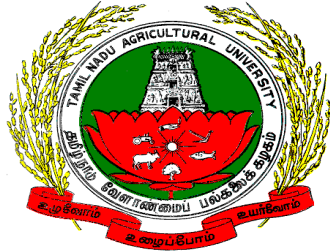


TAMILNADU AGRICULTURAL UNIVERSITY

COIMBATORE-641 003



RAWE-RURAL AGRICULTURAL WORKING EXPERIENCE (0+6)

ANAMALAI BLOCK

PAPAYA AS INTERCROP IN COCONUT

“Where all think alike, there is little danger of innovation”

Name : **Parthasarathi Kannan**
Age : 33
Qualification : M.Sc (Psychology)
Village : Vaazhaikombu
Taluk : Pollachi
Family members : Wife and two sons



Parthasarathy Kannan, is an emerging coconut farmer having his farm at Vaazhaikombu. He has about 20 years of experience in farming starting his tenure from 1995. He has a holding of about 40 acres of land with coconut as the main crop of those tender coconut varieties constitute about 16 acres and the rest are tall varieties and hybrid varieties. The tall \times dwarf hybrids were purchased from Deejay farms, Madurai at a cost of Rs. 350/ sapling. He has provided spacing of about 26 \times 26 ft for the coconut plants.

Intercrops:

Papaya, cocoa, banana are the crops planted as intercrops with the main crop coconut. Of these

- Cocoa - 3 acres
- Banana - 4 acres
- Papaya - 2 acres

Papaya as an intercrop:

The farmer had planted papaya just as a trial to test the complementary effect of papaya with the main crop and also its yield. He had no idea that this method would bring him success in yield of both inter as well as the main crop. He believes that the roots of papaya has certain modifications which fix and mobilise N₂ for the main crop.



Earlier in the place of papaya, he had planted banana (Sevvazhai) as the intercrop. After cutting down the crop he prepared the land using rotovator three times within the field. The papaya seeds of variety red lady were purchased from a private company at Pollachi at a rate of Rs.2300 per 10 gram of seeds. Selection of varieties is indispensable in case of cultivation of papaya. The success lies in the selecting the variety which goes well in the market.

RED LADY:

Variety red lady has the duration of about 2 years. Early vigorous, high yielding and potential yield of 120 tons/ha in 2 years productive life cycle. One tree can produce 50 to 120 fruits with average fruit weight of 1.5 to 2kg/fruit. Semi-dwarf begins to bear fruit at 50-80 cm. Excellent fruit quality, thick, firm, red flesh, aromatic, very sweet with

13-14% sugar content. Female plants produce short oblong fruits while bi-sexual or hermaphrodites are elongated. Highly tolerant to papaya ring spot virus. Early maturing harvestable at 8 to 9 months from sowing.



The seeds were treated with a chemical which breaks dormancy and aids in germination. The seeds were planted in nursery at a seed rate of about 500g/acre. The nursery material includes coir pith, FYM, red soil at a ratio of 1:2:1. They were provided with water weekly once since there was surplus rainfall at the time. He sowed the seeds last year at the month of July. The seedlings were then transplanted to the main field after 40-45 days at the spacing of about 8*8 feet.

He provides fertilizer dose of about 50g(urea):65g(SSP):100g(MOP)/tree and 20g of micronutrient mixture at monthly interval. Most importantly he uses PANCHAKAVYA as a weapon of resistance against the major pests and diseases incidence. Incidence of papaya mealy bug was observed by him at the initial stage of flowering. But application of PANCHAKAVYA provided great endurance against the pests.

PANCHAKAVYA:

PANCHAKAVYA has the potential to play the role of promoting growth and providing immunity to the plants.

**Components:**

- Cowdung
- Cow Urine
- Milk
- Curd
- Jaggery

- Ghee
- Banana
- Tender Coconut Water
- Water

The farmer has no definite proportion for mixing the components of PANCHAKAVYA. Once during the first fruit formation, delayed harvest of the fruits led

to spoilage of the fruits and he lost about 10 tons of them. This was when he got the idea of preparing PANCHAKAVYA by utilizing the rotten papaya fruits as one of the major components. This mixture is sprayed at a rate of 3g/100 ml of water. He feels that spraying PANCHAKAVYA has great effect on resisting pests and diseases and enhancement of the glabrous nature of the fruits. He also procures PANCHAKAVYA from local producers at a rate of Rs 100/litre. He prepares PANCHAKAVYA in drums and has to be stirred daily to prevent settling of the solids at the bottom.

The source of irrigation is a well at the center of the far. He has installed micro irrigation {drip} for both the main as well as inter crops. Irrigation is provided once in 3 days with a 2mm pipe. It is an outline dripper. Owing to heavy temperature during summer season fruit formation is hampered.

Labour:

He has about 3 men working in his farm for monthly wages. He has engaged temporary female workers 3 times till now. 35 women were employed for weeding purposes at 140 Rs/6 hrs. 50 men were engaged twice with wages of 150 Rs/6hrs.

Yield :

He has achieved about 24 tonnes of fruits till now. He has observed yield of about 7 ton/acre.

Marketing :

Wholesale dealer themselves send labors for harvesting the fruits. He has customers from Coimbatore, Pollachi and Bangalore thereby limiting his efforts for harvesting the fruits. The fruits are sold at about 5000-10000 Rs/ton.

Advice to other farmers :

He recommends planting papaya as an intercrop with tall variety of coconut rather than banana as he feels that it has a complementary effect with the main crop. He feels that by planting papaya as an intercrop, the yield of coconut has increased to about 30% rather than planting other crops as intercrops or by planting coconut as a sole crop.

Future plan :

He has an idea of planting “Sinta” variety of papaya for the next season and also planting nutmeg and citrus plants as intercrops.

Our suggestions:

We have suggested soil and water tests for his fields as he is unaware of such techniques. We also recommended “coconut tonic” for coconut plants and also provided him with appropriate details.