of East Godawari

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Ball copra enjoys a good status in the dry fruit markets of North India. The product is sold as hot cakes in festive seasons. It is an essential item in all the major festivities and marriages in Northern India. In Maharashtra and Madhya Pradesh ball copra is an important item of the gift packet given to the guests during marriage functions.

Coconut Development Board under its Technology Mission on Coconut has given assistance to 13 ball copra units in Andhra Pradesh. These units are having the capacity to process more than 80 lakhs nuts annually.

East Godawari district in Andhra Pradesh is famous for the maximum number of ball copra units in the country. East Godavari district has an average production of 730 million nuts (2012-13) from an area of more than 50,000 ha. The medium to small size nuts from the locally grown tall variety- East Coast Tall, which has low water content, the climatic condition prevailing in the area and the proximity to Northern India, aids in the establishment of more ball copra processing units in the district. The use of coconut in daily life is minimum here and about 70% of the production is converted in to ball copra processing. The remaining 20% production is utilized for supply of dry coconut (with water), which is usually transported to Maharashtra and other north Indian states. Less than 10 % of coconut production is utilized for copra making and tender nut harvesting, which is not practiced widely, although copra merchants and traders are available in the major coconut markets in Ambajipetta, Amalapuram and Ravulapalem.

In East Godawari, coconut is usually harvested 5-6 times a year at

an interval of 60-75 days. The peak harvesting period falls in the month of May-June, which contributes roughly to 25-30 % of the total production in the district. During peak season, the price of nuts in villages may crash to as low as Rs 3-4 per nut. The other main harvesting period is October –November which accounts for 15-20% of the total production. The nuts harvested during May-June are of medium size than that of the nuts during October –November period. If the price of coconut rules high, the major part of the nuts harvested during May-June will be sold as mature dry coconuts with water, without husk or partially dehusked. If the ruling price is lower, majority of the mature nuts will be stored for making ball copra.

The process of ball copra making

East Godawari district is having more than 150 big ball copra processing units with the capacity to process more than 3-5 lakh nuts annually. Majority of the houses has a special structure in the ceiling to store the partially husked nuts.

The harvested nuts are transported and sold to the processing units without grading and the entire lot is valued on per nut basis. Ball copra processing unit is a specialized structure for storing the partially dehusked or peeled mature coconuts. Majority of the units are two to three storied buildings with concrete pillars. These structures have stair cases and ladder like structure in between for loading the nuts. The floor area of big units exceed more than 10,000 sq ft which has the capacity to process 10 lakh nuts annually. Two cycles of ball copra processing is possible in a year. The capacity utilization in majority of the units depend on the price and

availability of nut. Usually 60-75% capacity utilization is possible annually. The ceiling of each floor is made of bamboo or coconut logs. Special partitions are made in each ceiling for loading additional nuts. Adequate ventilation is provided in the walls for better aeration which helps in easy drying of nuts.

The nuts will be stored in heaps covered with coconut leaves or coconut husks. After 20-30 days of storing, the nuts are graded and the big to medium sized nuts are partially dehusked and sold to big traders as mature coconut (with water) if the ruling price is high. During 2014-15, the major ball copra processors purchased nuts from the farmers at an average price of Rs 4-6 per nut.

Dehusking

The stored nuts will be partially dehusked by skilled labours. Only the outer hard portion of the husk is removed in this process and a labourer can dehusk/peel 1000-1200 nuts per day. The labour charge is usually paid on per nut basis and average price of dehusking is Rs 0.65 to Rs 0.75 per nut. The partially dehusked nuts will be loaded in the ball copra units. If the loading is made up to three feet in each floor, no separate arrangement or compartment is required. If the nuts are more, each nut is arranged vertically in a slanting position one over other and for accommodating more layers, partitions will also be provided in each floor. The vertical arrangement will reduce the chance of germination of nuts. The loading of nuts will be normally done by women labourers. After completion of loading, the nuts have to be stored for a period of four to six months. If the demand of ball copra is high, occasional checking of nuts will be done and the dried nuts are taken out

after four months for providing more space in the godown. The periodical mixing and tilting will speed up the ball copra production.

Grading of processed nuts

The nuts after storing for four to six months are taken out and the grading is done by skilled labourers. The removal of the remaining husk is not done and the processed nuts will be beaten against a stone or elevated hard surface to check the formation of ball copra. The ball copra is graded according to the size of the nuts. The skilled labourers can easily grade the nuts with the feel and the damaged ones are discarded. About 10-15% of the total nuts will be damaged due to rotting, germination etc. Generally, 3-4 grades of ball copra are available for trading.(Table1)

Table 1. Grades of ball copra

Grade	Specifications	Prevailing price of nut (March 2015)
Gandera kurudi	Big size; stored for > 6 months	Rs 12 to 14
New Gandera	Big size; stored for 5 to 6 months	Rs 12
Gatagata	Medium size	Rs 10
Chettakai	Small size	Rs 8

The best ball copra, locally known as *Gandera kuridi* is currently fetching more than Rs 14,000 per thousand nuts and even the slightly inferior grades such as *Gatagata* is fetching above Rs 10,000 per thousand nuts. Due to prevailing high price, all the units are realizing bumper profit during this year. On an average, Rs 1.25 to Rs 1.75 is the maximum expenditure incurred per nut for processing in to ball copra with in a time period of 5-6 months. After sorting, the nuts are packed in special sized gunny bags with the husk intact. About 100 to 110 big size nuts can be packed per bag whereas 140 medium sized nuts and 200 to 225 small sized nuts can be packed per bag. During peak seasons, ball copra processors are getting 50-60% advance from the traders for reserving the quantity. During such seasons, 70-80 truck loads of nuts are daily transported from the major coconut trading areas of Ambajipetta and Ravulapelem. Ball copra processing units are providing seasonal employment to more than 10000 labourers and the total ball copra business exceeds more than Rs 500- Rs 600 crores annually.

Assistance under TMoC

Board is providing back-ended credit capital subsidy limited to 25% of the cost not exceeding Rs.50 lakhs for NGO's, Individual entrepreneurs and other organizations for establishment of ball copra units. The norms for construction of drying sheds for ball copra making and storage in Andhra Pradesh is given in the Table 2

The list of documents to be submitted along with the submission of project proposal for Ball Copra are:

Table 2. Norms of drying sheds

Type of Construction	Size of Compartment	Holding Capacity	Cost
RCC Framed Structure ball copra Godowns with wooden doors and windows constructed in two Floors of concrete type	50x30x15 ft ht	40000-50000 nuts	Rs. 500 per sq ft
RCC Framed Structure ball copra Godowns with wooden doors and windows coated with synthetic in three Floors of concrete type and provided with rolling shutters	100x 40x 15 ft ht	2-3 lakh nuts	Rs. 700 per sq ft

application form duly filled in, detailed Project Report, Bank/Financial Institution's Term Loan Sanction Letter, Bio-data of the Promoters, Previous experience, if any, in running such a project or any other type of project, Blue print of the factory-building plan, plan approval of Municipality/Corporation/ Panchayath alongwith estimate, Statutory clearance / permission from Panchayath/ Industry Department and Notarized English version of Land Document (in case it is in any of the regional languages)

So far CDB has cleared projects worth Rs 285.81 lakhs and sanctioned financial assistance amounting to Rs 61.35 lakhs to 13 ball copra processing units having a total processing capacity of more than 80 lakh nuts annually.

Future thrust

The ball copra processing units are mainly established by private entrepreneurs. Since value addition to other forms is not done, the entire nuts during the major harvesting season are available and this usually leads to price crash.

Now, Board has initiated the formation of Coconut Producer Societies (CPS) by associating 40-100 coconut growers in a contiguous area with a consolidated minimum of 4000-5000 palms. The objective is socio economic upliftment of the farmers through productivity improvement, cost reduction, efficient collective marketing, processing and product diversification. CPS will be further federated to CPF and 10 such CPF will be encouraged to form the apex body- Coconut Producer Companies (CPC). So far 450 CPSs, 40 CPFs and 2 CPCs are formed in AP. Out of these, 240 CPSs, 25 CPFs and one CPC is formed in East Godawari alone. The aggregation of harvested nuts and its processing to ball copra at FPO level will help the member farmers to realize better profits. CDB is motivating the FPOs to take up ball copra processing at CPS / CPF level which will help the farmers to avoid the distress sale at the time of price fall during peak harvest seasons. Instead of big structures / drying sheds, a cost effective durable, pre fabricated models need to be developed, so that more farmers and farmer collectives can easily establish ball copra processing units.

Ball copra Production



Small sized nuts heaped after harvesting



Dried nuts heaped for dehusking / peeled portion of husks also seen



Storing of nuts inside the husks



Partial dehusking of mature dried nuts before loading into processing unit



Loading of partially dehusked nuts above the bamboo ceiling



Sorting of processed nuts/ball copra