

Coconut Tree Climbing Equipment

Boon to Rural People for Year-round Income and Employment - Case Study

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Coconut (*Cocos nucifera* L.) is the most valuable gift of nature to humankind and is commonly known as KALPAVRUKSHA, which fulfills many vital human needs. It is unique among horticultural crops as a source of food, drink, shelter, fiber, medicine and a variety of raw materials for industrial use. The coconut tree grows upto a height of 30 meters depending upon the variety. The tall coconut trees had become bane to harvest coconut at right time due to paucity of climbers. The physical strain and occupational risk involved in climbing had prevented people (especially women) from climbing coconut trees. Further, the delay in harvest of mature coconuts has increased the theft of fallen nuts from the orchard which reduces the income of the farmers. People from rural areas are migrating towards cities for job and other livelihood which has lead to the dearth of persons in coconut harvesting. Coconut Development Board has introduced a programme called FoCT for extending training in coconut harvesting with the help of a climbing equipment. By attending this training programme many people have sustained their livelihood and has chosen coconut tree climbing as a profession. In this connection, here is an example of a person from Mandya taluk who took coconut tree climbing as a profession for his livelihood.

Rajanna, aged about 62 years residing in Keragodu Hobali of Mandya taluk is climbing coconut tree as a profession since 14 years. He is familiar as a coconut tree climber in several villages which are surrounded by Keragodu namely, Ankannana Doddi, Bokkegowdana Doddi, Kalmanti Doddi, Kod iDoddi, Maralingana Doddi, Panchegowdana Doddi, Siddegowdana Doddi and Taalelemele Doddi. He is popularly called as Coconut Rajanna (Tenginakaayi Rajanna in Kannada) by the people and they contact him over phone for harvesting of coconuts. Usually, Rajanna is taking two to three days to harvest the

nuts, as he is busy in attending harvesting of nuts every day without any gap.

Before using the climbing equipment, Rajanna could climb only 17 coconut trees in a single day due to the physical strain involved during climbing at this his age. Further, he could climb for about 20 days in a month due to small injuries which would occur during climbing. The average charge for climbing a tree ranges from Rs.25 to 30 depending on the height of the tree. Thus he could earn an annual income of Rs. 1,02,000 (table 1).

During 2019, Rajanna purchased coconut tree climbing equipment for Rs. 4600. Initially, he could climb only 23 to 25 coconut trees per day but later on with practice he was able to climb 39 trees. This was made possible by using the coconut tree climbing equipment. As the equipment requires less physical strain to climb the tree, the annual employment days was gradually increased from 240 days to 288 days with an improvement of 20 percent. Therefore, the overall annual income from climbing coconut tree was increased from Rs.1,02,000 to Rs. 2,80,800 with an increase of 175 percent (table 1). Rajanna also acts as a village level trader who purchase mature nuts from farmers and sell to the whole saler with the minimal margin of Rs. 2 per kg of coconut.

Particulars	Harvesting of coconuts through manual climbing method	Harvesting of coconuts through coconut climbing equipment	% increase
No. of coconut trees climbed and harvesting nuts in a single day	17	39	129.41
Charges for climbing and harvesting of nuts (Rs./ tree)	25	25	-
Average Annual Employment days of climbing coconut trees	240	288	20.00
Annual Income	1,02,000	2,80,800	175.29

The major problems faced by the coconut tree climber is presented in Table 2. Presently, Rajanna is using wired equipment for climbing coconut trees. Though he was aware of advanced climbing equipments, he could not afford to purchase the



equipment due to high cost. Further, he was facing difficulties while climbing straight trees. Not insured for occupational risk during climbing the tree and need to change iron wire for about 6 to 8 months which requires huge cost were the other major problems faced by Rajanna.

Table 2: Major problems opined by the coconut climber

Sl. No.	Problems	Ranking
1	Not upgraded to the advanced climbing equipment due to high cost	I
2	Found difficulty and slippery while climbing straight trees	II
3	Not insured for occupational risk during climbing the tree	III
4	Need to change iron wire for about 6 to 8 months which requires huge cost	IV

The adoption of coconut tree climbing equipment has shown positive impact in the income and employment of the coconut tree climber. The equipment also help to reduce the physical strain and injuries which reduce the health cost of the tree climber. Further, coconut tree climbing efficiency has enhanced and thereby an increased income and year round employment is ensured. Coconut Development Board is taking necessary steps to conduct training programmes for rural unemployed youths in climbing in major coconut growing areas in Karnataka. The subsidy benefits and insurance coverage for coconut climbers may be popularized, so that more youths are attracted and choose coconut tree climbing as a profession.

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