

# SOCIO-ECONOMIC ASPECTS OF ARECANUT IN MEGHALAYA WITH SPECIAL REFERENCE TO WEST GARO HILLS DISTRICT

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## Introduction

Arecanut (*Areca catechu* L.) is one of the important commercial crops in South-east Asia. Areca plant is a tall-stemmed erect palm, reaching varied heights depending upon the environmental conditions. Arecanut is an important component of the religious, social and cultural celebrations and economic life of people in India. India is the leading country in context of production contribution. In India it is grown in parts of Karnataka, Kerala, Assam, Meghalaya, West Bengal and Andaman and Nicobar Islands. Arecanut is also one of the important plantation crops of north eastern states, especially in Meghalaya and Assam, and also plays significant role in the livelihood of the people. It provides income and livelihood security to many people in Meghalaya.

*Areca catechu*, of which areca nut is a fruit, is one of the palm species. The arecanut is the source of the common masticator nut, popularly known as betel nut or supari or 'Tamool' in Assamese, 'Gue' among Garo. Arecanut and betal leaf chewing with lime is a tradition, custom or ritual common in Meghalaya (Anitha, 2000). Meghalaya state is also one of the most important consuming centres. In Meghalaya, especially West Garo Hills District, most of the household do arecanut

cultivation. From selling seedlings to harvested nut (raw) they earn their livelihood (Anandaraj, 2015). The plantation crop sector contributes a significant amount to the foreign exchange and the magnitude of direct and indirect employment provided by the sector makes it vital for overall economic development.

Areca marketing is the systematic performance of areca business activities related to processing, grading, standardising, packing, assembling, transporting, sorting, financing, selling and distributing in order to reach the areca produce from the point of producer farmers to the ultimate consumers. In the process of arecanut marketing, production is the starting point of marketing. This paper aims to highlight traditional cultivation practices, harvesting, transportation, price, labour, skills and prospects of value addition in arecanut and its by-products.

## Garos Tribe of West Garo Hills

The Garos are indigenous people in Meghalaya, inhabiting North-Eastern region of India. They are the second largest tribe in Meghalaya after the Khasi and comprise about a third of the local population. The Garos are one of the society/community who follows matrilineal system of marriage. The Garo are at

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present mainly concerned with agriculture. They practice both permanent and shifting cultivation. The important fruit crops are orange, pineapple, litchi, banana, jackfruit and other citrus fruits. Important plantation crops are arecanut, cashewnut, coconut, tea, black pepper, bayleaf, betal leaf and rubber. Arecanut is an important tree among the people as it is used in many ways.

### Arecanut Cultivation Practices

Areca cultivation is common in West Garo Hills. Arecanut Farmers are earning their livelihood from the crop every year. Some of the farmers are getting more than a lakh and above from eight *bhigas* (one hectare approx.) in a season. From Table 1, it is found that in one *bhiga* they used to cultivate 700 - 900 trees. Most of the farmers grow seasonal variety *i.e.*, harvested once a year. In the month of May and June, nursery is raised by using polythene pouch (Fig 1) for small scale production and field for large scale production. The farmers select good quality nut (ripe, mature, firm) for nursery preparation. The farmers used soil and farm yard manure or decomposed leaves of plants and trees. *Matchuki* (cow dung) is

commonly used for raising seedlings. During rain not much irrigation/watering is required, but the soil should be wet enough for the seed to germinate. As mentioned by farmers there is no 100% germination, 60- 75 % seeds get germinated. Those seeds which are not germinated they used to throw away. The price of the one year old seedling cost Rupees Six and Rupees ten for two year old seedling.



Fig 1: Raising of seedlings

**Table 1: Characteristics of Representative Arecanut farm in West Garo Hills**

| Sl. No. | Variables/ Items              | Qty./ Frequency              |
|---------|-------------------------------|------------------------------|
| 1       | Size of the farm (bhigas)     | 2-10                         |
| 2       | No. of trees per bhiga        | 700-900                      |
| 3       | Price of seedlings            | Rs. 6 -10 (one to two years) |
| 4       | Labour cost (weeding)         | Rs.300-400/day               |
|         | Labour cost (Harvesting)      | Rs. 500/ day                 |
| 5       | Harvesting (yield) per bhiga  | 140 - 180 kg                 |
| 6       | Price per bosta (100 kg/ 1 Q) | Rs. 1200 - 4000              |

Source: Primary Data



Fig 2: Transplanting of seedling

ensure that the tree is protected from cattles, wild animals (elephant) and squirrels. Not much frequent caring and monitoring is required in arecanut farming. Proper fencing with bamboo and weeding twice a year called as *jakra* and *bamil* is enough for arecanut cultivation. Labour cost for weeding is Rs.300 - 400 per day per labour. Every year areca farmer used to spend Rs.800 for one bhiga. 86% of the sample respondents mentioned about the difficulty of digging the land due to presence of rocks for transplanting the seedlings. After five to six years the tree started giving fruit/nut.

In West Garo Hills District harvesting of the nut starts from the month of April to June. When the nuts are fully ripe, matured orange in colour, harvesting is done. For harvesting one to two skilled labours is required to harvest the nut and collecting the nuts. Most of the arecanut farmer used traditional method of harvesting nut from arecanut palm tree *i.e.* by climbing the palm tree. Some of farmers used *katchi* or *atte kangkin* (sickle) showed in Fig. 3 tied on bamboo pole so as to reach the tall nut (Fig 4). When the bamboo is not sufficient to reach properly they need to join two to three bamboos together by strong ropes in order to harvest the nuts bunch.



Fig 3: Sickle (*atte kangkin*)



Fig 4: Sickle (*atte kangkin*) tied on bamboo

The labour cost is Rs.500 per day per labour for harvesting the nuts. Finding the skilled labour in the particular locality/village is also a tedious task as it involved risk. After harvesting, each nut is removed from the bunch and packed in a bosta (gunny bag weighing 50 kg). The local market system is pon system (one pon comprises of 80 arecanuts) as showed in Fig. 5. The price of fermented arecanut (*moja*) is Rs. 5000/ per bag (Fig. 6). The price of fermented arecanut is more and highly



Fig 5: Pon system in local market



Fig 6: Fermented arecanut (*moja*)

demanding but arecanut farmers are hesitated to do fermentation as it takes time and maintenance problems. All the sample farmers were not aware about the available Government subsidy and schemes about the tank construction for fermenting arecanut.

Marketing of arecanut is tedious task as it is labour-intensive. In most of the villages particularly near the road side, some area is fenced for keeping these bags so that the agents come and collect the nuts from the farmers. All the sample farmers neither have own transport system to market their produce nor the approachability of regulated market for arecanut in nearby. Here the middle men/agents take the lion's share of arecanut (Ahmed, 2011). Lack of financial assistance, difficulty in getting license for production, high cost of betel nut, lacking brand name, seasonal availability, lack of time are also the major hindrances to the farmers.

The farmers usually sell their produce (raw) in the month of May and June. They are seasonal variety type. Farmers sell their produce in local *bosta* system, one *bosta* comprises of two bags each weighing 50 kg each. The arecanut agent (*gue* agent) collects arecanut (raw) from the farmers in their own transport system carrying along with the bags (gunny bags). Some of the agent used to bring their own skilled labour for harvesting the nuts. Analysing the price trend of arecanut in West Garo Hills district, it is found that there is no stability in the price (Table 2). There is somewhat increasing trend from the year 2011 to 2013. The price of arecanut is more in Darengre village, Gambegre Block because of its taste and having name in Meghalaya.

**Table 2: Price Trend of Arecanut in West Garo Hills, Meghalaya**

| Sl. No. | Year | Price Trend (Rs.) per <i>Bosta</i> = 100 kg/ quintal |
|---------|------|--|
| 1       | 2015 | 1200-4000  |
| 2       | 2014 | 1500-2000  |
| 3       | 2013 | 1000-2000  |
| 4       | 2012 | 1000-1500  |
| 5       | 2011 | 700-1000   |

Source: Primary Data

### Other uses of Arecanut

People of West Garo Hills used arecanut stem as pipe for collecting water from hills or raised surface to the nearby house. It is also used as a pole to construct a house. The leaves of arecanut plant are used for covering the roof as well as for fencing. The bark of arecanut is used for fermentation of arecanut in order to protect the nuts from ants and insects. The inner parts (strips) of the stem are used as manure after decomposing. The tender nuts are used in preparing dish with ginger, garlic and spices.

### Prospects of Value addition

Value added products have more value and can gain more profit. The fermented arecanut (*moja*) catches more prices as compared to a raw one because of its taste, time consumption, and value added product and is highly demanded. It is obvious that value added products have more price (Croucher and Islam, 2002). Arecanut has to be used to achieve maximum profit. Additional uses have been identified for the nut such as toothpaste, while the husk can be used to make paper or as a source of fuel for electrical power generation. Central Food Technology Research Institute (CFTRI), Mysore proved that areca husk could

be used to prepare craft paper and as raw material for preparing readymade toys, flowers, garlands and decorative ornaments and many types of showcase pieces. Capre Foundation, a renowned organisation also mentioned about areca leaf training enhances participant income, create employment in target areas and helps in waste management.

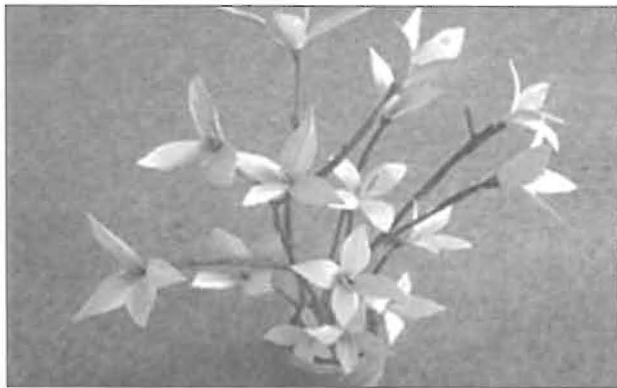


Fig 7: Dry flower from Arecanut leaf



Fig 8: Vase from Arecanut stem

As showed in Fig. 7 and 8 the arecanut leaf, bark and stems can be used as raw materials for crafts items such as flower from leaf bark, flower vase or utility article from stems and nuts. The income of the arecanut farmer can be further enhanced by utilising the locally available resources especially waste of arecanut and its by-products. The arecanut which are not germinated can be utilised for making crafts items if dried properly. The arecanut growers

may increase their income by selling these crafts items. Due to heavy wind some of the arecanut tree is damaged, the stem can be utilised for making utility article and other crafts items which are otherwise going to be thrown as waste.

### Conclusion

Arecanut, like many other plantation crops is a location specific crop. It is consumed all over India by many. The West Garo Hills district in Meghalaya is also one of the important consuming centres. Arecanut plays a significant role in the livelihood of the people by providing income and economic security to many people in Meghalaya. Seeing the crop growing pattern and longevity in the state it should be utilised to its fullest potential so that farmers can get more income by utilising the arecanut and its by-products. These can be made into many crafts and utility items such as flowers, vases, dolls, decorative and show piece etc. so that they may enhance their income by utilising locally available cheap resources.

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