



Coconut + Cocoa+ Nutmeg cropping system at the foot hills of Western Ghats - Success story

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Coconut is one of the important horticultural crops which has a significant bearing on the livelihood security of millions of small and marginal farmers of the country and particularly in Tamil Nadu wherein it contributes 21% of the national production. Coconut cultivation spreads over an area of 85,832 ha in Coimbatore and the 'coconut city' Pollachi contributes 25,225 ha. across 96 villages. The versatile crop, coconut frequently hits the headlines of mass media because of multitude of challenges viz., fluctuating price of copra, outbreak of devastating pests and diseases and large stock of senile palms etc. Compared to other leading coconut producers of the country, the average national productivity of coconut monocropping system is slowly declining over the years mainly because of the deteriorating soil condition of the gardens and practice of imbalanced fertilization.

A large portion of the area under coconut cultivation, representing over 20% of the available arable land may be used for increase the productive



capacity of existing cultivated land with either a single selected intercrop or several intercrops in a multi-storey cropping system, arranged based on a logical and practical manner. With coconut as the tallest crop in this Coconut Based Farming System(CBFS) practice, the selected intercrops are planned in the same piece of land considering the full heights and canopy expanse of each intercrop in achieving productivity and profitability during the long-term cropping period and hence coconut based intercropping system became the need of the hour.

In Pollachi area, there are many innovative farmers involved in scientific cultivation of the crop. One of the innovative progressive farmers, Mr. OVR Somasundaram of Odayakulam village, interestingly adopted the technical resources of coconut intercropping system after seeing the coconut based cropping system model from different coconut research centres across the world and particularly from Coconut Research Station, AICRP (Palms) centre, Aliyarnagar and coconut based



Hindi Fortnight 2018



The valedictory function of Hindi Fortnight 2018 of CDB was held on 16th October 2018 at Board's headquarters at Kochi. Dr.Raju Narayana Swami IAS, Chairman,CDB chaired the function and Shri. Kumar Pal Sharma, Deputy Director(Implementation), Regional Implementation Office, Kakknad was the chief guest of the programme. Dr.Raju Narayana Swami IAS distributed cash prize and certificates to the winners of the Hindi Essay competition held for the students and Hindi teachers in Ernakulam District. Prizes were also distributed to the winners of the Hindi competitions conducted for the officers and staff of the Board and their children.

cropping system model at CPCRI, Kasaragod. He has planted coconut at a spacing of 29 feet (8.8m) to accommodate intercrops viz., cocoa and nutmeg. The moderate climatic conditions of the region, availability of water for irrigation throughout the year, annual rainfall of 1200 – 1300 mm in southwest and north east monsoons and humidity range of 70-85% favoured intercropping in coconut.

The farmer initially started intercropping venture with cocoa which fitted well in the coconut plantation without exacting an independent climate of its own. Cocoa cultivation, as an intercrop with coconut and arecanut seems to be expanding at a faster rate. The farmer witnessed an array of benefits due to cocoa intercropping viz., controlled weed growth, improved soil fertility status due to addition of leaf litter and an improved ecology of the farm due to the movement of pollinators and insects. The farmer also observed an invisible positive impact on palm yield. The additional income accrued from cocoa intercropping motivated Mr.OVR Somasundaram to venture other spice intercrops like nutmeg. Cocoa planted in intra-row spacing of coconut with spacing of 7.5m x 3m whereas, inter-row spacing utilized by nutmeg planting with 7.5m x 7.5m. His farm planting pattern is coconut- nutmeg in the ratio of 1:1 and coconut – cocoa in the ratio of 1:2. Each nutmeg is planted at the centre of four coconut palms. He followed the recommended cultivation practices in training, pruning, irrigation and nutrient management. He scrupulously applied biofertilizers and biocontrol

agents to enrich soil microflora. To meet the nutrient demands of the crop, the farmer adopted fertigation technology with water soluble fertilizers. He opined that mulching helps in maintain the soil moisture as well as to protect the raising soil temperature during summer and equally to keep the soil temperature warm during winter.

Farmers who have practised intercropping of cocoa with coconut have seen their incomes double with net income of about Rs.3,75,000/- per hectare obtained per annum through coconut based intercropping system. The average nut yield from coconut was 150-200 Nuts/palm/year and 1-1.3kg of beans from per cocoa tree. The intercropping of nutmeg yielded 1000 fruits from 7th year onwards. He has realised that the per tree yield of coconut is far better than the monocropped garden, and hence the per unit area production also increased remarkably.

At present, many farmers are adopting the cocoa based intercropped system in this region. Thanks to the efforts taken by Mondelez India Foods Ltd., (formerly Cadbury India) towards the promotion and popularising of the system among the coconut farmers. Now there is assured inputs supply technology flow and buy back policy for the produce with assured income. ■

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