

Chapter 1

INTRODUCTION

In olden days most of the activities were done manually. Gradually many big and small equipments were developed to ease human activities, thus to lessen the human efforts to do the things. Nowadays most of the activities which include human efforts are either replaced or automated by the use of machines or other kind of equipments. As India is in a transitional state in terms of the economic profile, an occupational research approach would balance the understanding of the modern industrial exposures and the traditional sectors and their methods in agriculture and plantations. One such approach is being given in the area of Cultivation and Harvesting of Coconuts.

Coconut Development Board has been set up on 12th January 1981 by the Government of India with the mandate of integrated development of coconut in the country. Technology Mission on Coconut is being implemented by the Board to integrate various on-going Govt. Programmes and to ensure adequate, appropriate, timely and concurrent attention to all the links in the production, post harvest and consumption of coconut. The Board's schemes are either implemented directly or through the department of Agriculture/Horticulture of the states. Financial institutions have also formulated coconut financing schemes in potential areas both for fresh coconut planting and intensive cultivation. Integrated coconut development schemes with farm infrastructure facilities like well, pump set, fencing, drip irrigation system etc. have also been considered. For coconut based industries, support is also given by the banks for setting up new units which are also backed by the Coconut Development Board by way of subsidy.

Coconut plantation being one of the major agricultural activities in the southern part of India, a better study and development of equipments for the ease of harvesting are required. In case of these trees, the height and absence of branches makes it very difficult to

climb on them. The regular plucking of coconuts and spraying of pesticides to coconut trees, which is done manually to a large extent, requires specialized labor. The trees are scaled through a series of upward hops along the vertical face of the tree trunk. This activity is traditionally carried out by the socio-economically backward communities, where men are trained in the art of climbing trees rapidly and plucking the coconuts or spraying pesticides. These communities are distributed wherever coconut trees are cultivated in large numbers as coconut plantations.

A professional climber with proper training only could be able to climb the coconut tree. Due to the risk involved, nowadays very less people are coming forward to climb the coconut trees. Due to lack of professional climbers, the existing professional climbers may charge more from the owners, moreover as the educational background of Indian youth is increasing, many people may hesitate to come in this type of profession.

Considering this scenario, a device which will help the user to climb coconut tree easily will be useful for the people who are having large coconut cultivation as well as residents with less coconut trees. This kind of devices will encourage more people to come forward to agricultural sector.

1.1 OBJECTIVES OF PROJECT :

- The idea is to make a device which does not use Electrical energy but a device completely depending on mechanical linkages.
- Provide an alternative to the existing methods of climbing.
- To tackle the problem of unavailability of coconut tree climbers for coconut farming and plant protection activities.