

Value Addition in Coconut

Coconut is the main crop cultivating across India especially in Kerala. Coconut is well known for its health benefits as the coconut oil which is rich in lauric acid. Coconut is Grown as a plantation crop. Most of the parts



of a coconut tree is useful in various means. So, coconut is called as '*Kalpavriksha*' in Kerala. Coconut water is also a nutritious drink. Sap from the coconut flower is also nowadays processed into healthy drink '*Neera*'. Toddy is prepared from the coconut by fermenting the sap. Dried coconut meat which is also known as '*Copra*' is the source of coconut oil. Desiccated coconut is also using widely nowadays for bakery purpose. Coconut Development Board is also promoting the entrepreneurship venture in coconut flavoured milk which is just started in Tirur, Kerala. The outer mesocarp of coconut is used in coir industry to make various kind of products. Even coconut shell is also used for charcoal preparation and for ornamental purpose. Even though a major producer of coconut, India consumes more than 50% of its coconut production of 15.84 billion nuts per annum as raw nuts for culinary and religious purposes. 35% of the production is utilized for conversion to copra, 11% for tender nuts, 2% for seed purposes and hardly 2% is utilized for value addition and industrial purposes. There are so many value-added products are available from the coconut. Here we are discussing some of the value-added products which can be produced as a part of enterprise for producing higher income.

Coconut: The '*Kalpavriksha*'

Coconut palm (*Cocos nucifera* Linn.) is called the tree of heaven as it's all parts are useful in one way or other. The copra, which is dried kernel of the coconut is the richest source of vegetable oil called coconut oil. Copra contains 65-70% oil. The coconut palm



is adapted to various agroclimatic conditions. Essentially, coconut is a tropical palm. It requires rainfall above 20000 mm per year and an irrigation of 40L/day on an average for proper growth. Coconut is growing in different types of soils. Mainly, it is growing in coastal sandy soils. It is also growing in loamy, laterite, alluvial, clayey and reclaimed soils as well. The palm requires proper drainage and good water holding capacity of the soil for root strength.

There are only two distinct varieties of coconut, the tall and the dwarf. The tall and short varieties vary in different characters such as oil content, lifespan, water content, copra content and oil content. The tall cultivars that are extensively grown are the West Coast Tall and East Coast Tall. The dwarf variety is shorter in stature and its life span is short as compared to the tall. Tall x Dwarf (TxD), Dwarf x Tall (DxT) are the two important hybrids.

There are 10 different combination of hybrids, developed by Kerala Agriculture University and Tamil Nadu Agriculture University and released for commercial cultivation. They are high yielders under the good management conditions. Laccadive Ordinary, Andaman Ordinary, Philippines, Java, Cochin-China, Kappadam etc. are the other tall cultivars under cultivation. The coconut seedlings are raised from selected seednuts from a high vigour mother palm. Seedlings are planted at a spacing of 7.5 x 7.5 m usually in the beginning of south-west monsoon.

Manuring is done yearly and the palms require more potassium for optimum growth. Basin and drip irrigation are practiced in case of irrigated cultivation. Mostly they are grown as rainfed crops. Coconut is a best crop that can be used for intercropping there by increasing the income of farmer.

Pest and diseases are common for the palm like white fly attack, root wilt, Tanjore wilt, Rhinoceros and red palm beetle attack, which can be managed by integrated pest management.

Value Addition in Coconut; Aim and Scope

Kerala is the state which is cultivating coconut as a major crop. So as a new entrepreneur, he can obtain the inputs easily as we have a good amount of production of coconut. Major production of our state is used in domestic purpose. Also, the chances of exporting are high if the value addition is done. Coconut development board allows support for different ventures with coconut which is also helps the enterprises to flourish. CPCRI, Kasaragod is developing new technologies in value addition which are also strengthen the coconut-based enterprises. Coir industry is dependent over the coconut ventures are also a supportive firm. The timely and needful supply of products can ensure good market. Modern people considered to be use desiccated coconut instead of grated coconut. Use of readymade coconut milk and powder is also increasing. New enterprises such as coconut flavoured milk is also flourishing nowadays. The best benefit from coconut-based enterprises are the by products are also useful in one or other way so, the entrepreneur can assure zero wastage from his firm. The recycling of the products and by products increases the feasibility of the enterprises and the outcome is also grow more than entrepreneur can expect. Except spoilage issues, coconut is safe to manage and store in large godown and rooms and does not need sophisticated storage conditions before processing.

Based on the part which is used for the processing, the coconut value added products can be classified into these categories

1. Kernel Based Coconut Products
2. Coconut Water based Products
3. Coconut Inflorescence Based Food Products
4. Coconut Shell Based Products
6. Other processed products