# PROFILE ANALYSIS OF COCONUT CLIMBERS IN THIRUVANANTHAPURAM DISTRICT

By

**SAKEER HUSAIN. A.**

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SAKEER HUSAIN. A

## DECLARATION

I hereby declare that this thesis entitled "Profile Analysis of Coconut Climbers in Thiruvananthapuram District" is a bonafide record of research work done by me during the course of research and that the thesis has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar title, of any other University or Society.

Vellayani,
-7-1994.

SAKEER HUSAIN. A

## CERTIFICATE

Certified that this thesis entitled "**Profile Analysis of Coconut Climbers in Thiruvananthapuram District**" is a record of research work done independently by **Shri. SAKEER HUSAIN.** A under my guidance and supervision and that it has not previously formed the basis for the award of any degree, fellowship or associateship to him.

Vellayani
25-7-1994

Dr. S. SHILAJA,
Chairman,
Advisory Committee.
Associate Professor,
Dept. of Ag. Extension
College of Agriculture
Vellayani.

APPROVED BY

*CHAIRMAN*

Dr. S. SHILAJA

*MEMBERS*

Dr. G.T. NAIR

Dr. G. SOBHANA

Dr. P. SARASWATHY

*External Examiner*

M. ANANTHARAMAN

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INTRODUCTION

# INTRODUCTION

The agriculturist has rightly been regarded as the lynchpin of the whole social chariot. With over 70 per cent of the Indian population engaged in agriculture and allied activities, the importance of agriculture can not be over emphasised. The progress of our country depends mainly on the progress of agricultural development. Agriculture was, is and will continue to be the back bone of our economy.

The Father of nation, Gandhiji once said, "Farmers and workers.... make India. Their poverty is India's cure and crime. Their prosperity alone can make India a country fit to live in". This is so apt because, along with farmers labourers play a significant role in agricultural production and thereby in national development.

Among the very many factors which influence any production function, labour is regarded as the most important one. As Prokopenko (1987) rightly puts it, "formal analysis of basic productivity factors such as input, output, labour,

capital, technology and motivation reveals that more than half of these factors are concerned with quality of labour force". Thus any attempt with an objective to augment productivity cannot, in any condition, ignore the significance of labour. Actually, there lies the importance of agricultural labourers.

The labour sector of the economy needs more attention and careful study, even more attention than what is given to industry and banking. It is because the quantity and quality of labour become both a cause and effect of economic development. The relevance of the labour in economic development is yet to be fully realised, specially when planners and policymakers are emphasising physical balances, and investment on human resources and when there exist immense opportunities for converting labour into capital. We need a theory of production and accumulation of technical knowledge that leads to economic development via higher productivity. The results naturally should improve the working and living conditions of labour. This outlook is based on the recognition of needs of the worker as a human being and not merely as a tool or means of production.

Upliftment of agricultural labourers has to be one of the paramount concerns of our planners and administrators. Planning and development programmes on labour and labour welfare undertaken so far have touched mainly the workers in the organised / formal sector of employment. According to the data available, 85 per cent of the working people in Kerala belong to the unorganised / informal sector and nearly 50 lakhs among them are wage-labourers, which include agricultural labourers also. (Government of Kerala, 1991) In Kerala, there are about 21.03 lakh agricultural labourers accounting 25.66 per cent of the total workers in the state, as per census, 1991.

Earlier, studies in development have mostly been conducted by economists, sociologists and anthropologists and their focus has been economic inputs, technological transformations and social and institutional variables. But later, the vital role played by certain kinds of motivation in economic development has been conclusively demonstrated, and psychologists have begun to investigate the role of certain motivational and attitudinal variables as facilitators and inhibitors in development. In these contexts, it is worthwhile to know the personal, economic and

socio-psychological charecterists of each and every section of agricultural labourers which, in turn, may be used for devising suitable strategy for effective implementation of welfare programmes. The present study is an attempt in this direction.

Coconut is the most important cashcrop grown in Kerala. The economy of Kerala is intertwined inextricably with the coconut crop. It is grown in an area of 8.75 lakh hectares with an annual production of 4349 million nuts (Farm Information Bureau, 1991). In many practices related to the cultivation of this crop such as plant protection, cleaning, harvesting etc., coconut climbers play a vital role. Thus in the managment of the coconut crop, this sector of agricultural labourers is a sina-qua-non.

The present study was undertaken with the main objective of developing a comprehensive understanding of the socio-psychological and economic profile of agricultural labourers engaged in coconut climbing in Thiruvananthapuram district and to study the constraints experienced by them with a view to suggest measures, if any, for the welfare of this section.

It was with these aims, the following specific objectives of the study have been set.

1. To assess the availability of labour for coconut climbing, as perceived by the coconut farmers.

2. To analyse the socio-phychological and economic profile of agricultural labourers engaged in coconut climbing.

3. To study the employment and wage patterns of coconut climbers.

4. To identify the constraints experienced by the coconut climbers with a view to suggest welfare measures, if any.

**Need for the study**

The major problem faced by the coconut growers of Kerala is the non-availability of labourers for timely harvest and plant protection measures related to the crop. It still remains a paradox that, in the rural Kerala, there is wide spread non-availability of the coconut climbers due to various reasons. Research studies on various aspects of this enterprise are yet to come by. Hence, it becomes

essential to know the profile of coconut climbers as well as the constraints experienced by them as coconut climbers, with a view to suggest welfare measures, if any. The present study assures topical and practical importance in that, it purports to generate valuable informations on many aspects related to this specific group of agricultural labourers.

*Scope of* the study

The findings of this study, like other scientific and systematic studies, would provide an insight into the subject. It is hoped that the study would be of immense use to the planners and administrators in devising suitable strategy for effective implementation of the welfare schemes for agricultural labourers engaged in coconut climbing. Moreover, standardisation of measuring devices to quantify the variables in the study would be useful contributions to the body of Agricultural Extension Research. The study assures added significance in view of the fact that this is going to be the first ever research effort in this area. There is ample scope for continuing the study in other related aspects and angles, in future.

## Limitations of the study

The study was undertaken by a single researcher as a part of the requirement of P.G. programme and hence, the limited time and resources restricted the exploration of the area in a greater depth and in a more comprehensive manner. Consequently the researcher was unable to operate the study in all parts of the State. This limitation has narrowed down the scope of generalising the results. Since the study was based on the expressed opinion of the respondents, it may or may not be free from their individual biases and prejudices. Moreover, a study of this kind has not been undertaken in the field of agricultural labour so far. So there was dearth of relevant findings which could give guidance to the researcher.

No human effort is free from limitations. This study is no exception. However, sincere attempts have been made to accomplish the objectives, and utmost care has been taken to make the study as objective as possible.


THEORETICAL ORIENTATION

# CHAPTER II

## THEORETICAL ORIENTATION

In this chapter an attempt is made to give an orientation to the concepts pertaining to the study and to link whatever research findings that exist in the area of study with the research problem. For the same, a probe into the past research studies have been attempted. This helps to give a proper orientation to the study and also to locate the problem on a theoretical perspective. The literature that appeared relevant is presented under the following heads

2.1 Concept of coconut climber.

2.2 Perception of coconut farmers.

2.3 Profile of coconut climbers.

2.4 Employment and wage pattern of coconut climbers.

2.5 Constraints experienced by coconut climbers.

## 2.1 Concept of coconut climber

Coconut climbers is a section of agricultural labourers. Agricultural labourer has been defined by various authors. Government of India (1969) defined agricultural labourer as one who is basically unskilled and unorganised and has nothing but physical labour to exist.

According to Singh and Singhal (1969) agricultural labourer is a person, who for more than half of the total number of days on which he actually worked during the year, worked as an agricultural labourer.

Government of Kerala (1976) defined agricultural labourer as a person, who in consideration of the wages payable to him by a landowner, works on, or does any other agricultural operation in relation to the agricultural land of such land owner.

According to the Census of India (1981) 'a person who works in another person's land for wages in money, kind or share is an agricultural labourer.

Coconut climbers are agricultural labourers who do various works requiring coconut climbing such as harvesting of coconuts, cleaning the palm, supporting the bunches, application of plant protection chemicals, covering the stem of the palm with coconut fronds, thorns and similar materials etc. They do these works for wages in money or in other forms.

## 2.2 Perception of coconut farmers

### 2.2.1 Perception

According to Young (1957) perception refers to the activity of sensing, interpreting and appreciating objects both physical and social. Perception also involves past experience or meaning. Moreover, perception is related to motivation or needs. What we see or hear will be partly determined by the particular motive or drive at the moment, as well as by what we have learned about this particular object or situation.

Bhatia (1967) says that perception is the true beginning of knowledge. Sensations provide the raw material which perception elaborates into a definite knowledge of the

external world, of the attributes and relations of objects around us. We sense the physical world; we perceive what it means. Perception is sensation plus meaning. An element of thought, memory, learning, past experience and motivation enters into perception. It gives knowledge and information about the external world.

Mitchel (1978) stated that perception is that factor that shapes and produces what we actually experience.

Seema (1986) defined perception as the awareness of objects, consciousness and is generally concerned with that which interests an individual.

### 2.2.2 Perception of coconut farmers

In this study, perception is the past experience of coconut farmers regarding the availability of coconut climbers for doing various operations requiring coconut climbing.

Padmanabhan (1981) reported that 43.3 per cent of the farmers were of the opinion that labour availability was just sufficient to satisfy the requirement while 56.7 per

cent of the farmers considered that labour availability was much less than the requirement. Not a single farmer was of the opinion that labour availability was much more than the requirement.

Jhamtani and Singh (1989) concluded that there was definite and real difference in the perception of existing environment amongst the functionaries of the department.

## 2.3 Profile of Coconut Climbers

Profile of coconut climbers have been studied taking into account their personal, economic, social, psychological and extension communication factors. Since this is a pioneer attempt in this area, no study is available in this regard. So related studies were reviewed.

### 2.3.1 Personal variables

#### 2.3.1.1 Age

According to Sharma and Singh (1970), women belonging to middle age group, participated in farm operations in large proportions than others.

Deepali (1979) found that lower age group of respondents were in high participation score range in agricultural operations than other groups.

Padmanabhan (1981) in his study observed that 40 per cent of the men labourers belonged to the age group of 25 to 40 years while 50 per cent of the men labourers were in the age group of 41 to 55. When 10 per cent of the men labourers were above 55 years of age, there was not a single labourer in the category below 25 years of age.

Halim (1984) established that about 49 per cent of the women labourers belonged to the age group of 30-39 years. The minimum and maximum age limit of the hired labourers were 10 and 49 years respectively.

Ingle and Dharmadhikarj (1987) reported that relatively higher proportion of female labourers were below 30 years of age (40 per cent). The labourers below 40 years of age were 75.56 per cent.

Kanwar and Koranne (1989) stated that women working in agriculture fall in the age-group of 21 to 35 years of age.

Shilaja (1990) in her study on farm women found that agricultural labourers have a mean age of 38 years.

2.3.1.2 Caste

Jena (1957) stated that agricultural wage earners are mostly drawn from backward classes.

Mukherjee (1957) established that the scheduled castes top the list of agricultural labour families forming about 70 per cent.

Tea Board (1962) revealed that almost all the plantation labourers in this territory are Hindus, only one out of the 75 families investigated was found to be christian.

Sharma and Singh (1970) observed that women belonging to low caste participated in farm operations more than others.

Indian school of Social Science (1976) established that 95 per cent of the bonded labour families belong to lower castes.

Deepali (1979) stated that there was significant difference in participation between two caste groups scheduled and non-scheduled; the scheduled caste group respondents have participated more in agricultural activities.

Padmanabhan (1981) in his study observed that all the respondent labourers belonged to scheduled caste.

Dak et al. (1986) revealed that the contribution of higher caste women in agriculture was significantly lower than that of lower caste women.

Ingle and Dharmadhikarj (1987) found that majority of the female labourers belonged to scheduled caste.

Singh and Verma (1987) reported that majority of child workers (52.9%) have been drawn from the scheduled castes, with 33.26 per cent from high castes and 3.12 per cent from backward castes. The remaining 11.84 per cent have been constituted by tribals.

Kaur and Sharma (1988) in their study reported that in Haryana, women of all castes were working in agriculture, the highest being in lower castes (83.6 per cent) followed by scheduled castes (81.6 per cent), middle castes (81 per cent) and upper castes (58.6 per cent).

Ramachandran (1990) revealed that out of the 164 scheduled caste households in 1977, constituting more than a quarter of all house holds in the village, 125 households (76 per cent) were agricultural labour households. That is, scheduled castes are concentrated among the hard-labouring sections of the population, particularly among agricultural labourers.

Shilaja (1990) in her study depicts that majority of the female labourers were from scheduled castes.

2.3.1.3 Family type

Sharma and Singh (1970) found out that the type of the family is not a descriminating factor in participation of women in farm operations.

Kumar (1982) revealed that joint family system is not prevalent among agricultural labourers.

Singh and Verma (1987) reported that an overwhelming majority (61.6 per cent) of the childworkers have been drawn from joint families, with remaining 38.4 per cent from nuclear ones.

Shilaja (1990) found that women agricultural labourers were having nuclear families.

2.3.1.4 Family size

Tea Board (1962) found that families with 3 members constituted (29.3 per cent) of the sample, followed by two member families (18.6 per cent). The average size of labour family was 4.01.

Deepali (1979) in her study revealed that small families were having high participation score when compared to big families.

Kumar (1982) observed that the sample households of agricultural labourers were of small family.

Halim (1984) found that the average family size of women labourers in Bangladesh villages was 5.06 which is below the national average. Fifty two per cent families had 5 to 7 members and 39 per cent had 1 to 4 members. The rest of the families had 8 to 10 members.

Saibaba (1984) depicted that more than 74 per cent of workers had large size families with more than 6 members. On an average, the size of the worker family consists of 5 adults and 4 children.

Ingle and Dharmadhikarj (1987) reported that 90 per cent of the female labourers had family members upto 5 only out of which 40 per cent with 1 to 3 members and 50 per cent with 4 to 5 family members.

Ramachandran (1990) reported that the average size of the family among agricultural labour households were 4.6 persons and among landless agricultural labourers were 4.48 persons.

2.3.1.5 Family educational status

Tea Board (1962) opined that although education is gradually spreading among the plantation workers, it is curious that there is a gradual reduction in the literacy percentage with increase in age. Although an increasing trend in the percentage of literacy is observed among the younger section of the population yet the overall literacy position among plantation workers remain quite low and needs considerable improvement. Only 23.2 per cent of children are attending schools and none of the adolescents are attending any school.

Mosher (1965) indicated that education of farm people is an accelerator for agricultural development.

Choudhary (1969) pointed out that agricultural productivity was related to the education of farm workers.

Holmstrom (1978) found that half the workers in the random sample had a senior school leaving certificate, three quarters reached high school and a quarter have some formal technical qualification.

Deepali (1979) observed that illiterate group were in high participation score range in contrast to other group. She also observed that low family education profile group of respondents were in high participation score range.

Padmanabhan (1981) in his study revealed that majority of the respondent labourers were illiterates.

Dak et al. (1986) stated a significant influence of higher family education on all agricultural activities except tending cattle which was performed both by more educated and less educated alike.

Ingle and Dharmadhikarj (1987) found that majority of the respondent female labourers were illiterates.

Singh and Verma (1987) pointed out that 35.6 per cent of the child workers have never been to any school and 19.4 per cent have discontinued their education and only the remaining 45 per cent have been going to school. Among those who have continued their studies despite various types of heavy odds, majority of the child workers (58.22%) have been in the category of educational status titled 'upto V class'.

Kaur and Sharma (1988) observed that 83 per cent of women workers were illiterate. The number decreased to 11.6 per cent as literacy increased to matriculation level and above.

Kanwar and Koranne (1989) reported that 45.35 per cent of working females were uneducated and 34.64% took education only upto primary school level.

Ramachandran (1990) reported that his study in Tamilnadu revealed that literacy among agricultural labourers was considerably lower (36 per cent).

Shilaja (1990) in her study revealed that majority of the women agricultural labourers were able to read only.

2.3.1.6 Farm size

Mukherjee (1957) in his study concluded that only 10 households out of 251 agricultural labour households (4 per cent) own land. But there are as many as 47 households who cultivate land either as owners or tenants.

Deepali (1979) found that majority of the respondents (55.53 per cent) were in small land holding group.

Panicker (1979) opined that majority of the agricultural labourer households are landlesss except for the small area around their huts ranging from 2 to 10 cents.

Rudra (1982) reported that in West Bengal, the land-less constituted less than 25 per cent of the agricultural labour households.

Chauhan (1983) revealed that 75 per cent of the agricultural labour households owned less than 1.5 acres.

Halim (1984) described that about 70 per cent of women labourers in Bangladesh villages possessed a homestead land of their own, 27 per cent families had neither any cultivable land nor any homestead area. The rest 3 per cent did have some cultivable land in addition to homestead area.

Nancharaiah (1989) reported that out of 248 total households, 93 were landless households, majority being the scheduled caste agricultural labourers in Andhra pradesh.

Ramachandran (1990) found out that of the agricultural labourers 81 per cent were completely landless.

Shilaja (1990) in her study observed that the average farmsize of the women agricultural labourers was 0.23 acres.

2.3.1.7 Housing facilities

Tea Board (1962) described that all the 75 labour families surveyed were found to be living in Kutcha mud built houses. Provision of the 'standard house' to the labourers as envisaged in the Plantation Labour Act still remains a far cry. Majority of the labour families have been provided with single roomed quarters having no verandah.

Singh and Singhal (1969) reported that the housing conditions of agricultural labourers are diplorable. Their houses are the worst in the villages. They do not have their own land to construct their own houses and always remain at the mercy of the landowners for small house sites.

Menon (1972) observed that in Kerala, most of the low class people were agricultural labourers and they lived in small huts by the side of their high caste masters.

Saibaba (1984) depicts that of the total number of houses provided to the labourers, about 94.2 per cent consisted of one room tenements, 4.7 per cent two room tenements and the remaining 1.1 per cent had three rooms or more. About 94 per cent of the houses are not having electric lighting facilities and the construction was temporary or kutcha ie. thatched houses without walls.

2.3.1.8 Experience

Chambers' English Dictionary (1972) explained experience as practical acquaintance with any matter gained by trial or wisdom.

Padmanabhan (1981) in his study observed that majority of the respondent male labourers had farming experience of about 10-30 years.

Shilaja (1990) observed in her study that majority of women agricultural labourers were having farming experience ranging from 20-23 years.

2.3.1.9 Occupational mobility

Mukherjee (1957) revealed that the earners in the agricultural labour households take to other work as well, besides agricultural labour. On an average, 15 per cent of the total number of earners take to other work.

Srinivasan (1957) stated that there was a movement of surplus labour outside the respective villages during transplanting, weeding and harvesting seasons.

Muthiah (1970) concluded that the phenomenon of employing labour from far off places was quite peculiar to the district under study. Over the years, this system had been so perfected that the outside labour could move from one village to another in a systematic and planned manner and find work for a few months before they returned to their villages. Further every group of outside labour has a set of villages and farmers for whom they work regularly year after year.

Holmstrom (1978) in his study found out that 27 per cent of the workers in the random sample and 36 per cent of

the case study sample were migrated to Mysore from other south Indian states.

Punekar et al. (1988) opined that the mobility of labour in India is rather high in the sense that there is high rate of change in the working staff in any particular field.

### 2.3.2 Economic variables

#### 2.3.2.1 Annual income

Tea Board (1962) gave the information that the average weekly income of plantation labour family registers a rise from Rs.8.24 to Rs.34.19 between the lowest and highest expenditure levels. Considering all families in all expenditure levels, the average weekly income of a labour family comes to Rs.16.67.

Nath (1976) reported that a qualified skilled worker gets Rs.200 per month on an average in Poona industries.

Alexander (1980) reported that in no state other than Punjab will the agricultural labourer be able to have an earning above the poverty line at the prescribed minimum wage.

Halim and Mc Carthy (1983) observed that the daily income of the family of women labourers in the rice producing villages of Bangladesh was taka 21.99.

According to Saibaba (1984), the average monthly income of 'blaster' of the mining industry was Rs.200.00 and of 'driller' was Rs.165.00.

Singh and Verma (1987) revealed that the average income of the child workers had been Rs.730.32 which means Rs.60.86 per month.

Punekar et al. (1988) indicated that the minimum salary of the respondent workers was around Rs.300 per month and maximum around Rs.850 per month. The average gross salary of the workers was calculated as Rs.406 per month.

Pawar et al. (1991) reported that in tribal areas the contribution of wage earnings to the total family income

was the highest (80.43 per cent) in case of land less labour families.

2.3.2.2 Family expenditure

Tea Board (1962) found out the average weekly expenditure of a plantation labour family as Rs.17.74. The bulk of the total expenditure is spent on food items, of which rice accounts for the lion's share.

According to Halim and Mc Carthy (1983), the daily family expenditure of the women labourers of rice producing villages of Bangladesh was taka 21.60.

Saibaba (1984) reported that the average monthly expenditure of 'blasters' of the mining industry of Andhrapradesh was Rs.280.00 and that of 'drillers' was Rs.234.00.

Singh and Verma (1987) revealed that the largest single group of child workers (45.07 per cent) had been spending money on fulfillment of basic needs and entertainment needs.

According to Giriappa (1990), low average income and high expenditure levels are common features among labourers engaged in fishing, cultivation of vegetables and in plantations.

2.3.2.3 Savings

Tea Board (1962) in a study found that only 28 per cent of the families made some savings. The extent of savings of an average family in a year works out as Rs.51.52 which is only 5.04 per cent of the total estimated annual income of this group of families.

Sabapathi (1988) observed that normally the tribal people do not save anything for the next day and have very poor planning.

2.3.2.4 Indebtedness

Tea Board (1962) revealed that 44 per cent of the families were indebted and the average debt per indebted family varied from Rs.13.68 to Rs.104.00 within the expenditure groups. On the whole, the average amount of debt

per indebted family was Rs.38.97 which is 233.77 per cent of an average family's weekly income or 53.95 per cent of its monthly income.

Pant (1965) opined that indebtedness will reduce the bargaining power and increases the labour supply from the family of the indebted workers.

Singh and Singhal (1969) pointed out that whenever the landowners are giving small house sites for agricultural labourers, the rents charged are very heavy which increases the agricultural labourer's indebtedness and reduces their standard of living.

Indian School of Social Science (1976) revealed that only 14.2 per cent of the families under study were free from debt and the rest were indebted.

Marla (1981) observed that the wages fixed and actually paid had been so low that the bonded labourer never gets the opportunity of repaying the debt completely to free himself from bondage.

Punekar et al. (1988) informed that of the total sixty workers, only two had no debts at all. Ten of them had odd debts here and there which could not be accounted for. Forty eight of them (80%) borrowed up to Rs.4000. Some of them had borrowed over and above this amount. The average debt of the industrial workers surveyed was found to be Rs.2264.00 which was around five and a half times their average monthly wages.

Sabapathi (1988) from his study among the 'Irulas' of 'Attappady' stated that indebtedness is a common phenomenon among the Irulas of Attappady. A person who has more indebtedness may find it difficult to pull on. Many such people work in their neighbour's farms as labourers.

Pawar et al. (1991) indicated that the expenditure exceeds the income in all labour families forcing them to borrow money from the money lenders.

### 2.3.3 Socio-psychological variables

#### 2.3.3.1 Political participation

Holmstrom (1978), in his study indicated that more than 90 per cent of the respondents were members of trade unions.

Padmanabhan (1981) reported that majority of the agricultural labourers were not members in labour unions. The few labourers who were members had only limited participation in labour union activities.

Saibaba (1984) found that there were no trade unions in more than 50 per cent mica mines. 44.9 per cent of mica mines in Andhrapradesh had trade unions. About 20 per cent of the workers had membership in the unions by 1975 ie., as many as 80 per cent workers are not members of any trade unions.

Punekar et al. (1988) depicts that a predominantly agricultural country cannot have a strong viable trade union movement, for trade unions are organised mainly by industrial workers. The trade union movement has not, as yet, reached either the peasant or the landless labourer in our country. Among non-agricultural workers, trade unions have progressed only in such sectors as large and medium industries, construction and transport. Workers in agriculture and small scale industries are difficult to organise.

Gowda et al. (1991) found that the respondent poultry farmers had comparatively very poor political participation.

Pushpangadan (1992) showed that literacy standard among labourers is comparatively higher in Kerala than other states and it has helped in faster spread of trade unionism among them.

2.3.3.2 Social participation

Sharma and Singh (1970) stated that social participation is not a discriminating factor in the extent of participation of women in farm operations.

Renukaradhya (1983) reported that majority of the trained farmers had high social participation.

Gowda (1988) reported that variation in ragi productivity of small and marginal farmers was influenced by social participation.

Shilaja (1990) observed that majority of the female agricultural labourers were having low social participation.

2.3.3.3 Cosmopolite orientation

Sumathy (1987) reported that majority of the respondent coffee growers were highly cosmopolite.

Sabapathi (1988) observed that those who are economically motivated may try to improve their farming practices by acquiring knowledge from localite or cosmopolite sources.

Shilaja (1990) in her study found that majority of the women agricultural labourers were having low cosmopolite orientation.

2.3.3.4 Economic motivation

Jayavelu (1980) in his study on cotton growers observed a positive and significant relationship of economic motivation with their attitude towards development programmes and improved practices.

Viju (1985) found that economic motivation had a significant positive relationship with attitude of tribal farmers towards farming.

Chandran (1989) reported a significant positive relationship of the economic motivation of pepper growers with their awareness and attitude towards development programmes and improved practices.

Shilaja (1990) inferred that majority of the women agricultural labourers were having low economic motivation.

2.3.3.5 Achievement motivation

Lowell (1952) proved that high need achievers should perform better than those with low scores.

Mc Clelland (1961) defined achievement motivation as a spontaneously expressed desire to do something well for its own sake, rather than to gain power or love, recognition and profit.

Durand (1975) stated that people with a need to achieve do perform better.

Singh and Kumar (1975) described that achievement motivation is conceived as a personality orientation which

impels the individual to strive for success for its own sake rather than in anticipation to concrete rewards. This does not mean that an achievement oriented person is indifferent to promised rewards, but these are only secondary to him. His main satisfaction seems to lie in the achievement itself. One can perhaps capture the essence of achievement motivation by the English proverb that "success is its own reward".

Janardhan (1979) and Kalavathi (1989) reported that achievement motivation was not related with job performance, while a significant association between achievement motivation and level of performance was reported by Rogers and Svenning (1969), Durand (1975), Singh and Kumar (1975), Prasad (1983), Reddy (1983) and Singh and Srivastava (1983).

2.3.3.6 Level of aspiration

Levin (1951) defined level of aspiration as the degree of difficulty of the goal towards which a person is striving.

Wilkening and Bharadwaj (1968) indicated that involvement of husbands and wives in farm, home and family is influenced by their task involvement and aspirations.

Padmanabhan (1981) in his study revealed that majority of the agricultural labourers had very low level of aspiration.

Shilaja (1990) in her study found that majority of the respondent labourers were having high level of aspiration.

2.3.3.7 Risk preference

Viju (1985) stated that risk orientation was found to have significant and positive relationship with attitude of tribal farmers towards farming.

Singh and Verma (1987) describes: Agriculture is one of the hazardous occupations from the stand point of physical health and safety of workers. Performance of various agricultural operations in vast open fields leading to exposure of agricultural worker to inclement weather (scorching heat of the sun in the summer, chilly and biting cold in winter and lashing and dazzling showers accompanied by lightning and thunder storm in rainy season), use of machines running at fast speed and making use of high energy

technology, use of pesticides, insecticides and chemical fertilizers, demanding taxing nature of agricultural work etc. are the factors which considerably add to the hazardous nature of agricultural occupation. Children working in agriculture, in addition to minor ailments which they suffer from due to seasonal variations and frequent changes in weather conditions are also exposed to the risk of varied kinds of serious diseases and handicaps.

According to Kunchu (1989), majority (76%) of the respondent cardamom growers had medium risk orientation, with 10.67 per cent having high risk orientation and 13.33 per cent having low risk orientation.

### 2.3.3.8 Values related to agriculture

Parsons and Shills (1965) defined value orientation as those aspects of the actor's orientation which commits him to the observance of certain norms, standards, criteria for selection whenever he is in a contingent situation which allow him to make a choice.

Padmanabhan (1981) found that men labourers were more progressive than women labourers. There was significant positive relationship between value orientation and efficiency of agricultural labourers.

Shilaja (1990) brought out the information that majority of the respondent women labourers possess traditional values.

**2.3.3.9 Attitude towards profession**

Thurstone (1946) defined attitude as the degree of positive or negative affect associated with some psychological object towards which people can differ in varying degrees.

According to Krech and Krutchfield (1948) attitude is a function of perception.

Finley et al. (1955) says that efficiency of workers would be more if positive attitudes towards work were encouraged.

Job attitude was perceived by Gilner (1961) as the feeling, the employee has about his job, his readiness to react in one way or another to specific factors related to job.

Clifford and Richard (1971) defined attitude as a learned orientation or disposition towards an object or situation which provide a tendency to respond favourably or unfavourably to the object or situation.

Porter et al. (1974) stated that for effective performance, favourable attitude is a pre-requisite.

Padmanabhan (1981) observed that a great majority, ie. more than 90 per cent, of agricultural labourers had favourable attitude towards their profession.

### 2.3.4 Extension Communication Variables

#### 2.3.4(1 Knowledge about plant protection measures in coconut

Knowledge is one of the important components of the behaviour and as such plays an important role in the covert and overt behaviour of an individual.

Bloom et al. (1955) defined knowledge as those behaviours and test situations which emphasised the remembering either by recognition or recall of ideas and materials on some phenomena.

English and English (1958) defined knowledge as a body of understood information possessed by an individual or by a culture. Knowledge is knowing what to do next. Skill is knowing how to do it and virtue is doing it.

Govindappa (1974) concluded that 45 per cent of small farmers and 28 per cent of other farmers had low knowledge and 47 per cent of small farmers and 63 per cent of other farmers had high level of knowledge in dairy enterprise.

Sithalaxmi (1975) observed that eventhough women supervise all activities on the farm, the knowledge of these women in scientific method of cultivation and profitable utilization of the produce were limited.

Sandhu and Sharma (1976) in their study with 100 farm women, inferred that the existing level of knowledge

about selected improved agricultural and home science practices was medium in 50 per cent farm women while it was low in 37 per cent and high in only 13 per cent.

Padmanabhan (1981) found that only 14.2 per cent of the respondent agricultural labourers were having good knowledge of scientific agriculture.

2.3.4.2 Awareness of Welfare Programmes

Krishnaswamy and Patel (1974) found that only five farmers out of 240 farmers were aware of the dry farming research stations and many were not even aware of crop competitions.

Oliver (1974) reported that only 25 per cent of the farmers were aware of the demonstration at one stage or another.

Padmanabhan (1981) observed that majority of the agricultural labourers had low knowledge about the programmes undertaken by the government for their development.

Labour Bureau (1987) observed that lack of awareness among the workers about the rates of minimum wages was one of the important causes for ineffective implementation of minimum wages.

According to Singh and Verma (1987) cent per cent of the child workers who have either been exclusively working on land owned by others or on their own as well as other's land in the capacity of wage earning employees did not have any knowledge of the Minimum Wage Act per se let alone its application to agriculture.

Kunchu (1989) revealed that majority of the cardamom growers had medium level of awareness about developmental schemes.

### 2.3.4.3 Utilization of welfare programmes

Misra and Baldeoram (1966) in their study inferred that 60 per cent of the members utilized the loan for productive purposes and they utilized about 67 per cent of the total amount advanced.

Arriffin (1975) from his study with Malay peasants concluded that the farmer is more inclined to accept a recommended agricultural practice, if he perceives that the practice is relevant to his situation.

Singh et al. (1976) reported that on an average about 73.71 per cent of the co-operative loan was utilized for productive purposes.

Muthukrishnan (1982) found that majority of the users (93%) of biogasplants had better perception towards the attributes of biogas plants.

Balan (1987) reported that majority (72.73%) of the farmer respondents had medium level of perception about utility of soil test recommendations.

Kunchu (1989) revealed that majority of the farmers ie. 60.67 per cent had medium level of utilization of the developmental schemes.

## 2.4 Employment and wage pattern of Coconut climbers

The pattern of employment and wage of agricultural labour in India, by and large is, governed by usage and

custom rather than by contract or state regulation or the urge of economic dynamics. This generality bears a greater degree of truth in the state of Kerala also.

Employment of workers in agriculture occurs in spurts during agricultural seasons. The workers who are unattached find employment in various agricultural operations. These operations are, of course, confined to certain periods of the year depending on the crops. During other periods, the labourers do find some other employment but, generally the number of days worked and the earnings from the work during these periods are comparatively low.

### 2.4.1 Employment pattern

Agricultural Labour Enquiry Committee (1951) revealed that agricultural labourers are engaged for 189 days in an year in agricultural operations. Out of that 95 days ie. more than 50 per cent of the days on the average, are hired out for wages.

According to Second Agricultural Labour Enquiry (1956), on an average, all-India male agricultural wage labourers were employed for 267 days a year, the three

different components of the same being agricultural employment, 189 days; self employment, 49 days; non agricultural employment, 29days.

Kahlon and Bhardwaj (1957) in their study in Indian Agricultural Research Institute farm revealed that the dairy enterprise has a relatively uniform labour distribution through out the year, but the percentage of labour employed in crop production varied from 6.17 per cent and 6.31 per cent in August and September respectively to the highest percentage of labour utilization (10.97 per cent) in April.

Misra and Vaish (1957) found that the months of March, April and November are very busy. In sugarcane area, the months of December and January are also busy. The months of May, June, October and February are to some extent idle.

Patnaik (1957) reported that on an average, the agricultural men workers were employed for 189 days on wages in agricultural labour and for 29 days in non agricultural labour. They were totally unemployed for about 100 days and self employed for about 50 days.

Sachdeva (1981) reported that an agricultural labourer is unemployed roughly for about four months in a year.

Singh and Singhal (1969) brought out the information that the adult male agricultural labourers are employed, on an average, for 218 days of which agricultural labour accounted for 189 days and non-agricultural labour for 29 days.

Labour Bureau (1975) observed that, the average days of employment available to adult male agricultural labourers were 255 days.

Mamoria (1976) stated that there is a peak demand for labour in the harvesting seasons followed by transplanting and weeding in rice.

Mencher (1980) observed that eventhough wage rate is high in Kerala, number of days for which employment is available for agricultural labourer is less.

Padmanabhan (1981) found that the average period of employment in an year for men labourers was 138.87 days.

Santhanam et al. (1982) inferred in their study that about 30 per cent of respondents in Kerala were employed for more than 181 days. Those employed for less than 120 days in an year in Kerala were 18 per cent.

Chauhan (1983) showed that landless agricultural labourers are facing acute problem of unemployment.

Halim and Mc Carthy (1983) observed that about 10 different types of works were done by the women in the rice producing villages of Bangladesh. The activities were mostly related to post-harvest processing of paddy.

Singh and Verma (1987) described that an overwhelming majority of the child workers (72.4 per cent) have been engaged in transplanting followed by harvesting, watching of crops, weeding, irrigation of field, hoeing, sowing, threshing, preparatory work, storage, ploughing and other miscellaneous activities. Busy months in relation to nature of employment revealed that majority of the child

workers have considered July (64.4 per cent), June (64%), November (60.4%), December (57.2%) and May (56.2%) as busymonths. Majority of the childworkers have reported January (51.8%) and February (51.2%) as slack months. Majority of them (63.8%) have been working for more than 300 days in a year. On an average, they have been working for 280 days in a year.

Ahlawat (1988) observed that during lean seasons agricultural labourers earn their livelihood by engaging themselves in non-agricultural activities.

Government of Kerala (1988) revealed as per the survey on agricultural labourers conducted by the Directorate of Economics and Statistics that the average days of employment for agricultural labourers in Kerala during 1986 was only 183 days.

Pawar et al. (1991) found out that the overall total employment for male agricultural labour in Maharashtra was 261.63 days. Their overall unemployment was 103.37 days.

Sentilnathan (1991) opined that seasonal unemployment and underemployment were the biggest problems faced by the agricultural labourers.

### 2.4.2 Wage pattern

Agricultural labour Enquiry Committee (1951) revealed that there are different modes of payment of wages to agricultural labour viz. in cash, in kind and partly in cash and partly in kind.

Misra and Vaish (1957) gave the same information as above. They also pointed out that the wage rates vary widely from place to place.

Pant (1965) depicted that wages in Indian agriculture depend upon productivity and as productivity is very low, wages will also be low. According to him, wages of women and children are lower because the work done is less strenuous.

Bardhan (1970) in a study at all-India level opined that real wages seem to have gone up much faster in Kerala than in N.W. India.

Nath (1976) described that there are various systems of wage payment, but the most important are two. One is payment by time and the other is payment by results. The wage structure depends upon the bargaining power of the workers in different industries and adhoc increments given to the workers from time to time. Among the 20 industries for which the survey was conducted, the highest paid worker is in oil engines industry and here one 'pattern maker' is getting Rs.478.00 per month, while one 'fitter' is paid Rs.376.00 per month.

Jose (1978) observed that the agricultural wage rates in Kerala have been among the highest compared to other states.

Panicker (1979) in his study on paddy field labourers of Kuttanadu says that high wage rates of agricultural labourers in Kerala are due to organised strength of workers.

Subrahmanian (1979) opined that it is practically impossible to enforce the minimum rates of wages for certain types of workers.

Chauhan (1983) reported that wages received by the landless labourers are very poor because of their weak bargaining power.

Halim and Mc Carthy (1983) reported that the daily average wage rate of women labourers in the rice producing villages of Bangladesh was taka 9.25 compared to the wage rate of husbands which was taka 9.74.

Baby (1986) observed a cyclical fluctuation of increase and decrease in wages.

Srivastava (1986) observed that wages in kind is less prevalent in villages near urban centre due to alternative employment opportunities with cash wages.

Government of Kerala (1989) in the Steering Committee Report revealed that Kerala has the highest wage rates followed by Haryana and Punjab. The states with minimum wages are our neighboures viz. Karnataka and Tamilnadu.

Reddy (1991) revealed that the enforcement of minimum wages in agricultural sector had been extremely poor and in many cases non-existent.

Government of Kerala (1992) in the Kerala Government Gazette published the revised minimum wages fixed for agricultural labourers. For ordinary agricultural operations (men) for 8 hours it is Rs.40.20.

Government of Kerala (1992) in the Economic Review - 1992 pointed out that the average daily wage rate of male agricultural labourers of Kerala was Rs.41.38. The wage rates had shown a steady but non uniform increase during the whole period (1980-1992). The increase in wages of male labourers had moved at a faster rate compared to the rise in wages of female labourers.

Pushpangadan (1992) opined that output decline in paddy production is due to the increase in wage rates in all the districts of Kerala.

Acharya (1992) observed that rise in wages is detrimental to employment. He also opins that wages are sensitive to general upswings and downswings in the economy.

## 2.5 Constraints experienced by coconut climbers

According to Webster's Third New International Dictionary, to constrain is to check, especially from free or

easy indication or expression or to force by stricture, restriction or limitation imposed by nature, oneself or circumstances or exigencies.

Pandya and Trivedi (1988) defined constraints as "Those items of difficulties or problems faced by individuals in the adoption of technology".

Zinyama (1988) and Petharam (1985) called the problems and/or limitations as constraints.

Gogoi and Talukdar (1989) defines constraints as those factors which have repressive effects on a desired and/or purposive action.

A significant fact emerging from the Agricultural Labour Enquiry Committee (1956) is that the problem of further employment opportunities for the agricultural labourers is as important as that of fixing their minimum wages.

Mendelievich (1979) opines that agriculture is one of the most hazardous sectors for the physical safety and health of workers for several reasons: the prevalence of

dangerous modern machinery; prolonged exposure to heat, sunlight, dust, wind and insects; the almost constant physical effort that agricultural work demands; contact with various chemical products such as fertilizers and pesticides whose long term effects on man may be completely unknown and for the majority of which, in cases of poisoning, no specific antidotes exist.

Halim and Mc Carthy (1983) in their study depicts that the respondent women labourers cited 10 different problems of their own. The basic necessities - food, shelter and clothing were cited as the first problem. The important problems other than the basic necessities were unemployment, lack of medical and educational facilities and low wage rates.

Saibaba (1984) inferred that the employment in mines is highly insecure as the industry is passing through the most critical period.

Mencher (1987) reported that women agricultural labourers were exploited for substandard remuneration and called for welfare measures to combat these problems.

Singh and Verma (1987) observed that the largest single group of child workers had been faced with the problem of disturbance in studies coupled with excessive workload.

Punekar et al. (1988) concluded in their study that the low vitality of Indian workers due to malnutrition, poor housing, insanitary and generally very unhealthy conditions of life, ignorance and illiteracy, uncongenial and unattractive working conditions, monotonous nature of work, drinking and gambling are some of the labour problems of India.

Singh and Sharma (1988) found illiteracy to be rampant among the farm women in both hills and plains. The women are mostly involved in repetitive and monotonous operations.

Kalaimathy (1990) reported that lack of comprehensive employment legislation, discrimination, wage structure, lack of job security etc. are the problems of women workers in agriculture.

Prasad (1990) observed that the existing conditions of bonded labourers were miserable and they were exploited by paying only nominal wages (far below the minimum wages) and ill-treated in case of their absence from their routine work.

# METHODOLOGY

# Chapter III

## METHODOLOGY

This study was undertaken with the main objective of understanding the socio-psychological and economic profile of agricultural labourers engaged in coconut climbing in Thiruvananthapuram District. This Chapter deals with the methods employed in the study, which are presented under the following heads.

3.1 Location of study.

3.2 Selection of respondents.

3.3 Availability of coconut climbers as perceived by the coconut farmers.

3.4 Variables selected for studying the profile of coconut climbers.

3.5 Operationalisation and measurement of variables.

3.6 Employment and wage pattern of coconut climbers.

3.7 Constraints experienced by Coconut climbers.

3.8 Techniques of data collection.

3.9 Categorisation of respondents.

3.10 Statistical tools employed for analysis of data.

## 3.1 Location of study

This study was confined to Thiruvananthapuram District in Kerala State. In kerala, coconut is cultivated in all the districts. While considering the total area under coconut cultivation in Kerala, Thiruvananthapuram ranks first in the southern region with an area of 84847 hectares [Farm Information Bureau (1991)].

The study forms a part of a major research investigation to generate comprehensive informations on various aspects of agriculture labourers in Thiruvananthapuram district. Moreover, data on employment and wage pattern of coconut climbers had to be collected at periodical intervals throughout one year. So Thrivananthapuram district had been purposively selected as the locale of the study.

## 3.2 Selection of respondents

### 3.2.1 Selection of coconut farmers

Out of the total 89 Panchayats in Thiruvananthapuram district, 10 Panchayats were selected at random. From each selected Panchayat, the list of coconut cultivators were obtained from the concerned Krishibhavan. From the list, 10 coconut farmers were identified randomly from each Panchayat. A total of 100 coconut farmers were thus selected as key informants for identifying the coconut climbers in their respective Panchayats.

### 3.2.2 Selection of coconut climbers

The coconut farmers selected as "key informants" were asked to provide information or address of the coconut climbers in their Panchayats. Thus, all the coconut climbers in the selected panchayats were identified. From the list of coconut climbers identified through the key informant technique, 10 coconut climbers were selected at random from each selected panchayat. Thus 100 coconut climbers constitute the respondents of the study.

### 3.2.3 Selection of respondents for sub-sample study

From the selected coconut climbers, 30 per cent were selected for conducting a sub-sample study to know their employment and wage pattern at fortnightly intervals for an year.

## 3.3 Availability of coconut climbers as perceived by the coconut farmers

The perception of coconut farmers regarding the availability of coconut climbers was measured using a schedule developed for the purpose. For that all possible statements which can measure the perception of coconut farmers regarding the availabililty of coconut climbers were collected by discussing few non-sample coconut farmers and by review of literature. Then these statements were edited with the help of experts. Finally 18 statements constituted the scale (Appendix-I).

The responses of selected coconut farmers were collected in a 5 point continuum viz. strongly agree, agree, neutral, disagree and strongly disagree. For positive

statements, a score of 5,4,3,2 and 1 were given for SA, A, N, DA and SDA respectively. The scoring procedure was reversed in the case of negative statements. The score of all the statements were summed up to obtain the total score of a respondent.

## 3.4 Variables selected for studying the profile of coconut climbers

### 3.4.1 Personal Variables

1. Age
2. Caste
3. Family type
4. Family size
5. Family educational status
6. Farm size
7. Housing facilities
8. Experience
9. Occupational mobility

### 3.4.2 Economic Variables

1. Annual income
2. Family expenditure

3. Savings
4. Indebtedness

### 3.4.3 Socio-Psychological Variables

1. Political participation
2. Social participation
3. Cosmopolite orientation
4. Economic motivation
5. Achievment motivation
6. Level of aspiration
7. Risk preference
8. Values related to Agriculture
9. Attitude towards profession

### 3.4.4 Extension-communication variables

1. Knowledge about P.P measures in coconut
2. Awareness of welfare programmes
3. Utilization of welfare programmes

## 3.5 Operationalisation and measurement of variables

### 3.5.1 Personal Variables

#### 3.5.1.1 Age

Age was measured as the number of years completed by the respondents at the time of interview, since his birth.

The respondents were asked to mention their age in terms of completed years.

### 3.5.1.2 Caste

The categorization followed in the Census report (1981) was followed. All the respondents in the sample were classified into following categories.

1. Forward - Nairs, Brahmins, Christians
2. Backward - Ezhavas, Muslims, Nadars and Anglo-Indians
3. Scheduled - Parayas, Pulayas, Thandas, Kuravas, Vedas

Forward caste labourers were given a score of '3', backward caste a score of '2', and scheduled caste '1'.

### 3.5.1.3 Family type

In this study, family type means single type (nuclear) family or joint type family.

Supe and Singh (1968) in their study on Dynamics of rational behaviour of Indian farmers, single type family was

given the score as '1' and joint family type score as '2'. The same procedure was followed in this study also.

### 3.5.1.4 Family size

In the present study, family size was measured by taking into consideration the specific number of members in the family of the respondent, living together.

### 3.5.1.5 Family educational status

It is the educational status of the family of the respondent.

Trivedi (1963) developed a scoring system for measuring different levels of education which he had followed in his socio-economic status scale.

Ray (1967) measured the family educational status by averaging the total educational status with the effective family size. Here the effective family size refers to the size of the family excluding members below the age of five.

The same procedure used by Ray (1967) was followed in this study. The scoring system used was as follows.

| | | |
|---|---|---|
| Illiterate | - | 0 |
| Can read only | - | 1 |
| Can read and write | - | 2 |
| Primary school level | - | 3 |
| Middle school level | - | 4 |
| High school level | - | 5 |
| College level | - | 6 |

3.5.1.6 Farm size

This is defined as the area possessed by the family of the respondent, measured in cents. The scoring procedure used was as follows.

| | | |
|---|---|---|
| No land | - | 0 |
| Less than 5 cents | - | 1 |
| 6-15 Cents | - | 2 |
| 16-30 Cents | - | 3 |
| 31-50 Cents | - | 4 |
| More than 50 cents | - | 5 |

### 3.5.1.7 Housing facilities

Housing facilities of the respondents were measured based on type of house, number of rooms, energy source for lighting, ventillation and source of drinking water. The scoring procedure was as follows.

1. House : Thatched - 1
   Tiled - 2
   Concrete - 3

2. Rooms : One room - 1
   Two rooms - 2
   Three rooms - 3
   More than three rooms - 4

3. Lighting : Kerosine - 1
   Biogas - 2
   Electricity - 3

4. Ventillation : Poor - 1
   Average - 2
   Good - 3

5. Drinking water : Pond - 1
   Road pipe - 2
   Public well - 3
   Owned well - 4
   Pipe connection - 5

The scores for the five items were added up to get the total score of housing facilities for each respondent.

### 3.5.1.8 Experience

It is operationally difined as the total number of years the labourer had been engaged in coconut climbing as his occupation.

The respondents were asked, for how many years have they been engaged in coconut climbing. The respondents were then categorised into four groups based on experience.

Less than 5 years - 1

6 - 15 years - 2

16 - 30 years - 3

More than 30 years - 4

### 3.5.1.9 Occupational mobility

It is operationalised as the movement of coconut climbers from one job to another and also the movement from one place to another for doing a particular job.

The scoring procedure was as follows

| Item | Score |
|---|---|
| 1.(a) Never goes to other villages | 0 |
| Rarely goes outside the village | 1 |
| Sometimes goes outside the village | 2 |
| Mostly goes outside the village | 3 |
| (b) Mobile outside the village | 1 |
| Mobile outside the taluk | 2 |
| Mobile outside the district | 3 |
| 2.(a) Never goes for jobs other than coconut climbing | 0 |
| Rarely goes for jobs other than coconut climbing | 1 |
| Sometimes goes for jobs other than coconut climbing | 2 |
| Mostly goes for jobs other than coconut climbing | 3 |
| (b) To agriculture related jobs | 1 |
| To non-agricultural jobs | 2 |
| For both | 3 |

The scores obtained by a respondent for each item were summed up to get the total score of the respondent for occupational mobility.

### 3.5.2 Economic Variables

#### 3.5.2.1 Annual income

This is the earnings of the family for one year including income from coconut climbing and all other sources.

This was obtained by directly asking the respondent the income of his family for one year. The income from various practices requiring coconut climbing and from all other sources were noted separately. Then these were added up to get the total income.

#### 3.5.2.2. Family expenditure

This is the expenditure of the family of the coconut climber for one year.

This was obtained by directly asking the respondent the expenditure of his family on various items for one year.

3.5.2.3 Savings

In this study, savings refers to the money saved by the family of the respondent by various means.

It was measured by directly asking the respondent the amount of money saved in various forms.

3.5.2.4 Indebtedness

It is operationally defined as the total debt in terms of money, a coconut climber owes, at the time of the interview to various money lending sources.

Indebtedness was measured by directly asking the respondent how much amount of debt they had at the time of interview.

3.5.3 Socio-Psychological variables

3.5.3.1 Political participation

It is the degree of involvement of the respondent from mere membership to organisational positions and his

active participation in the activities of various political organisations.

This was measured using the method followed by Trivedi (1963) with suitable modifications in the items and weights.

The items and weights used were as follows.

| Items | Weight |
|---|---|
| No membership in political organisation | 0 |
| Membership in political organisation | 1 |
| Office bearer in political organisation | 2 |

With regard to the attendance at the meeting of the organisation, the scoring pattern followed was

Never attending - 0

Occasionally attending - 1

Regularly attending - 2

The scores obtained by a respondent were added up to get the final score.

### 3.5.3.2 Social participation

Social participation indicates the degree of involvement of coconut climbers in social organisations as a member or as an office bearer and the regularity in attending the activities of these organisations

In this study, social participation was measured using the procedure followed by Kamarudeen (1981). The scores were assigned as shown below.

i) **Membership in organisations**

No membership in any organisation - 0

Membership in each organisation - 1

Office bearer in each organisation - 2

ii) **Frequency of attending the meetings**

Not attending any of the meetings - 0

Attending few meetings - 1

Attending all meetings - 2

To obtain the final score, the scores secured by the respondent for the two items were added up.

### 3.5.3.3. Cosmopolite orientation

A cosmopolite individual has some interest in the community and maintains a minimum relationship within the community, but he is highly oriented to the problems and affairs outside the community and regards himself as part of outside world.

To assess the cosmopolite orientation of coconut climbers, the statements developed by Moulik and Lokhande (1969) were used with some modifications in weights assigned to the statements. In this, the respondents were asked to rate each statement on 3-point continuum viz. Agree, Undecided, Disagree. For positive statements, a score of 3,2 and 1 were given for Agree, Undecided and Disagree responses respectively and the reverse order of scoring for negative statements. The scores of all the four statements were summed up to get the score of the cosmopolite orientation for the respondent.

### 3.5.3.4. Economic motivation

It refers to the extent to which an individual is oriented towards achievment of the maximum economic ends.

Moulik (1965) developed an economic motivation scale. Supe (1969) developed another scale for measuring the economic motivation. In this study, the economic motivation was measured by using an arbitrary scale developed for the purpose. The scale consists of 6 statements of which 3 were positive and 3 were negative. A dichotomous pattern of response (Agree, Disagree) was followed in this study. A score of 2 was assigned to for the Agree response and '1' score for Disagree response in the case of positive statements. The scoring procedure was reversed in the case of negative statements. The scores obtained on each statement were cumulated to obtain the total score of a respondent on this variable.

### 3.5.3.5. Achievement motivation

It is operationally defined as the desire or excellence in order for a coconut climber to attain a sense of personal accomplishment.

Achievement motivation scale developed by Singh (1970) and used by Manohari (1988), Kalavathi (1989) and Ashaletha (1993) was used for the study. There were a total

of six statements. The responses were collected in a 5-point continuum of strongly agree, agree, undecided, disagree and strongly disagree and scores of 5, 4, 3, 2 and 1 were given respectively. The sum of scores of all the items formed the achievment motivation score of the respondent.

3.5.3.6 Level of aspiration

Level of aspiration is operationally defined as the future level of achievment in his job which he is expecting based on the knowledge about the level of past performance.

In this study, the level of aspiration was measured using the 'self-anchoring striving scale' developed by Cantril (1965). A figure of ladder with 9 steps as given in the scale in reproduced below

| | |
|---|---|
| 9 | Top (Best possible life) |
| 8 | |
| 7 | |
| 6 | |
| 5 | Middle (Neutral) |
| 4 | |
| 3 | |
| 2 | |
| 1 | Bottom (Worst possible life) |

The respondents were asked to indicate the step in the ladder which they felt as standing at present (at the time of study), where they were 5 years ago and where they would stand 5 years from now (from the period of the study).

The score assigned was indentical to the step mentioned by the respondent for the three time periods, and all these scores were summed up. The score thus worked out was taken as the level of aspiration score of the individual.

3.5.3.7. Risk preference

Among various agricultural labours, perhaps, the most risky job is coconut climbing. Risk preference is operationalised in this study as the degree to which a coconut climber is oriented towards risk.

Supe (1969) developed a scale to measure the risk orientation of farmers towards farming. In the present study, it was measured with the help of an arbitrary scale developed by the researcher for the purpose. The scale consists of 6 items of which first 5 statements are negative. These items have been rated in three point response continuum

- Agree, undecided, Disagree. The scores allotted were 3,2 and 1 for Agree, Undecided and Disagree respectively for the positive statement and the reverse order of scoring for the negative statements. The scores of all the 6 items were summed up to get the score of each respondent for risk preference.

### 3.5.3.8 Values related to Agriculture

Beal and Sibley (1967) observed that values are the standards upon which evaluations are made, the criteria by which both ends and means are chosen. Consequently, an individual is emotionally committed to standards in such a manner that they influence, guide or direct his behaviour. This study takes into account the nature of values held by the coconut climbers about agriculture and related tasks.

In this study, the scale used by Shilaja (1990) which is the modification of the scale developed by Alexander (1982) had been used. The scale, consisting of 10 statements were administered to the coconut climbers and their responses elicited on a dichotomous pattern as Agree or Disagree. All the statements except statement number 2 were positive

towards the value which indicated traditional or irrational values. For all positive statements, a score of 1 was given for disagree response and a score of 2 was given for Agree response. The scoring procedure was reversed in the case of statement No. 2. The scores of each respondent on the 10 statements were summed up to obtain the scale value.

### 3.5.3.9 Attitude towards profession

The term attitude refers to the degree of positive or negative affect towards a psychological object. In this study, the attitude of coconut climbers towards their profession was constructed using Likert's method of summated rating.

#### 3.5.3.9.1 Collection of items

All possible statements which will discriminate the positive and negative attitudes of the respondents towards their profession were collected through a pilot survey, discussion with experts and review of literature. The statements were edited following the procedure suggested by Edwards (1957). A total of 40 statements were selected,

among which 20 statements were positive statements and 20 negative.

3.5.3.9.2 Item analysis

Item analysis was made for rejecting those items which could not discriminate between positive and negative attitudes. For that, the selected statements were given to 40 coconut climbers in two purposively selected villages in non-sample area in Thiruvananthapuram district and the responses were collected in a five point continuum viz. Strongly agree, Agree, Undecided, Disagree and Strongly disagree. After getting the responses from 40 respondents, the scoring was done in the order of 5,4,3,2 and 1 for Strongly Agree, Agree, Neutral, Disagree and Strongly disagree responses respectively in the case of positive statements and the reverse in the case of negative statements. By summing up the scores obtained for each of the statements in the scale, the total score for each of the respondents was obtained.

3.5.3.9.3 Mann-Whitney U test

For calculating Mann-Whitney U, the scores obtained by 40 respondents were added; the mean and the standard deviation of the scores were calculated. The respondents having the scores equal to or greater than mean score + standard deviation of scores were taken as the high group and the respondents having scores less than mean score- standard deviation of scores were taken as the low group. The two groups were combined and ranks were assigned for scores of each statements. After ranking the scores, U and U' were calculated out as follows.

$$U = n_1 \cdot n_2 + \frac{n_1 (n_1 + 1)}{2} - R_1$$

$$U' = n_1 \cdot n_2 + \frac{n_2 (n_2 + 1)}{2} - R_2$$

where

$R_1$ = the sum of ranks assigned to the group with a sample size, $n_1$

$R_2$ = the sum of ranks assigned to the group with a sample size, $n_2$

Here

$$U = n_1 n_2 - U' \quad \text{OR} \quad U' = n_1 n_2 - U$$

Level of significance had been fixed at 1 per cent. At this level 9 statements were found to be significiant. These 9 statements are given in Appendix III. Thus the final scale consists of 9 statements with 4 positive and 5 negative statements.

3.5.3.9.4 Validity of the scale

The validity of a scale means the fidelity with which it measures what it is supposed to measure. The developed scale was tested for the following two types of validity.

Content validity

The main criterion for content validity is how well the contents of the scale represents the subject-matter under study. Since the items selected were from the universe of contents, extensive review of literature and discussion with experts, it was ensured that the items covered all aspects regarding attitude of coconut climbers towards their profession.

Construct validity

When validity of a measuring instrument cannot be directly measured and certain other measuring instruments are needed to find out the validity of an instrument, the approach followed is known as construct validity. This was tested by calculating the correlation coefficient between 'Values related to agriculture' and attitude scores. Forty climbers were selected and their risk preference scores and attitude scores were calculated and the correlation between the two sets of scores was calculated. The correlation coefficient was found to be highly significiant. ($r = -0.69$) and hence it was concluded that the scale had construct validity.

3.5.3.9.5 Reliability of the scale

A scale is said to be reliable when it produces results with high degree of consistency when administered to the same respondents. In this study, reliability of the scale was determined by split- half method. The scale administered to the 40 respondents was divided into two halves based on odd- even numbers of statements. The scores

of the odd numbered items as well as the scores of the even numbered items of same respondents were correlated using the Pearson's Product moment correlation coefficient. The coefficient of internal consistency (roc) was worked out using the formula

$$r_{oc} = \frac{N\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{[N\Sigma X^2 - (\Sigma X)^2][N\Sigma Y^2 - (\Sigma Y)^2]}}$$

where N = Number of respondents

X = Value of odd numbered items score

Y = Value of even numbered items score

The roc value obtained was again correlated by using Spearman Brown Formula and thus obtained the reliability, $r_{tt}$ of the original test. The formula used was

$$r_{tt} = \frac{2roc}{1 + roc}$$

The obtained rtt value was 0.785, which indicated a high reliability of the scale.

### 3.5.3.9.6 Administering the scale

The attitude scale thus developed was incorporated in the interview schedule and administered to 100 respondents

of the study area and their responses were collected on a 5-point continuum viz. Strongly agree, Agree, Neutral, Disagree and Strongly disagree. The scoring was in the order 5,4,3,2 and 1 for Strongly agree, Agree, Neutral, Disagree and Strongly disagree respectively in the case of positive statements and the reverse for the negative statements. The individual scores for each of the respondents were obtained by summing up the responses for all items.

### 3.5.4 Extension communication variables

#### 3.5.4.1 Knowledge about plant protection measures in coconut

In the present study, the knowledge of coconut climbers about various plant protection measures in coconut was being measured.

Lindquist (1951) described the procedure for developing the scale for measuring knowledge

Shankariah and Singh (1967) measured knowledge based on the teacher made test.

Padmanabhan (1981) developed a teacher made test including simple question items and constant alternative items.

In this study also, a teacher made test was used. For that the researcher had collected details of plant protection measures of coconut from Package of Practices Recommendations of Kerala Agricultural University (1989) and Farm Information Bureau (1991). Based on this, 30 questions were formulated. After discussion with experts, 8 questions which had been found to be the most relevant to the situation were selected for making the teacher made test.

The teacher made test used in this study consisted of 8 questions, each question carrying four alternative answers. A score of 1 was given to a correct answer and '0' to a wrong answer. Finally the scores were added up to get the knowledge score for each respondent.

**3.5.4.2 Awareness of welfare programmes**

In this study, awareness was operationally defined as the extent of general information possessed by coconut climbers regarding four welfare schemes viz. Welfare fund

scheme for tree climbers, Group insurance scheme for landless agricultural labourers, Kerala Agricultural workers pension scheme and Kerala Agricultural workers welfare fund scheme.

Gaikwad (1971) studied the awareness of participant farmers of Integrated Area Development Scheme by asking few questions to findout whether they were aware or not about the scheme and awareness was measured by calculating percentage of farmers aware and unaware of the programmes.

Salunkhe (1977) measured awareness of farmers by asking questions and different aspects of Small Farmers Development Agency activities and giving scores for each correct answer.

Naik (1981) studied awareness of respondents about T&V system by asking a number of questions on several aspects of the system. The scoring index developed for the purpose of the study was used as a guidance to score each response. By summing up these scores on individual items, the total score on awareness was obtained.

To measure the awareness of coconut climbers about welfare schemes, all the four schemes that are now operating in Kerala which are exclusively for agricultural labourers were included in the study viz. welfare fund scheme for tree climbers, group insurance scheme for landless agricultural labourers, Kerala agricultural worker's pension scheme and Kerala agricultural worker's welfare fund scheme. The awareness of coconut climbers was measured by asking whether they were aware or not about the welfare schemes and also by asking few questions related with the schemes to find out their extent of awareness. If a respondent was aware about a welfare scheme, a score of 1 was given and if not aware, a score of '0' was given. If a respondent had given a correct answer to a question, a score of 1 was given and if it was wrong a score of '0' was given. The total awareness score of the respondent was obtained by summing up all these scores for the four welfare schemes.

### 3.5.4.3. Utilization of welfare programmes

In this study the utilization of welfare programmes refers to the number of welfare schemes utilized by a respondent among the welfare schemes now operating in the

state which are exclusively for agricultural labourers viz. Welfare fund scheme for tree climbers, Group insurance scheme for landless agricultural labourers, Kerala Agricultural worker's pension scheme and Kerala Agricultural worker's welfare fund scheme.

The respondents were asked to mention the schemes that are utilized by them. The total number of schemes that are utilized by a respondent equals his total score for utilization of welfare programmes. Thus, the score for utilization of welfare programme ranges from 0 to 4.

### 3.6. Employment pattern and wage pattern of coconut climbers

The employment and wage pattern were studied with 30 per cent of the respondents as subsample for one year from October 1992 to September 1993. The subsample study was conducted to know their employment pattern, wage pattern, number of days of gainful employment etc. This was made possible by helping the respondents in maintaining the daily records of their employment pattern and wage pattern for one year and collecting the data at fortnightly intervals.

The format used to collect the employment pattern and wage pattern of the respondents is given in Appendix II.

### 3.7. Constraints experienced by coconut climbers

In the present study, constraint is operationalised as "those items of difficulties or problems faced by the coconut climbers with regard to their profession.

After discussion with a cross section of coconut climbers in different parts of Thiruvananthapuram district and also drawing from the experience and observations of the researcher, eight problems which assumed to affect the job of coconut climbers were listed. The coconut climbers were asked to rank these items from 1 to 8 by making an overall comparison with regard to the intensity of the constraints. Those items which the climbers did not consider as 'constraints' were put in rank IX. A score of 8, 7, 6, 5, 4, 3, 2, 1 and 0 were given to the $I^{st}$, $2^{nd}$, $3^{rd}$, $4^{th}$, $5^{th}$, $6^{th}$, $7^{th}$, $8^{th}$ and $9^{th}$ ranks respectively. The frequencies of the respondents ranking each constraints in each ranks were found out and multiplied with the corresponding score values to obtain the total score value. The constraint with higher

score value was considered as the most serious one followed by others in the order of decreasing score values.

### 3.8 Techniques of data collection

Data collection was done in three stages. The first stage consisted of collecting data about the perception of coconut farmers regarding the availability of coconut climbers. For that, the items were prepared in English (Appendix I) and its Malayalam version was made and used for interviewing 100 coconut farmers. They were contacted in their houses by the researcher. This part of data collection was completed by October 1992.

In the second stage of data collection a proforma (Appendix-II) was prepared to collect the employment pattern and wage pattern of coconut climbers. This was collected from the subsample of '30' coconut climbers for one year. This part of data collection was done during October 92 - October 93.

For the third stage of data collection, an interview schedule including all questions pertaining to the

objectives was prepared in English (Appendix-III). A Malayalam version of the same was also prepared. The data were collected using a pretested, structured and standardised interview schedule printed in Malayalam. All the respondent coconut climbers were contacted at their houses and questions were put in a conversational style and responses were transcribed in the schedule itself. This part of data collection was done during July - August 1993.

### 3.9 Categorisation of respondents

For most of the variables except a few, the respondents were classified into low and high groups taking the mean as the criteria ie

| | | |
|---|---|---|
| Low | - | Below mean |
| High | - | Equal to mean and above mean |

Variables such as family size, family educational status, farmsize, housing facilities, Annualincome, experience, family expenditure, savings, indebtedness occupational mobility, political participation, social

participation, cosmopolite orientation, economic motivation, achievement motivation, level of aspiration, risk preference, value related to agriculture, attitude towards profession, knowledge about P.P measures in coconut, and awareness and utilization of welfare programmes were classified in the above way. In case of age, caste and family type, the respondents were classified as follows:

| | | | | |
|---|---|---|---|---|
| Age : | Upto 35 | - | 1 | - Young |
| | 36 - 55 | - | 2 | - Middle-aged |
| | Above 55 | - | 3 | - Old |

| | | | |
|---|---|---|---|
| Caste : | Forward | : | 3 |
| | Backward | : | 2 |
| | Scheduled | : | 1 |
| Familytype : | Nuclear | : | 1 |
| | Joint | : | 2 |

### 3.10 Statistical tools employed for analysis of data

Data collected were coded, complied and analysed using the following statistical techniques.

### 3.10.1 Percentage analysis

Percentage distribution of respondents in different categories on all variables were worked out by dividing the frequency in each category with total number of respondents and multiplying by 100.

### 3.10.2 Coefficient of variation

Coefficient of variation was used to identify the magnitude of variation present in each set of observations relative to the values of arithmatic means. It is the ratio of standard deviation to arithmatic mean expressed in percentage. Lesser the coefficient of variation for a variable, the more homogenous the sample will be with respect to that variable.

### 3.10.3 Simple correlation analysis

Pearsons product moment correlation was used to specify the nature and degree of relationship between the variables. The computed values of 'r' were tested for their significance using table values for n - 2 degrees of freedom.

### 3.10.4 Chi-square test

This test was used to know whether there is any significant difference between the respondents of scheduled castes and non-scheduled castes, and between low income group and high income group with regard to other variables.

# RESULTS

# Chapter IV

## RESULTS

The results are presented under the following heads, in this chapter, keeping in view the objectives of the study.

1. Perception of coconut farmers regarding the availability of coconut climbers.

2. Profile of the coconut climbers.

3. Interrelationship of various characteristics of coconut climbers

4. Association of caste and annual income with other selected characteristics of coconut climbers.

5. Employment and wage pattern of coconut climbers.

6. Constraints experienced by the coconut climbers.

## 4.1 Perception of coconut farmers regarding the availability of coconut climbers

The mean, standard deviation and coefficient of variation of perception scores of the samples were found to be 55.93, 11.57 and 20.70 respectively.

The distribution of coconut farmers on their perception regarding the availability of coconut climbers are presented in Table 1.

Table 1. Distribution of coconut farmers, based on their perception

| Category | % of respondents |
|---|---|
| High | 52 |
| Low | 48 |

A glance of table 1 shows that 52 per cent of the coconut farmers perceived the availability of coconut climbers as more than sufficient and 48 per cent of them perceived that the coconut climbers available in their locality were not sufficient to meet their needs.

A detailed picture of the perception of coconut farmers regarding the availability of coconut climbers is

Table 2. Frequency of perception scores of coconut farmers (n = 100)

| Sl. No. | Statements | Frequency SA | A | N | DA | SDA |
|---|---|---|---|---|---|---|
| 1. | Enough coconut climbers are there in the locality | 32 | 45 | 2 | 18 | 3 |
| 2. | There is no problem of non availability of coconutclimbers to meet the requirements | 33 | 28 | 2 | 35 | 2 |
| 3. | Each and every coconut farmer will have his permanent coconut climbers | 22 | 50 | 4 | 23 | 1 |
| 4. | Since the permanent climber comes in time, the nonavailability of the climbers is not felt by the farmers | 15 | 43 | 10 | 28 | 4 |
| 5. | In the absence of their permanent climbers, it is difficult to get yet another climber | 13 | 43 | 2 | 29 | 13 |
| 6. | Coconut climbers will be available on the day of call itself | 0 | 14 | 5 | 46 | 35 |
| 7. | Coconut climbers are available only after a week of our call | 1 | 33 | 13 | 43 | 10 |
| 8. | Due to the unavailability of coconut climbers in time, evendrying and falling of nuts usually occur | 6 | 25 | 4 | 33 | 32 |
| 9. | Besides harvesting of nuts, the climbers are available in time for covering the stem of the palm with fronds, thorns etc., removal of rhinocerous, application of P.P Chemicals etc. | 7 | 23 | 9 | 51 | 10 |

| Sl. No. | Statements | Frequency SA | A | N | DA | SDA |
|---|---|---|---|---|---|---|
| 10. | It is difficult to get the coconut climbers, if the farmers possess only limited number of palms | 12 | 42 | 8 | 28 | 10 |
| 11. | It is difficult to get the climbers during public holidays | 9 | 38 | 6 | 36 | 11 |
| 12. | The coconut climbers will not come for application of p.p. chemicals alone | 14 | 42 | 9 | 33 | 2 |
| 13. | It is difficult to get the climbers for work during rainy season | 33 | 39 | 5 | 20 | 3 |
| 14. | If only lesser number of nuts are there in the palms, it is difficult to get the climbers | 2 | 22 | 3 | 46 | 27 |
| 15. | For cleaning the palm, removal of rhinocerous beetles etc. alone, without the job of harvesting the nuts, it is not easy to get the coconut climbers | 1 | 32 | 12 | 40 | 15 |
| 16. | Being a high risky job, youth are not coming to this field and this affects the availability of coconut climbers | 10 | 34 | 7 | 32 | 17 |
| 17. | As the old climbers leave the job of coconut climbing, the youth are coming to this field and hence the non availability of the climbers is not seriously felt | 8 | 39 | 8 | 40 | 5 |
| 18. | The non availability of the climbers is not at all felt by the farmers because a number of persons are coming to this field since it is a highly profitable occupation | 15 | 30 | 8 | 40 | 7 |

given in Table 2. From the table it is evident that majority (81 per cent) of the coconut farmers are of the opinion that coconut climbers were not available on the day of call itself. At the same time 77 per cent of them agreed that enough coconut climbers are there in their locality. Majority of the farmers opined that eventhough the number of nuts are very less in the palm, it is not difficult to get a coconut climber for doing the harvest. Around 72 per cent of the farmers agreed that each and every coconut farmers will have a permanent climber. However, there is difficulty in getting coconut climbers during rainy days. About 61 per cent of the farmers perceived that non-availability of coconut climbers is not a problem with regard to harvesting of nuts while it is difficult to get the coconut climbers for doing various other operations like application of P.P. chemicals covering stem of the palm with thorns, coconut fronds etc. and similar operations.

## 4.2 Profile of the coconut climbers

### 4.2.1 Meanscore, standard deviation and coefficient of variation in respect of selected characteristics of coconut climbers

The mean score, standard deviation and coefficient of variation of selected personal, economic, socio-

psychological and extension communication characteristics of coconut climbers are presented in Table 3. High coefficient of variation was observed in respect of the following variables viz. Indebtedness (259.92) in the first position, followed by utilization of welfare programmes (202.58), political participation (139.34), savings (130.38), social participation (130.17), knowledge about p.p. measures in coconut (67.56), awareness of welfare programmes (65.75), farmsize (54.43), occupational mobility (53.34), annual income (45.06), caste (42.91), family expenditure (42.48), experience (35.42), family size (34.04) and family educational status (31.81) in the descending order. Rest of the variables did not show much variation in the sample under study.

A bird's eye view of the results presented in Table 3 shows that the respondent coconut climbers had an average age of 38. Among the respondents, the minimum age found was 20 and the highest age found was 62. Majority of the climbers belonged to scheduled caste. They were having nuclear families with family size less than five members. On an average the educational status of the family were at primary school level. Majority of them have a farm size of 6-15

Table 3. Possible score range, average score, mean standard deviation and coefficient of variation of scores selected characteristics of coconut climbers (n = 100)

| Sl. No. | Variable | Mean score obtained by the sample | S.D. | Coefficient of variation (%) | Possible score range | Average of the possible score |
|---|---|---|---|---|---|---|
| 1. | Age (years) | 38.25 | 10.49 | 27.42 | - | - |
| 2. | Caste | 1.27 | 0.55 | 42.91 | 1-3 | 2 |
| 3. | Family type | 1.09 | 0.16 | 14.98 | 1-2 | 1.5 |
| 4. | Family size | 4.37 | 1.49 | 34.04 | - | - |
| 5. | Family educational status | 3.42 | 1.09 | 31.81 | 0-6 | 3 |
| 6. | Farm size | 1.80 | 0.98 | 54.43 | 0-5 | 2.5 |
| 7. | Housing facilities | 12.28 | 2.30 | 18.75 | 5-18 | 11.5 |
| 8. | Experience | 2.33 | 0.28 | 35.42 | 1-4 | 2.5 |
| 9. | Occupational mobility | 5.22 | 2.78 | 53.34 | 0-12 | 6 |
| 10. | Annual income (Rs) | 25055.00 | 9938.64 | 45.06 | - | - |
| 11. | Family expenditure(Rs) | 23319.66 | 8630.78 | 42.48 | - | - |
| 12. | Savings (Rs) | 2483.40 | 3237.99 | 130.38 | - | - |
| 13. | Indebtedness (Rs) | 668.00 | 1736.25 | 259.92 | - | - |
| 14. | Political participation | 0.89 | 1.24 | 139.34 | 0-4 | 2 |



Contd...

Table 3 (Contd...)

| Sl. No. | Variable | Mean score obtained by the sample | S.D. | Coefficient of variation (%) | Possible score range | Average of the possible score |
|---|---|---|---|---|---|---|
| 15. | Social participation | 1.12 | 1.46 | 130.17 | 0-4 | 2 |
| 16. | Cosmopolite orientation | 9.76 | 1.83 | 18.79 | 4-12 | 8 |
| 17. | Economic motivation | 9.23 | 1.17 | 12.71 | 6-12 | 9 |
| 18. | Achievement motivation | 22.52 | 4.45 | 19.76 | 7-35 | 21 |
| 19. | Level of aspiration | 14.13 | 3.28 | 23.21 | 3-27 | 15 |
| 20. | Risk preference | 14.36 | 2.17 | 15.08 | 6-18 | 12 |
| 21. | Values related to agriculture | 14.32 | 1.48 | 10.35 | 10-20 | 15 |
| 22. | Attitude towards profession | 35.37 | 4.29 | 12.15 | 9-45 | 27 |
| 23. | Knowledge about p.p. measures in coconut | 2.49 | 1.68 | 67.56 | 0-8 | 4 |
| 24. | Awareness of welfare programmes | 2.88 | 1.89 | 65.75 | 0-12 | 6 |
| 25. | Utilization of welfare programmes | 0.23 | 0.47 | 202.58 | 0-4 | 2 |

cents, with low housing facilities. The coconut climbers selected for the study were having an average experience score of 2.33 (6-30 years). The occupational mobility was below average. The average annual income of the sample respondents was Rs. 25055.00; while the family expenditure was Rs. 23319.66. Their average saving was Rs. 2483.00 and their average indebtedness was Rs. 668.00.

As evidenced by Table 3 high mean values (above average) were observed with respect to socio-physchological and extension communication varinbles such as cosmopolite orientation, achievement motivation, risk preference, and attitude towards profession. Where as the mean values with regard to the variables such as political participation, social participation, knowledge about p.p. measures in coconut and awareness of welfare programmes were comparatively low (below average). The mean values obtained for economic motivation level of aspiration and values related to agriculture was almost average.

### 4.2.2 Distribution of coconut climbers based on the characteristics selected

Table 4 presents the distribution of coconut climbers into different groups with respect to the selected personal, economic, socio-psychological and extension communication variables and the results from this table are presented below.

#### 4.2.2.1 Age

Fifty two per cent of the respondents come under the middle aged group (36-55 years) and 43 per cent of the respondents come under the young group (Upto 35 years). Only 5 per cent of the climbers were old (above 55 years).

#### 4.2.2.2 Caste

Scheduled castes top the list of coconut climbers forming 78 per cent. Only 5 per cent of the respondents were from forward castes and the remaining 17 per cent were from other backward castes.

Table 4. Percentage distribution of respondents based on selected characteristics (n = 100)

| Sl. No. | Variable | Category | Score range | Percentage of coconut climbrs |
|---|---|---|---|---|
| 1. | Age (years) | Young | Upto 35 | 43 |
| | | Middle aged | 36 - 55 | 52 |
| | | Old | Above 55 | 5 |
| 2. | Caste | Scheduled | 1 | 78 |
| | | Backward | 2 | 17 |
| | | Forward | 3 | 5 |
| 3. | Family type | Nuclear | 1 | 91 |
| | | Joint | 2 | 9 |
| 4. | Family educational status | Low | <5 | 57 |
| | | High | ≥5 | 43 |
| 5. | Family status | Low | <4 | 49 |
| | | High | ≥4 | 51 |
| 6. | Farm size | Low | <2 | 40 |
| | | High | ≥2 | 60 |
| 7. | Housing facilities | Low | <13 | 60 |
| | | High | ≥13 | 40 |
| 8. | Experience | Low | <3 | 56 |
| | | High | ≥3 | 44 |
| 9. | Occupational mobility | Low | <6 | 55 |
| | | High | ≥6 | 45 |
| 10. | Annual income (Rs) | Low | <25055 | 61 |
| | | High | ≥25055 | 39 |
| 11. | Family expenditure (Rs) | Low | <23319.66 | 56 |
| | | High | ≥23319.66 | 44 |
| 12. | Savings (Rs) | Low | <2483.4 | 70 |
| | | High | ≥2483.4 | 30 |
| 13. | Indebtedness (Rs) | Low | <668 | 78 |
| | | High | ≥688 | 22 |

Contd...

Table 4 (Contd...)

| Sl. No. | Variable | Category | Score range | Percentage of coconut climbrs |
|---|---|---|---|---|
| 14. | Political participation | Low | <1 | 60 |
| | | High | ≥1 | 40 |
| 15. | Social participation | Low | <2 | 62 |
| | | High | ≥2 | 38 |
| 16. | Cosmopolite orientation | Low | <10 | 38 |
| | | High | ≥10 | 62 |
| 17. | Economic motivation | Low | <10 | 63 |
| | | High | ≥10 | 37 |
| 18. | Achievement motivation | Low | <23 | 59 |
| | | High | ≥23 | 41 |
| 19. | Level of aspiration | Low | <15 | 51 |
| | | High | ≥15 | 49 |
| 20. | Risk preference | Low | <15 | 51 |
| | | High | ≥15 | 49 |
| 21. | Values related to agriculture | Low | <15 | 55 |
| | | High | ≥15 | 45 |
| 22. | Attitude towards profession | Low | <36 | 49 |
| | | High | ≥36 | 51 |
| 23. | Knowledge about p.p. measures in coconut | Low | <3 | 46 |
| | | High | ≥3 | 54 |
| 24. | Awareness of welfare programmes | Low | <3 | 48 |
| | | High | ≥3 | 52 |
| 25. | Utilization of Welfare programmes | Low | <1 | 80 |
| | | High | ≥1 | 20 |

#### 4.2.2.3 Family type

Majority (91 per cent) of the coconut climbers had nuclear family. The rest nine per cent of the climbers had joint family.

#### 4.2.2.4 Family size

Fifty seven per cent of the coconut climbers had a family size of less than 5 and 43 per cent of them had a family with size more than 5 numbers.

#### 4.2.2.5 Family educational status

Fifty one per cent of the respondent coconut climbers had a family educational status score of 4 and above (middle school level of education and above). Fourty nine per cent of the respondents had family educational status below that level (primary school level of education and below).

#### 4.2.2.6 Farm size

Forty per cent of the coconut climbers had a farm size of less than 5 cents while the remaining 60 per cent of the climbers had a farm size above 5 cents.

#### 4.2.2.7 Housing facilities

Majority (60 per cent) of the respondent coconut climbers come under high group with regard to housing facilities and 40 per cent had low housing facilities.

#### 4.2.2.8 Experience

Forty four per cent of the coconut climbers had an experience of more than 15 years in their profession. Majority (56 per cent) of them had experience only upto 15 years.

#### 4.2.2.9 Occupational mobility

Fifty five per cent of the respondents had low occupational mobility where as 45 per cent of the respondents had high occupational mobility.

#### 4.2.2.10 Annual income

Sixty one per cent of the coconut climbers had an annual income of less than Rs. 25055 while the remaining 39 per cent had an annual income of more than Rs. 25055.

4.2.2.11 Family expenditure

Forty four per cent of the respondents had a family expenditure of more than Rs. 23316.66 and 56 per cent of the respondents had a family expenditure of less than Rs. 23316.66.

4.2.2.12 Savings

The climbers had an average savings (70 per cent) of the respondent coconut climber had their savings less than Rs. 2483 in an year and 30 per cent of the climbers were able to save more than Rs. 2483 in one year.

4.2.2.13 Indebtedness

Majority (78 per cent) of the climbers were indebted by an amount of Rs.668 in an year. Twenty two per cent of the climbers were indebted to any of the money lending sources by an amount of Rs. 668 during the last year.

4.2.2.14 Political participation

Majority (60 per cent) of the coconut climbers had low political participation while the remaining 40 per cent

of the climbers belonged to high political participation group.

#### 4.2.2.15 Social participation

Sixty two per cent of the coconut climbers had low social participation and 38 per cent had high social participation.

#### 4.2.2.16 Cosmopolite orientation

An overwhelming majority (62 per cent) of the respondents belonged to high cosmopolite orientation group whereas 38 per cent of the respondents had low cosmopolite orientation.

#### 4.2.2.17 Economic motivation

Only 37 per cent of the respondent coconut climbers had high economic motivation. The majority (63 per cent) of the respondents were coming under low economic motivation group.

#### 4.2.2.18 Achievement motivation

Fifty nine per cent of the respondent coconut climbers were having low achievement motivation with the remaining 41 per cent having high achievement motivation.

#### 4.2.2.19 Level of aspiration

The distribution of respondents were almost equal in the high (49%) and low (51%) level of aspiration group.

#### 4.2.2.20 Risk preference

Forty nine per cent of the respondents had high risk preference and the rest 51 per cent had low risk preference, which means that distribution of respondents based on this variable was almost equal in the high and low group.

#### 4.2.2.21 Values related to Agriculture

Fifty five per cent of the coconut climbers possessed less amount of traditional values whereas the

remaining 45 per cent possessed high values related to agriculture.

#### 4.2.2.22 Attitude towards profession

The distribution of respondents in the high group and low group, with regard to this variable was almost equal with a split up of 51 percentage in the high attitude group and 49 per cent in the low attitude group.

#### 4.2.2.23 Knowledge about p.p. measures in coconut

More than 50 per cent of the coconut climbers were having high level of knowledge about p.p. measures in coconut and 46 per cent were having low level of knowledge about p.p. measures in coconut.

#### 4.2.2.24 Awareness of welfare programmes

Awareness of welfare programmes was high in 52 per cent of the respondent coconut climbers while it was low in 48 per cent of the climbers.

#### 4.2.2.25 Utilization of welfare programmes

With regard to utilization of welfare programmes, an overwhelming majority (80 per cent) of the respondents had low level utilization of welfare programmes. The remaining 20 per cent had high level of utilization of welfare programmes.

## 4.3. Interrelationship among the selected characteristics of coconut climbers

Table 5 presents the intercorrelations among the selected personal, economic, socio-psychological and extension communication variables. It gives an over all picture of the interrelationship that exists among the various characteristics of coconut climbers under study. It could be read from the table that among the variables studied housing facilities had significant relationship with maximum number of other variables (ten) immediately followed by attitude towards profession (seven). Awareness of welfare programmes and annual income were in the third place and family size, family expenditure, political participation, social participation, economic motivation, achievement motivation and utilization of welfare programmes in the

The characters are :

$X_1$. Age

$X_2$. Caste

$X_3$. Family type

$X_4$. Family size

$X_5$. Family educational status

$X_6$. Farm size

$X_7$. Housing facilities

$X_8$. Experience

$X_9$. Occupational mobility

$X_{10}$. Annual income

$X_{11}$. Family expenditure

$X_{12}$. Savings

$X_{13}$. Indebtedness

$X_{14}$. Political participation

$X_{15}$. Social participation

$X_{16}$. Cosmopolite orientation

$X_{17}$. Economic motivation

$X_{18}$. Achievement motivation

$X_{19}$. Level of aspiration

$X_{20}$. Risk preference

$X_{21}$. Values related to Agriculture

$X_{22}$. Attitude towards profession

$X_{23}$. Knowledge about P.P measures in coconut

$X_{24}$. Awareness of welfare programmes

$X_{25}$. Utilization of welfare programmes

Table 5. Inter-correlation matrix for various characteristics of the respondents (n=100)

| | x1 | x2 | x3 | x4 | x5 | x6 | x7 | x8 | x9 | x10 | x11 | x12 | x13 | x14 | x15 | x16 | x17 | x18 | x19 | x20 | x21 | x22 | x23 | x24 | x25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Correlation Matrix | | | | | | | | | | | | | | | | | | | | | | | | | |
| X1 | 1.000 | | | | | | | | | | | | | | | | | | | | | | | | |
| X2 | 0.2016* | 1.0000 | | | | | | | | | | | | | | | | | | | | | | | |
| X3 | 0.8608** | 0.1558 | 1.0000 | | | | | | | | | | | | | | | | | | | | | | |
| X4 | 0.3068* | -0.0369 | -0.4855** | 1.0000 | | | | | | | | | | | | | | | | | | | | | |
| X5 | 0.0758 | 0.2384* | -0.0071 | 0.1450 | 1.0000 | | | | | | | | | | | | | | | | | | | | |
| X6 | 0.0781 | 0.1198 | 0.0074 | 0.1400 | 0.1820* | 1.0000 | | | | | | | | | | | | | | | | | | | |
| X7 | 0.0460 | -0.0363 | -0.1287** | 0.1775** | 0.0848 | 0.3129** | 1.0000 | | | | | | | | | | | | | | | | | | |
| X8 | 0.0937** | 0.0554 | -0.4249** | 0.5845** | 0.1551* | 0.1987* | 0.3919** | 1.0000 | | | | | | | | | | | | | | | | | |
| X9 | 0.0119** | 0.1576* | 0.1681** | 0.1856** | 0.0461 | 0.0693 | -0.0644** | -0.1047** | 1.0000 | | | | | | | | | | | | | | | | |
| X10 | 0.0568 | 0.0225 | -0.4978** | 0.6525** | 0.1684* | 0.1620* | 0.3562** | 0.9466** | -0.1218* | 1.0000 | | | | | | | | | | | | | | | |
| X11 | 0.9728** | 0.0393** | -0.1273* | 0.1523* | 0.0552 | 0.1519* | 0.2946** | 0.5812** | -0.0321 | 0.3396** | 1.0000 | | | | | | | | | | | | | | |
| X12 | 0.1375* | 0.3551** | 0.0495 | -0.0239 | 0.0342 | 0.2308* | 0.0692 | 0.0549 | 0.1841* | 0.0487 | 0.1058* | 1.0000 | | | | | | | | | | | | | |
| X13 | -0.0543 | 0.0531 | 0.0123 | -0.0583 | -0.0470 | -0.0828 | 0.1651** | 0.0788 | -0.0359 | 0.0714 | 0.0785 | 0.1084 | 1.0000 | | | | | | | | | | | | |
| X14 | -0.0348 | -0.0300 | 0.1130 | -0.0213 | 0.0120 | -0.0346 | 0.2910** | 0.0814 | -0.0836 | 0.0992 | 0.0928 | 0.0780 | 0.1142 | 1.0000 | | | | | | | | | | | |
| X15 | -0.0927 | -0.0030 | 0.1457 | -0.0112 | 0.0250 | 0.0658 | 0.3594** | 0.0431 | -0.0828 | 0.0667 | 0.1005* | 0.0748 | 0.0378 | 0.8867** | 1.0000 | | | | | | | | | | |
| X16 | -0.0848 | 0.0948 | -0.0793 | 0.0106 | -0.0397 | 0.1403 | -0.0646* | 0.0761 | -0.0665 | 0.0207 | 0.2394* | 0.1635* | 0.0809 | 0.0544 | -0.0192 | 1.0000 | | | | | | | | | |
| X17 | -0.1468 | -0.1596 | 0.0914 | -0.0373 | -0.0600 | -0.1252 | 0.2352* | -0.0729 | -0.1300* | -0.0639 | -0.0658 | 0.1526* | 0.0978 | 0.0036 | 0.0599 | -0.0859 | 1.0000 | | | | | | | | |
| X18 | -0.1474 | 0.0246 | -0.1124 | 0.0585 | 0.0747 | -0.1596 | 0.1331** | 0.0769 | -0.2873* | 0.1192 | -0.0428 | 0.0217 | 0.0182 | -0.1527* | -0.1067 | -0.0374 | 0.3680** | 1.0000 | | | | | | | |
| X19 | -0.0207 | 0.0699 | 0.1510 | -0.1493 | 0.1271 | 0.1762 | 0.3607* | 0.1025 | 0.0026 | 0.0556 | 0.1357* | -0.0731 | 0.2006* | 0.1855* | 0.1662* | 0.0885 | 0.0234 | -0.0074* | 1.0000 | | | | | | |
| X20 | -0.0933 | 0.0363 | -0.0123 | -0.0351 | -0.1066 | 0.1423 | -0.0503 | -0.0477 | 0.0678 | -0.0193 | 0.0273 | 0.0723 | 0.2008* | 0.0673 | 0.0743 | 0.1099 | 0.0264** | 0.2151* | 0.1976* | 1.0000 | | | | | |
| X21 | 0.0225 | -0.2183* | 0.0203 | 0.0234 | 0.2515* | -0.0311 | 0.1876** | -0.0112 | -0.0333 | -0.0355 | 0.0913 | -0.0882 | -0.0891 | -0.0352* | 0.0979* | -0.1704* | 0.2566** | 0.1294** | -0.1464* | 0.0513** | 1.0000 | | | | |
| X22 | -0.1281 | 0.0812 | 0.0596 | 0.0255 | -0.0204 | -0.0299 | -0.2359** | 0.0764 | -0.1181* | 0.0705 | 0.0837 | -0.1225* | -0.0187 | -0.2570** | -0.2258** | 0.0138 | -0.2311** | 0.2865** | -0.0957* | 0.5339** | -0.1191* | 1.0000 | | | |
| X23 | 0.1061 | -0.1225* | -0.0123 | 0.0994 | 0.0078 | -0.0437 | 0.1350* | -0.0898 | 0.1356* | -0.0890 | -0.0401 | -0.0075 | -0.1042 | -0.0877* | 0.0494* | -0.0656 | 0.2722** | 0.1984** | 0.0410** | 0.1025* | 0.0853* | 0.0458* | 1.0000 | | |
| X24 | 0.1893* | 0.0798 | 0.1092* | 0.0122 | 0.1167* | 0.0410* | 0.0765* | -0.1155* | 0.1341* | -0.1053* | -0.0698* | 0.1687** | -0.1248* | 0.2802** | 0.2262** | 0.1530* | 0.0934* | -0.1813* | 0.2344** | -0.0529* | -0.2036** | 0.0883* | 0.2288** | 1.0000 | |
| X25 | 0.0169 | 0.0311 | -0.1447* | 0.1513* | 0.1448* | -0.0088 | 0.1230* | 0.0587* | 0.0107* | 0.1349* | -0.0583* | 0.2998** | 0.0612* | 0.2649** | 0.0919* | 0.1114* | 0.0496* | -0.1782* | 0.0982* | -0.1514* | 0.0486* | -0.2224** | 0.0893* | 0.4868** | 1.0000 |

* - Significant at 5% level  ** - Significant at 1% level

fourth place. Savings, level of aspiration, risk preference and values related to agriculture were found to be significantly related to four other variables. The remaining characteristics except cosmopolite orientation had significant correlation with two or three other variables. Cosmopolite orientation was found to be significantly related to only one variable viz. savings.

## 4.4 Association of caste and annual income with other selected characteristics of coconut climbers.

Association of caste and annual income with other selected variables was also analysed in the present study. The results are presented in Table 6 and Table 7.

A glance at Table 6 indicates that caste of coconut climbers showed significant association with family educational status, indebtedness and economic motivation. No other variable was found to be significantly associated.

The results presented in Table 7 shows that there was significant association between annual income of the respondents and variables such as family size, farm size,

Table 6. Association of caste with other characteristics (n = 100)

| Sl.No. | Characteristics | $x^2$ value |
|---|---|---|
| 1. | Family size | 0.05 |
| 2. | Family educational status | 5.32* |
| 3. | Farm size | 0.79 |
| 4. | Housing facilities | 0.16 |
| 5. | Experience | 2.47 |
| 6. | Occupational mobility | 0.28 |
| 7. | Annual income | 0.49 |
| 8. | Family expenditure | 2.47 |
| 9. | Savings | 0.04 |
| 10. | Indebtedness | 9.04* |
| 11. | Politial participation | 0.79 |
| 12. | Social participation | 0.66 |
| 13. | Cosmopolite orientation | 1.38 |
| 14. | Economic motivation | 6.61* |
| 15. | Achievement motivation | 0.08 |
| 16. | Level of aspiration | 0.05 |
| 17. | Risk preference | 0.01 |
| 18. | Values related to agriculture | 1.28 |
| 19. | Attitude towards profession | 0.14 |
| 20. | Knowledge about p.p. measures in coconut | 0.83 |
| 21. | Awareness of welfare programmes | 0.48 |
| 22. | Utilization of welfare programmes | 0.13 |

* Significant at 5% level

Table 7. Association of annual income with other characteristics (n = 100)

| Sl.No. | Characteristics | $x^2$ value |
|---|---|---|
| 1. | Family size | 6.656* |
| 2. | Family educational status | 0.749 |
| 3. | Farm size | 5.490* |
| 4. | Housing facilities | 12.358* |
| 5. | Experience | 0.004 |
| 6. | Occupational mobility | 0.357 |
| 7. | Utilization of welfare programmes | 67.150* |
| 8. | Family expenditure | 30.280* |
| 9. | Savings | 2.865 |
| 10. | Indebtedness | 1.008 |
| 11. | Politial participation | 0.848 |
| 12. | Social participation | 0.248 |
| 13. | Cosmopolite orientation | 0.369 |
| 14. | Economic motivation | 0.177 |
| 15. | Achievement motivation | 1.400 |
| 16. | Level of aspiration | 0.749 |
| 17. | Risk preference | 0.051 |
| 18. | Values related to agriculture | 0.748 |
| 19. | Attitude towards profession | 1.585 |
| 20. | Knowledge about p.p. measures in coconut | 0.875 |
| 21. | Awareness of welfare programmes | 0.011 |

* Significant at 5% level

housing facilities, family expenditure and savings. Other selected characteristics of the respondents had no significant association with their annual income.

## 4.5 Employment and wage pattern of coconut climbers

### 4.5.1 Employment pattern

The results presented in Table 8 reveal that on an average the coconut climbers were employed for 218 days in an year. Of this, more than 75 per cent of the period (164 days) they were engaged in coconut climbing. The rest of the period they were employed in various other occupations like digging with an average of 17 days, cutting of trees and trunks (10 days), other farm operations (9 days), fencing (8 days), climbing on other trees (5 days), dehusking nuts and copra making (4 days) and loading and unloading (1 day).

Table 9 indicates the break up of the total number of days engaged by the respondents in coconut climbing depending upon the type of work. Harvesting nuts alone occupies 78 per cent of the total number of days engaged in coconut climbing followed by cutting of leaves (9.75 per cent) supporting the bunches (7.3 per cent), application of

Table 8. Number of days of employment of coconut climbers during 1992-93

| Type of work | Number of days | Per cent |
|---|---|---|
| Coconut climing | 164 | 75.22 |
| Digging | 17 | 7.79 |
| Cutting of trees and tree trunks | 10 | 4.58 |
| Other farm operations | 9 | 4.13 |
| Fencing | 8 | 3.66 |
| Climbing on other trees | 5 | 2.29 |
| Dehusking nuts and copra making | 4 | 1.83 |
| Loading and unloading | 1 | 0.45 |
| Total | 218 | 100.00 |

Table 9. Distribution of the average number of days in coconut climbing according to type of work

| Type of work | Average no. of days | Per cent |
|---|---|---|
| Harvesting | 128 | 78.0 |
| Cutting of leaves | 16 | 9.8 |
| Supporting bunches | 12 | 7.3 |
| Application of p.p. chemicals | 5 | 3.0 |
| Covering the stem of palm with fronds, thorns etc. | 3 | 1.8 |
| Total | 164 | 100.0 |

Table 10. Monthly fluctuation of employment and wage of coconut climbers

| Year/ month | No. of days in coconut climbing | No. of days of employment | Wage (Rs.) | Daily average | Daily average wage rate for c.c | Daily average wage rate for workers other than c.c |
|---|---|---|---|---|---|---|
| 1992 | | | | | | |
| Oct. | 13 | 18 | 1510 | 83.98 | 89.25 | 69.93 |
| Nov. | 13 | 17 | 1440 | 84.70 | 91.18 | 63.67 |
| Dec. | 13 | 16 | 1363 | 85.19 | 90.77 | 61.00 |
| 1993 | | | | | | |
| Jan. | 12 | 17 | 1344 | 79.05 | 85.87 | 62.70 |
| Feb. | 15 | 19 | 1550 | 81.57 | 85.90 | 65.50 |
| Mar. | 16 | 20 | 1661 | 83.05 | 88.84 | 60.10 |
| Apr. | 15 | 19 | 1542 | 81.16 | 85.20 | 66.20 |
| May | 17 | 22 | 1787 | 81.23 | 85.00 | 68.60 |
| Jun. | 11 | 17 | 1433 | 84.29 | 94.80 | 65.03 |
| Jul. | 12 | 18 | 1420 | 78.89 | 86.80 | 63.06 |
| Aug. | 12 | 15 | 1395 | 93.00 | 98.40 | 71.30 |
| Oct. | 13 | 18 | 1510 | 83.98 | 89.25 | 69.93 |
| Total | 164 | 218 | 17947 | - | - | - |
| Average | 13.67 | 18.16 | 1495.60 | 82.33 | 88.66 | 64.45 |

p.p. chemicals (3 per cent) and covering the stem of the palm with fronds, thorns etc. (1.8 per cent).

A view at Table 10 brings to focus the month-wise fluctuations in the number of days of gainful employment. It was inferrred from the table that the respondents received maximum number of days of employment as coconut climbers during the month of May (22 days) followed by March (20 days). On an average, the respondents selected for the study purpose received 18.16 days of gainful employment in a month. In this they received an average of 13.58 days of gainful employment per month as coconut climbers.

4.5.2 Wage pattern

The study revealed that there were different modes of payments of wages to coconut climbers viz. in cash, in kind and partly in cash and partly in kind. The wage rate received in cash and in kind varies from place to place and even from climber to climber

A critical examination of the data presented in Table 10 shows that the daily average wage rate of coconut

climbers was Rs. 82.33. This includes the wage rate for coconut climbing as well as for other works. It varied from Rs. 76.50 to Rs. 93.00 in various months. For coconut climbing alone, their average wage rate was Rs. 88.66 with a range of Rs. 82.40 to Rs. 98.40. When they do other works, other than coconut climbing, the average daily wage rate was Rs. 64.45 with a variation of Rs. 58.90 to Rs. 71.30 in various months.

It can also be seen from the table, during the month of May, the climbers got higher income followed by March, February, April, September, October, November, June, July, August and December in the descending order and the lowest income in January. Among the average daily wage rates obtained in different months, a high wage rate was obtained in August both for coconut climbing and for other works.

### 4.6 Constraints experienced by the coconut climbers

An attempt was made in the present study to understand the constraints experienced by the coconut climbers with regard to their profession. The problems and the respondents rankings are given in Table 11.

Table 11. Constraints experienced by coconut climbers with regard to their profession (n = 100)

| Sl. No. | Constraints | Number of respondents | | | | | | | | | Total Score |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rank - Score- | I (8) | II (7) | III (6) | IV (5) | V (4) | VI (3) | VII (2) | VIII (1) | IX (0) | |
| 1. | After attaining a certain age, even before becoming old one cannot climb the palms | 33 | 13 | 24 | 8 | 5 | 0 | 0 | 0 | 17 | 559 |
| 2. | No fixed income during rainy season | 20 | 26 | 14 | 12 | 5 | 0 | 0 | 0 | 23 | 506 |
| 3. | Health problems | 8 | 24 | 23 | 15 | 4 | 1 | 0 | 0 | 25 | 464 |
| 4. | Lack of good union for the climbers | 15 | 11 | 14 | 6 | 9 | 1 | 1 | 0 | 43 | 352 |
| 5. | Lack of job security | 15 | 10 | 4 | 2 | 7 | 2 | 1 | 0 | 59 | 260 |
| 6. | High risk in the job | 7 | 5 | 7 | 8 | 1 | 3 | 1 | 1 | 67 | 189 |
| 7. | Lack of proper knowledge regarding p.p. measures | 0 | 4 | 1 | 5 | 3 | 0 | 1 | 0 | 86 | 73 |
| 8. | Problems created by pesticides | 0 | 0 | 2 | 7 | 4 | 2 | 0 | 0 | 85 | 69 |

The constraint After attaining a certain age, even before becoming old, one cannot climb the palms was expressed by majority of the respondents and this was observed to be their major grievance. The total score obtained for this problem was 559. Thirty three per cent of the respondents ranked this as first and only 17 per cent did not consider this as a constraint. This was followed by 'No fixed income during rainy season'. Seventy seven per cent of the respondents expressed this as a constraint. Twenty per cent of the respondents placed this constraint in first rank and 26 per cent in the second position. The maximum score calculated with respect to this problem was 506. 'Health problem was considered as the third major problem by the respondents seventy five per cent of the climbers felt it as a constraint. More than 45 per cent of the respondents placed this constraint in the second and third rank position. Lack of a good union for the climbers was the next major constraint perceived by the respondent coconut climbers. Above 50 per cent of the respondents expressed this as a constraint. With respect to the constraints viz. lack of job security and high risk in thejob, more than 50 per cent of the respondents did not feel it as a problem. The rest two constraints namely 'lack of proper knowledge regarding p.p. measures' and 'Problems created by pesticides', more than 85 per cent of the climbers did not express it as constraints.


DISCUSSION

# Chapter V

# DISCUSSION

The results obtained in this study are discussed and interpreted in this chapter under the following heads.

1. Perception of coconut farmers regarding the availability of coconut climbers

2. Profile of coconut climbers

3. Interrelationship of various characteristics of coconut climbers

4. Association of caste and annual income with other selected characteristics of coconut climbers

5. Employment and wage pattern of coconut climbers

6. Constraints experienced by the coconut climbers

7. Suggestions for the welfare of coconut climbers

## 5.1 Perception of coconut farmers regarding the availability of coconut climbers

A slight majority of the coconut farmers perceived the availability of coconut climbers as sufficient to meet their requirements while 48 per cent of coconut farmers perceived that the coconut climbers available in their locality were not sufficient to meet their needs. Of course, there is wide disparity in the availability of coconut climbers from place to place. In certain places, the availability of coconut climbers was more than sufficient, but in some other places, the availability of coconut climbers was much less than the requirement. The availability of coconut climbers also depends on the area possessed by the coconut farmers under coconut cultivation. If the farmer is having only limited number of coconut palms, it is difficult to get a climber for harvesting the coconut. Generally, the availability of coconut climbers was very less for application of p.p. chemicals and covering the stem of the palm with fronds, thorns and similar materials for protecting the nuts from thieves and rats.

In a country like India, where unemployment is a burning problem, at the same time a lot of manpower is available, one may think that it is a paradox to say that labour availability is less than the requirement. But almost half of the coconut farmers perceived the availability of coconut climbers as much less than the requirement. This scarcity of coconut climbers in certain areas for doing various operations might be because coconut climbing is, perhaps the most risky job among the various agricultural labours; the job also requires more physical exertion. Even then, people go for this job because of unemployment and high income obtained from this job compared to other agricultural labours.

## 5.2 Profile of coconut climbers

The study examined twenty five characteristics of coconut climbers. From Table 2, it could be observed high coefficient of variations for the following variables viz. indebtedness, utilization of welfare programmes, political participation, savings, social participation' knowledge about p.p. measures in coconut, awareness of welfare programme, farm size, occupational mobility, annual income, caste,

family expenditure' experience, family size and family educational status in the descending order. High coefficient of variation shows poor consistency of the sample respondents with regard to these variables. This means that the coconut climbers under study was a highly heterogenous group with respect to the above variables. In the case of the other variables viz. age, family type, housing facilities, cosmopolite orientation, economic motivation, achievement motivation, level of aspiration, risk preference, values related to agriculture and attitude towards profession. The coefficient of variation was found to be comparatively less showing consistency in the sample distribution on these variables. It indicates homogenity of the sample with regard to these variables.

High mean values of the socio-psychological and extension communication variables such as cosmopolite orientation, economic motivation, achievement motivation, risk preference and attitude towards profession (Table 3) indicates the above average stand of coconut climbers with regard to these variables. On the other hand, the mean values with regard to political participation, social participation, knowledge about p.p. measures in coconut, awareness of

welfare programmes and utilization of welfare programmes were comparatively low (Table 3) showing below average standing of the coconut climbers on these variables.

### 5.2.1 Age

The study revealed that majority of the coconut climbers belonged to middle aged group (Table 4). The average age was 38. Young coconut climbers constituted 43 per cent. Only 5 per cent of the climbers come under the old age group. Youth are coming to this field as the old people give up their job of coconut climbing.

The plausible reason for this trend is that young men are pushed into this job due to their economic compulsions and unemployment problem. Some of them take up this profession because it is their traditional job. Only 5 per cent of the climbers come under the old age group. Generally people above 55 years of age cannot do coconut climbing due to the physical exertion required for this job compared to other agricultural labourers. Even then, a small percentage of them are forced to do this job to earn something for their family and to be independent.

The finding of the study is in agreement with those reported by Tea Board [1962], Sharma and Singh (1970) Padmanabhan (1981) and Shilaja (1990).

5.2.2. Caste

With respect to caste, a vast majority of the coconut climbers studied belonged to scheduled castes (Table 4). Only 17 per cent of the coconut climbers were from other backward castes and 5 per cent were from forward castes. The social status of coconut climbers is considered to be very low. This might be the reason which prevented the members of backward and forward castes from becoming coconut climbers. This inturn resulted in scheduled castes toping the list of coconut climbers. Yet another reason behind it is that coconut climbing is the traditional job of some scheduled castes. Even then, there are some coconut climbers from backward castes and forward castes and this is due to the unemployment problem, and high income obtained from coconut climbing.

The result of this study is in line with the findings of Mukherjee [1957], Dipali [1979], Padmanabhan

(1981), Dak et al. (1987), Ingle and Dharmadhikarj (1987), Singh and Verma (1987) and Shilaja (1990).

### 5.2.3 Family type

The family type in the study area revealed that an overwhelming majority of the coconut climbers were having nuclear families (Table 4). Generally, in Kerala, joint family system is not prevalent nowadays, eventhough it was common several decades back. The same situation is observed in the case of coconut climbers also ie. only 9 per cent of the respondents were found to have joint family system, and that too because of the lack of money to construct new houses.

The findings of this study is in conformity with the studies reported by Kumar (1982) and Shilaja (1990).

### 5.2.4 Family size

As far as their family size is concerned, it was found that the average family size of the respondent was 4.37 (Table 2). From Table 4, it could be seen that 57 per cent

of them has small families. This is because of their good knowledge about family planning and its importance. Kerala is a state with high literacy and people are exposed to the benefits of having small family while, 43 per cent of the respondents have large families with 5 or more than 5 members. This means a lot of mouths to be fed and income mobilization to fulfill their minimum needs. The situation of this nature falls under the Maslows's motivational hierarchy of need for security. Anyway we cannot say that a family with 5 members in a big family.

The finding of the study is in concurrence with the findings reported by Tea Board (1962). Dipali (1979), Kumar (1982) Ingle and Dharmadhikarj (1987) and Ramachandran (1990).

### 5.2.5 Family educational status

Education is lifeblood in any developmental activity as it helps people understand and practice the ideal preached. With regard to the family educational status of the respondents almost equal proportion of them fall under high and low group (Table 4). Families coming under the low

group were having their educational status up to primary school level and those coming under the high group were having their educational status ranging from middle school level of education and above. The result indicates that there is wide variation in the educational status of the family members of the respondents. It is evident from the results that a great majority of the family members of the respondents were literates. This points out that the respondents want their younger generation to take up employment with higher status and prestige in the society. This also shows no changing pattern among the coconut climbers who now consider education as 'vehicle of modernisation' and relate it to overall development goals and to the specific integration of agricultural labourers into the development process.

### 5.2.6 Farm size

As per the data furnished in Table 4, about 60 per cent of the respondents come under high group with regard to this variable. They possess a farm holding above 5 cents and 40 per cent possess a farmholding below 5 cents. Anyway, the average farmsize of coconut climbers was very low. This

shows that they are not getting good income from cultivation of crops. The reason behind the low farm size is that they neither inherited much land from their ancestors nor did they own much land using their own money because of their high expenditure. Thus it points out the low economic background of coconut climbers.

### 5.2.7 Housing facilities

A wide variation was noticed by the researcher on the type of house, number of rooms, energy source for lighting, ventilation and source of drinking water. Regarding this variable, it could be noticed from Table 4 that 60 per cent of the respondents were having low housing facilities and 40 per cent were having good housing facilities. The reason for the low housing facilities might be the lack of employment through out the year. With this income they have to meet their basic requirements. More over they spend almost whatever they earn for some or other purpose and not much attention was given by many of them for improving their housing facilities.

### 5.2.8 Experience

As mentioned in Table 4 more than 50 per cent of the respondents were having comparatively less experience in their profession. Majority of the climbers take up their profession because it was their traditional occupation. When their father become unable to climb the tree, the sons are forced to take up this profession due to the economic compulsion and the difficulty in getting some other occupation. In the present study itself, it was found that 43 per cent of the climbers are young below 35 years and 52 per cent between 36 and 55 years. This itself is a clear indication that the climbers may not have much experience. Since there are more number of young labourers among the sample studied, their period of experience will also be less.

### 5.2.9 Occupational mobility

There is some mobility of labour among the agriculture labourers engaged in coconut climbing. As shown in Table 4, more than 50 per cent of the respondents had low occupational mobility where as 45 per cent comes under high group with regard to occupational mobility. Any way, the

occupational mobility of coconut climbers in general is below average (Table 3). This might be due to the availability of enough job opportunities in coconut climbing, in their respective villages itself once a climber is known in his village and if he is approved by the farmers in the locality as a good climber. He will be called by the majority of the farmers in the locality and he will be called by the majority of the farmers in the locality and he will get employment in major part of the year. Even then, there is some mobility of labour because of the lack of employment in coconut climbing throughout the year, especially during rainy season and chilleedu season'. During rainy season, it is very dangerous to climb palms. In 'Chilleedu season[1]', only lesser number of nuts are obtained from coconuts palms, so that the harvesting interval is increased which results in the reduction of employment opportunities of coconut climbers as compared to that in 'Nalleedu season[2]. This leads to occupational mobility.

The result is in accordance with the findings of Mukherjee [1957], Srinivasan (1957) and Muthiah (1970).

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1. Chilleedu season = low yield season in coconut
2. Nalleedu season = high yield season in coconut

### 5.2.10 Annual income

In the case of annual income derived from various sources, it could be seen from Table 4 that 61 per cent of the respondents come under low group earning and annual income of less than Rs. 25055.00 whereas 39 per cent come under high group earning an annual income more than Rs. 25055.00. Eventhough this income is the annual income of the family of the coconut climbers, in most of the cases, the major source of income was only the coconut climber. Majority of them had only a very small land holding so that they earned only a negligible amount from the cultivation of remunerative crops. And no other source of income was available to many of the respondents. This may be the reason why majority of the climbers come under low annual income group. However an average annual income of Rs. 25055.00 (Table 2) is high when compared to the annual income of other agricultural labourers As mentioned earlier, eventhough the annual income of the family was studied, the major source of income, and in many cases the only source of income was the income earned by the respondents. Hence the reason behind the high annual income of the climbers might be their high wage rate. The high wage is due to the risky nature of the job as

well as the lack of more than the required number of coconut climbers in each locality. Besides, their high cosmopolite orientation might have helped them in getting information regarding outside their village thereby helping them in getting employment during off season. This might also have contributed to the higher annual income of the respondents.

### 5.2.11. Family expenditure

Family expenditure of the coconut climbers was found to be very high compared to other categories of agricultural labourers. Their average family expenditure was Rs. 23316.66 per year (Table 2). The data presented in Table 3 indicates that 44 per cent of the respondents come under high group. It is interesting to note in this connection that their annual income and family expenditure were almost equal. It means that whatever income they earned they utilized it for some or other purpose.

The bulk of the total expenditure was spent on food items followed by expenses on clothing and on beverages. Majority of the respondents were drunkards and a lot of money was spent to buy liquor. After this, they may not have enough money to save and improve their housing facilities.

### 5.2.12 Savings

Majority of the climbers made some savings in some or other forms, during the last year. Their average saving was found to be Rs. 2483 in an year (Table 2). As evidenced from Table 4, a good majority of the climbers come under low group with regard to this variable who had their savings less than Rs. 2483.00 in an year. The reason for the low savings is certainly their high family expenditure. As discussed earlier their family expenditure was found to be very close to their annual income. Whatever they earn, they spend it for some or other purposes ie. after meeting the basic needs. The major part of the income was spent for liquors, entertainment etc. This inturn resulted in the low savings of the climbers.

### 5.2.13 Indebtedness

With regard to this variable it was observed from Table 2 that the average indebtedness of the coconut climbers was Rs.668.00 in an year. A great majority of the climbers had indebtedness less than Rs. 668.00 in an year (Table 4). and around 60% of the respondents were not at all indebted to any of the money lending sources. This shows some what

good economic position of coconut climbers compared to other categories of labourers. The reason behind the low indebtedness of the respondents, is no doubt, their high annual income, which is enough to meet their basic needs. Besides due to their high educational status, they were in the position to understand the negative effects of borrowing money from others. Majority of the respondents were having high achievement motivation and so they strive hard to achieve the best, so as to lead a satisfactory life.

### 5.2.14 Political participation

A critical view of the data presented in Table 4 showed that 60 per cent of the respondents had no political participation at all, where as the remaining 40 per cent of the respondents had some political participation. As revealed in Table 3, the mean values for political participation of the climbers was very low indicating the below average standing of coconut climbers with respect to this variable. This shows that the few coconut climbers who were members in various political parties had only limited participation in them. The probable reason for the low membership might be the lack of faith in various political parties. Also they might

not have had adequate time to take part in the activities of various political parties. This might be the reason why the coconut climbers were not having a strong viable trade union movement.

The study reveals that the coconut climbers are highly unorganised. Hence this is a great challenge to trade unions to organise them into a strong union to help to improve their working and living conditions.

The result of this study supports the findings of Padmanabhan (1981), Saibaba (1984), Punekar et al (1988) and Gowda et al (1991).

### 5.12.15 Social participation

As observed from Table 4, 62 per cent of the respondents had low social participation. It can also be seen from Table 3 that the mean value for social participation obtained by the respondents selected for the study was very low indicating the low social participation of the respondents.

Coconut climbers consider themselves as a group belonging to the lower strata of the community and the number of people in this group is comparatively less to form an organization. The organisation in which they are members are not so keen in solving the problems of the coconut, climbers in a specific group. Another reason for their low social participation might be the lack of adequate time to participate in the activities of various organisations.

The finding is in line with the study conducted by Shilaja (1990).

### 5.2.16 Cosmopolite orientation

The respondents selected are having good cosmopolitic orientation. This is evident from the high mean value for this variable (Table 3). And 62 per cent of the climbers belonged to high cosmopolite orientation group (Table 4). The low coefficient of variation also indicates the consistency of the sample on this variable. High cosmopolite orientation of the respondents might be the result of their high educational status. An educated individual will be naturally more cosmopolitic through which he gets latest informations.

### 5.2.17 Economic motivation

Regarding economic motivation of the respondents, it is observed that 63 per cent of them were coming under low economic motivation group. This low economic motivation of the respondents might be because of their good annual income coupled with low level of aspiration. The finding of the study was in concurrence with that reported by Shilaja (1990).

### 5.2.18 Achievement motivation

The study revealed that the coconut climbers have high achievement motivation. Achievement motivation is the spontaneously expressed desire of an individual to attain an inner feeling of personal accomplishment, rather than social recognition or prestige. It is instrumental in persuading a person to perform better. Mc Clelland (1961) argued that highly achievement motivated individuals go to make successful leaders. The coconut climbers, who had been entrusted with the task of leading their families and finding means of livelihood, may possess a desire for excellence in their occupation to attain an inner feeling of satisfaction.

Moreover, they may be in possession of a conviction that a good worker should be deligent and earnest while executing a task.

### 5.2.19 Level of aspiration

As furnished in Table 4, distribution of respondents in the high aspiration group and low aspiration group was almost equal. However, the mean score for this variable was below the average (Table 3). This indicates that the respondents have low level of aspiration. The employment opportunities of coconut climbers varies with seasons such as Nalleedu season and Chelleedu season. For many days in an year they remain jobless. The wages they get during the working days is just sufficient for them to pull on life through out the year. In these circumstances, they cannot aspire much. Moreover they think themselves to be inferior in the society. And they did not want their children to do the same job. So they send them to school with the aspiration that they would get good job opportunities and can lead a comfortable life. But when the fathers became unable to climb the tree, even before becoming old, the sons are forced to take up this job due to the difficulty in getting

some other job and they are forced to take the responsibility of looking after the family.

### 5.2.20 Risk preference

The sample respondents were found to have high risk preference. This is seen from the high mean values obtained for this variable (Table 3). The reason for the high risk preference might be the high risky nature of the job. Coconut climbing is perhaps, the most risky job among various agricultural labours and only those who are having high risk orientation and risk preference will select this as their profession.

### 5.2.21 Values related to agriculture

In the case of values of the respondents related to agriculture, the mean value obtained was below the average (Table 3). Table 4 shows that within the group of respondents more than half of them belonged to low group. The plausible reason for this trend might be their high family educational status and high cosmopolite orientation. These might have provided them with ample opportunities to know what is

happening outside and would have developed a progressive outlook towards their own life as well as towards the realities of the world.

### 5.2.22 Attitude towards profession

As revealed from Table 4, more than 50 per cent of climbers come under the high group with regard to this variable. The mean attitude score of the climbers, towards their profession, was also very high. From this, it can be inferred that coconut climbers are having a favourable attitude towards their profession. Most of the respondents studied have been engaged in coconut climbing since their young stage and it is this profession that provided them a livelihood. There is no other alternative for them to earn their livelihood in a better way.

Attitude is individual-oriented while values are society oriented. Though the individual develops a favourable attitude towards his profession, the values of the society which decides the actions of individual may come in the way of rational behaviour.

The finding of the study is in concurrence with that reported by Padmanabhan (1981).

### 5.2.23 Knowledge about p.p. measures in coconut

Within the group of coconut climbers more than 50 per cent of them come under high group with regard to knowledge about p.p measures in coconut (Table 4). However, in an overall view, coconut climbers have less knowledge about p.p. measures in coconut, as evidenced by the very low mean value for this variable. Coconut climbers are generally not willing to go for application of p.p. chemicals and other p.p. measures, and hence they are neither getting informations about p.p. measures through practice nor interested in collecting informations about it. Even if a climber is going for p.p. measures, he is ready to do it for those farmers only, who always call him for harvesting the nuts. In such rare cases the coconut climber will do, without much knowledge in it and he will forget it afterwards because he is not continuously doing it. Hence this limited knowledge about p.p. measures in coconut.

The finding of the study through not similar is in line with those reported by Sithalakshmi (1975) and Padmanabhan (1981).

### 5.2.24 Awareness of welfare programmes

While analysing the awareness of the respondents about the welfare programmes, it could be found that the meanvalue obtained by them with respect to this variable was very low (Table 3). Merely half of the respondents had awareness scores less than the mean value. These vividly portrait the very low awareness of the respondents about the welfare programmes. This pathetic situation is one of the real barriers in the development of this section. Such a situation might be the result of their low political and social participation. The low level of aspiration and low economic motivation of the respondents might also have some role in the low awareness. Most of the climbers do not get a chance to utilize many of the schemes because of the various pre-requisites to be satisfied under each scheme to become a beneficiary. If the utilization has been increased, that might have enhanced the relay of informations regarding the schemes from climber to climber. But reverse is the case

here. Moreover, there was a belief among many of the respondents that the benefits of the scheme could be utilized only by those labourers who are active workers of certain political parties.

Related results were reported by Krishnaswamy and Patel (1974), Oliver (1974), Padmanabhan (1981), Labour Bureau (1987), Singh and Varma (1987) and Kunchu (1989).

### 5.2.25 Utilization of welfare Programmes

With respect to this variable, the value scored by the respondents was very low (Table 3) showing very low utilization of welfare programmes. It was also found from Table 4 that an overwhelming majority of the respondents belonged to the low group with regard to this variable. A close look at the table revealed that these 80 per cent of the respondents has not uitlized the welfare programmes at all. The awareness of the respondents about the welfare programmes was very low. Consequently, their utilization of these welfare programmes will also be very low. Moreover, most of the coconut climbers were not able to utilize many of the schemes because of various conditions to be satisfied by

the labourer to become a beneficiary under each scheme. The welfare fund scheme for tree climbers is applicable only to those climbers who met with serious accidents while doing their job by way of falling from trees. The Kerala Agricultural Worker's Pension Scheme is applicable to only those labourers who passed 60 years of age and have an annual income not exceeding Rs.1500.00. The Group Insurance Scheme for landless agricultural labourers, as the name indicates, can be utilized only by landless agricultural labourers. Thus, majority of the schemes cannot be utilized by most of the climbers. And the only scheme which is applicable to all the climbers viz. Kerala Agricultural Worker's Welfare fund scheme insists the labourers to remit some fixed amount each year and this should be continued for 40 years. The climbers were not ready to do that. Because of these, the utility of various schemes, as revealed by the study, is very low.

## 5.3 Interrelationship among the selected characteristic of coconut climbers

An overall view of the data presented in Table 5 revealed that some of the variables found to have significant relationship between them. At the same time, many variables

keep aloof from each other showing no significant relationship between them. The table gives an overall picture of intercorrelation among the selected variables. It is evident from the table that housing facilities had maximum number of significant relationships and this is because it is influenced by most of the economic factors and a number of socio-psychological factors. More than that, some personal factors also influence housing facilities. Attitude of coconut climbers towards their profession is one of the major variables studied and this is significantly related to seven other variables such as housing facilities, political participation, social participation, economic motivation and utilization of welfare programmes which are negatively correlated, and achievement motivation and risk preference which are positively correlated. The negative correlation between attitude towards profession, and housing facilities, political participation and social participation might be because those having high degree of the later traits considered coconut climbing as a job having a very low social status and hence had an unfavourable attitude towards coconut climbing. Respondents who are economically motivated might think that they could not earn much from this profession and this might be the reason for the negative correlation of

economic motivation with attitude towards profession. Achievement motivation and risk preference had significant positive relationship with attitude towards profession showing that the coconut climbers having high achievement motivation and risk preference had a very favourable attitude towards their profession. The probable reason behind it is that those climbers having high achievement motivation might think that coconut climbing is a job requiring more physical exertion than other agricultural labours and is a risky job, and hence after carrying out his job, he can attain an inner feeling of personal accomplishment. Similarly, those respondents with high risk preference are ready to take up risky ventures with a view to earn maximum profit. The climbers having high risk preference might have earned more income and this might have developed in them a favourable attitude towards their profession. Among the variables studied, cosmopolite orientation had least number of significant relationships. It was found to be significantly and positively related to savings. The respondents who are highly oriented to the problems and affairs outside the community and regard themselves as part of outside world developed the 'need to save' for future and this resulted in their good savings compared to others.

## 5.4 Association of caste and annual income with other selected characteristics of coconut climbers

It was generally believed that only certain categories of the scheduled castes accept coconut climbing as their job. But in the present study, it was observed that there were coconut climbers belonging to backward and forward castes. So the researcher thought that it was desirable to know what are all the characteristics that inspired people from other castes to accept the job of coconut climbing. Accordingly, association of caste with other selected variables was found out using $x^2$ test. It was found that family educational status, indebtedness and economic motivation was significantly associated with caste (Table 6). The significant association of indebtedness with caste is because the climbers of backward and forward castes were indebted to many agencies. Due to the pressure of these agencies to repay the debt and due to their poor economic background, they were forced to accept some job. But due to the difficulty in getting some other job, they selected agricultural labour as their occupation. Economic motivation was also found significantly associated with caste. This is because due to indebtedness and unemployment, when they were

forced to accept agricultural labour as their occupation, they found, due to their economic motivation, that coconut climbing is a job from which one can earn high income compared to other agricultural labourers. This motivated them to accept coconut climbing as their occupation. Family educational status also had significant association with caste. It is their family educational status that helped them in accepting this job. Because it was believed that coconut climbing is a job having a very low social status and this job is meant for a certain class of people only, and not suitable to forward castes and other backward castes. But due to their good family educational status they thought that 'one need not feel ashamed of doing any job'. So they accepted coconut climbing as their profession.

As in the case of caste, it was also believed that coconut climbers are low income groups. But the present study revealed that coconut climbers earn a very good income. It inspired the researcher to know what are all the characteristics that are associated with the annual income of coconut climbers. Association of annual income with other selected variables was found out using $x^2$ test. The study revealed that annual income of the respondents was associated

significantly with family size, farm size, housing facilities, family expenditure and savings (Table 7). It is quite natural that as the annual income of the respondents increases their housing facilities, family expenditure and savings also increases. The family size and farm size were also found to have significant relationship with the annual income of the family of the respondents. Majority of the respondents were having their family size less than 5 members. With the available income, they can lead a happy family life. The coconut climbing is a job which does not require stipulated time schedule. The climbers can leave the farm immediately after their job is over so that they get enough leisure time to cultivate some remunerative crops in their homestead, and they can take up some subsidiary enterprise involving other members of their family, through which they can earn additional income. Eventhough these might have contributed to the higher income of the coconut climbers, the researcher thinks that their high wage rate, as compared to other categories of agricultural labourers, is an important factor helping them in earning high income.

## 5.5 Employment and wage pattern of coconut climbers

As evidenced from Table 8, different types of works were done by the coconut climbers, the major work being coconut climbing. Besides coconut climbing, they used to go for digging, cutting of trees and tree trunks, fencing, climbing on other trees, dehusking the nuts and copra making, loading and unloading and some other farm operations. On an average the coconut climbers were employed for 218 days in a year. This is higher than the average period of employment of agricultural labourers as reported by Agricultural Labour Enquiry (1951), Patnaik (1957), Padmanabhan (1981) and Santhanam *et al* (1982). This shows that coconut climbers are having good employment opportunities as compared to other agricultural labourers. It might be because of the lack of sufficient number of coconut climbers in each locality. This is evident from Table 1, which reveals that nearly 50 per cent of the coconut farmers, under study, perceived that coconut climbers available in their locality were not sufficient to meet their requirements.

As could be seen from Table 9, of the total period of employment of coconut climbers (218 days), more than 75

per cent of the period (164 days) they were engaged in coconut climbing. Within this, they were engaged in various activities like harvesting of nuts, cutting of leaves, supporting the bunches, application of p.p. chemicals, covering the stem of the palm with fronds, thorns and similar materials to protect the nuts from thieves and rats etc. Among these operations, harvesting of nuts occupied lion's share of coconut climbing ie. more than 75 per cent of the period of employment in coconut climbing, they did harvesting of nuts.

Table 10 shows the monthwar fluctuations in the number of days of employment of coconut climbers. They received maximum number of days of employment as coconut climbers during the month of May followed by March and February. This is because the harvesting interval in coconut is comparatively less (around 40 days) during these months due to the comparatively high yield of coconuts (Nalleedu/Nallozhi). The coconut climbers were least employed during December-January because the yield of coconut is very less (Chilleedu/Chillozhi) in these months and hence the harvesting interval is increased in these months (around 60 days). In these periods, they go for jobs other than coconut climbing, in large proportions.

As far as wage pattern is concerned, it was found that the system of wage payment was not uniform among coconut climbers. There were different modes of payment of wages to coconut climbers viz. in cash, in kind and partly in cash and partly in kind. No fixed norm is there regarding the wage payment. It varies from place to place and even from climbers to climbers. This was in accordance with the studies of Agricultural Labour Enquiry (1951) and Misra and Vaish (1957).

It could be seen from Table 10 that the daily average wage rate of coconut climbers was Rs.82.30. This wage rate is much higher than the minimum wages fixed by the Government of Kerala showing that coconut climbers have high wage rates. They earned a high wage because of the high wage rate for coconut climbing, they perform works other than coconut climbing. This is evident from the results that the daily average wage rate for coconut climbing is Rs. 88.66 where as that for other works is only Rs. 64.45 only the high wage rate for coconut climbing is due to the nature of the work and the high risk involved in it, compared to other jobs. Eventhough the organising power of this section of labourers is limited, the researcher observed while

conducting the survey that some climbers of certain locality were organised as coconut climbers without the label of any political parties or any trade union. This might also have helped them in availing high wage rate.

If the wage is paid in cash, generally the wage rate carry from 2 to 3 rupees to climb a palm. if the number of palm is very limited, the rate of climbing per tree vary from Rs. 4 to 5.

When the wage is paid in kind (nuts), usually for every 100 nuts harvested, they will get 5-8 nuts as their wage. Still there is variation in the wages during Chilleedu (poor yielding season) and Nalleedu (good yielding season). Five to six nuts are given as wage during chilleedu. This is because, in chilleedu, the climbers have to climb more numbers of palms to harvest 100 nuts. If a coconut farmer is having only a very limited numbers of palms, then the climbers will ask for increased wages, at the rate of 9 or 10 nuts per 100 nuts harvested.

The subsample study conducted to know the wage pattern of coconut climbers revealed that they earned wages

upto Rs. 220 per day. This high wage is because on that day, they climbed more number of palms. On the other hand, in certain rare days they got a low wage of around Rs. 25 and is because on that particular day they climbed 5 or 10 palms only.

In addition to the wages earned as cash or kind, the coconut climbers take 2 or 3 nuts. This is based on the concept that 1 or 2 nuts as rent for the ladder that they bring and nut as rent for felling knife.

It is evidenced from Table 10 that the respondents earned higher income during May, followed by March. This is mainly because of the more number of days of coconut climbing as well as more number of days of employment during these months. In places where wages are paid in kind based on the yield, as the yield increases wage also increases. Hence during the months of May, March, February etc. in which the yield of coconut is comparatively high, wages received by the climbers will also be high. The daily average wage rate of the climbers was found to be maximum during August and this is because they might have received tips from the coconut farmers in connection with Onam, the festival of Kerala.

## 5.6 Constraints experienced by the coconut climbers

A cursory perusal of Table 12 revealed that 'after attaining a certain age, even before becoming old, one cannot climb the palms' was perceived as the major problem of coconut climbers. This is so because, coconut climbing is a job requiring very much physical strain and utmost care. As pointed out by a coconut climber, a regular climber generally become unable to climb, before becoming old. 'No fixed income during rainy season' was the next major problem expressed by them. During rainy season it is very difficult and dangerous to climb on coconut palm and hence wages earned during this is very low to meet their basic needs. 'Health problem' is also considered as an important constraint. Health is needed to carry out any activity, but a person with good health is essential to do a job like coconut climbing, which is risky and require much physical exertion. 'Lack of a good union for the climbers' is perceived as an important problem by the respondents. A strong union is essential to increase their organising power which inturn help them to increase their bargaining power, facilitate the utilization of various welfare schemes and in turn improve their standard of living. 'Lack of job security' and 'high risk in the job'

were considered as minor problems. Due to lack of more than sufficient number of climbers in each and every locality, as discussed earlier, they got enough job opportunities in coconut climbing and hence majority of them did not consider it as an unsecure job. High risk in the job is a minor problem might be because of the high risk preference of the respondents. 'Lack of proper knowledge regarding p.p. measures in coconut' and 'problems created by pesticides' were perceived as very minor problems. This is because, usually spraying against pest and diseases in coconut is performed by a separate group of people on contract basis and most often, they are not coconut climbers.

## 5.7 Suggestions for the welfare of coconut climbers

The labour sector of the economy needs more attention and careful study, even more attention than what is given to industry and banking. It is because the quantity and quality of labour become both a cause and effect of economic development. So welfare of agricultural labourers including coconut climbers is an important aspect.

Welfare of any section is based on their standard of living. To bring about improvement in the standard of living of coconut climbers, their economic status and their educational status are to be improved. There are coconut climbers who can earn only a very low income, who have no houses of their own, who cannot climb the palms due to health problems and who met with accidents while climbing on coconuts. Also coconut climbers will not get steady income during rainy season. There are certain welfare schemes put forward by the Government which can be utilized by the climbers. But most of the schemes cannot be utilized by many of them due to the conditions put under each scheme which are to be satisfied by each beneficiary. More over, the awareness of welfare programmes was found to be very low which inturn resulted in its low utilization. So the following suggestions are put forward for the welfare of this section of agricultural labourers.

1. Increase the awareness of coconut climbers about various welfare schemes there by increasing its utilization. This can be achieved with the help of Krishibhavans in Kerala.

2. Even before becoming old, one may not be able to climb on coconut palms and hence the pension age under Kerala Agricultural Workers Pension Scheme should be reduced from 60 to 55 or 50.

3. As per Kerala Agricultural Workers Pension Scheme, the beneficiary should have an annual family income of less than Rs.1500. This limit is too low that the agricultural labourers have to do malpractices to be included in the scheme. So this limit is to be increased.

4. Non-availability of fund from government causes difficulty in the timely disbursal of funds under various schemes. But considering the importance of agricultural labourers in the development of the economy, it should be given in time.

5. Coconut climbing is a risky job and to avoid much risk in the job a 'palm climber' should be given to each coconut climber with sufficient training to use it. This may be achieved through Krishibhavans (Palm climber is a device used to climb on palms).

6. Coconut climbers earn a very good income. But they have not much savings because of their high expenditure. This is due to their unnecessary expenditures especially for consuming liquors in large amounts. Majority of the climbers used to waste money in the way of consuming liquors. So various social organisations should come forward to make aware of the draw backs and bad effects of consumption of liquor and beverages including the huge economic loss per year for its consumption.

7. Under welfare fund scheme for tree climbers, along with the welfare fund that is given to those who have undergone serious accidents while climbing on palms, a fixed amount should also be given to them everymonth till he become able to do some work. Otherwise, the government should assist him by giving some job which he can do.

8. Introduce stable union meant exclusively for coconut climbers. This will no doubt enhance their standard of living in all respects.

To leave out the problems of agricultural labour in any scheme of agrarian reform is to leave unattended a weeping wound in the agrarian system of the country. Hence welfare of agricultural labourers including coconut climbers should be given utmost importance.


SUMMARY

# Chapter VI

## SUMMARY

Among the very many factors which influence any production function, labour is regarded as the most important one. To leave out the problems of agricultural labour in any scheme of agrarian reform is to leave unattended a weeping wound in the agrarian system of the country. The existence of large numbers of agricultural workers who lack sustained employment and frequently suffer from social handicaps is a source of serious weakness and even instability in the present agrarian system.

Coconut is the most important cashcrop grown in Kerala. In many practices related to the cultivation of this crop such as harvesting, plant protection, supporting the bunches, cleaning the crown of the palm etc., coconut climbers play a vital role. Thus, this sector of labourers form an important group of agricultural labourers, as far as Kerala is concerned.

No research studies have been done so far to understand various aspects of agricultural labourers engaged in coconut climbing. But it is essential to know the profile of coconut climbers as well as the constraints experienced by them in developing welfare programmes suitable to them. In this context, the present study was undertaken with the following specific objectives.

1. To assess the availability of labour for coconut climbing as perceived by the coconut farmers.

2. To analyse the socio-psychological and economic profile of agricultural labourers engaged in coconut climbing.

3. To study the employment and wage pattern of coconut climbers.

4. To identify the constraints experienced by the coconut climbers with a view to suggest welfare measures, if any.

The study was confined to Thiruvananthapuram district which ranks first in area of coconut, in the southern region of Kerala State. Out of the total panchayats

in the district, 10 panchayats were randomly selected. From each panchayat, 10 coconut farmers were randomly selected to study their perception regarding the availability of coconut climbers. The coconut climbers were identified by Key informant technique using the selected coconut farmers and from these, 10 climbers were selected from each panchayat. Thus the total number of respondents for the study was 100 coconut farmers and 100 coconut climbers. A subsample study was also conducted to know the employment and wage pattern of coconut climbers.

To study the profile of coconut climbers, their social, psychological and economic characteristics were taken as variables. Besides, the constraints experienced by them, if any, was also studied. The selected variables were measured either using adopted scales or schedules developed for the study. A scale to measure the attitude of coconut climbers towards their profession was also developed and tested for its validity and reliability.

The data were collected by personal interview. Different statistical tools like percentage, coefficient of variation, correlation coefficient and chi-square test were

used to analyse the data. The salient findings of the study are presented below.

1. Fifty two per cent of the coconut farmers perceived the availability of coconut climbers as more than sufficient while 48 per cent perceived that the availability of coconut climbers is not sufficient to meet their requirements.

2. Fifty two per cent of the climbers come under the middle aged group and 43 per cent of them come under the young group. Where as, only 5 per cent of the climbers were above 55 years of age.

3. More than 75 per cent of the coconut climbers belonged to scheduled castes. However there were climbers from other backward castes (17 per cent) and forward castes (5 per cent).

4. More than 90 per cent of the coconut climbers had nuclear families.

5. Fifty seven per cent of the respondent climbers had a family with less than 5 members and 43 per cent with more than 5 members.

6. Fifty one per cent of the respondents had middle school level of education and above, and 49 per cent had only primary school level of education and below.

7. Forty per cent of the climbers had a farm size of more than 5 cents where as the remaining 60 per cent of them had a farm size of more than 5 cents.

8. Sixty per cent of coconut climbers were having low housing facilities where as 40 per cent had good housing facilities.

9. Majority of the coconut climbers had experience upto 15 years while 44 per cent of the climbers had an experience of more than 15 years in their profession.

10. There was some mobility of labour among agricultural labourers engaged in coconut climbing. Fifty five per cent of them had low occupational mobility and 45 per cent of them had high occupational mobility.

11. The coconut climbers had an average annual income of Rs. 25055 and an average family expenditure of Rs.23317. Seventy per cent of the climbers saved only less than Rs.2483, eventhough their average savings was Rs.2483 in an year. Similarly, eventhough their average indebtedness

was Rs.668, a good majority (78 per cent) of the climbers had indebtedness of only less than Rs.668 in an year.

12. Majority of the coconut climbers were having low political and social participation.

13. Majority of the coconut climbers were characterised by high cosmopolite orientation low economic motivation, low achievement motivation and low level of aspiration.

14. The coconut climbers, in general, had high risk preference and possessed less amount of traditional values related to agriculture.

15. Majority of the respondents were having a favourable attitude towards their profession.

16. Coconut climbers had only a low level of knowledge about p.p measures in coconut.

17. The respondent climbers had only a very low awareness about welfare programmes and utilization of welfare programmes was very low.

18. On an average, the coconut climbers were employed for 218 days in an year, with 164 days in coconut climbing. They

received maximum number of days of employment during the months of March, May and February.

19. The daily average wage rate of coconut climbers was Rs. 82.30 with a monthly average wage of Rs.1496. They got higher income during the month of May followed by March February and April, respectively

20. The major constraints expressed by the climbers were After attaining a certain age (even before becoming old) one can not climb the palms' and 'No fixed income during rainy season'

Implications of the study

The study brings to focus the profile of coconut climbers which will help the planners and administrators in devising suitable strategy for effective implementation of welfare schemes for agricultural labourers engaged in coconut climbing. The constraints perceived by the coconut climbers should be given due consideration, and necessary actions are to be taken. The suggestions listed in the thesis, based on the present study, for the welfare of this section of labourers may be used for implementing welfare schemes. The

study also emphasises the need for conducting comprehensive explorations regarding the profile of various sections of agricultural labourers.

Suggestions for future research

The study has been limited to only one district in Kerala and with a restricted sample size and therefore, generalization based on this alone will not be meaningful. So to render generalization, a comprehensive research project of wider depth and coverage stretching all over the state need to be undertaken.

For want of time and resources, only limited factors have been included. Many more variables are yet to be studied in this connection.

Further, this type of research studies have to be undertaken with other sectors of agricultural labourers also, so as to suggest welfare measures to all sectors of agricultural labourers.

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* Originals not seen

# APPENDICES

# APPENDIX I

Department of Agricultural Extension

College of Agriculture

Vellayani, Thiruvananthapuram

PROFORMA TO COLLECT DATA FROM COCONUT FARMERS

Respondent No.

Date :

1. Name :

2. Address :

3. Area under coconut cultivation : Cents

4. Who are your coconut climbers : (including their address)

(1)

(2)

(3)

5. The other coconut climbers in the locality : (with their address)

(1)

(2)

(3)

6. Perception regarding the availability of coconut climbers

| Sl. No. | Statements | Strongly agree/Agree/ Disagree/Strongly disagree |
|---|---|---|
| 1. | Enough coconut climbers are there in the locality | |
| 2. | There is no problem of non availability of coconutclimbers to meet the requirements | |
| 3. | Each and every coconut farmer will have his permanent coconut climbers | |
| 4. | Since the permanent climber comes in time, the nonavailability of the climbers is not felt by the farmers | |
| 5. | In the absence of their permanent climbers, it is difficult to get yet another climber | |
| 6. | Coconut climbers will be available on the day of call itself | |
| 7. | Coconut climbers are available only after a week of our call | |
| 8. | Due to the unavailability of coconut climbers in time, evendrying and falling of nuts usually occur | |
| 9. | Besides harvesting of nuts, the climbers are available in time for covering the stem of the palm with fronds, thorns etc., removal of rhinocerous, application of P.P Chemicals etc. | |
| 10. | It is difficult to get the coconut climbers, if the farmers possess only limited number of palms | |

11. It is difficult to get the climbers during public holidays

12. The coconut climbers will not come for application of p.p. chemicals alone

13. It is difficult to get the climbers for work during rainy season

14. If only lesser number of nuts are there in the palms, it is difficult to get the climbers

15. For cleaning the palm, removal of rhinocerous beetles etc. alone, without the job of harvesting the nuts, it is not easy to get the coconut climbers

16. Being a high risky job, youth are not coming to this field and this affects the availability of coconut climbers

17. As the old climbers leave the job of coconut climbing, the youth are coming to this field and hence the non availability of the climbers is not seriously felt

18. The non availability of the climbers is not at all felt by the farmers because a number of persons are coming to this field since it is a highly profitable occupation

APPENDIX II

EMPLOYMENT AND WAGE PATTERN FOR THE FORTNIGHT (FROM TO )

Name and address of respondent Sl. No.

| Sl. No. | Name of operation | Place | No. of days worked | Wages earned per day | Details of contract work if any | Total wage |
|---|---|---|---|---|---|---|
| | | | | | | |

## APPENDIX III

### PROFORMA TO COLLECT DATA FROM COCONUT CLIMBERS TO STUDY THEIR PROFILE

Respondent No.

Date :

1. Name of respondent :

   Address :

   District :

   Taluk :

   Panchayat :

   Ward :

2. Religion : Caste :

3. Family type : Joint/Nuclear

4. Family educational status

| Name of the members | Age | Relation to the respondent | Illiterate/Can read/ Can read and write/ Primary school/middle school/high school/ Collegiate |
|---|---|---|---|
| | | | |

5. Farm size : Area owned : cents
Area leased : cents

6. Housing facilities :

Type of house : Thatched/Tiled/Concrete

Living space : One room/Two rooms/three rooms/More than three rooms

Lighting : Kerosine/Biogas/Electricity

Ventilation : Good/Average/Poor

Drinking water : Pipe connection/Own well/Common well/ Road pipe/Pond

7. Annual income

| Sl. No. | Occupation | Income earned |
|---|---|---|
| 1. | Harvesting the nuts - on season | |
| 2. | Harvesting the nuts - off season | |
| 3. | Application of P.P. chemicals | |
| 4. | Covering the stem of the palm with fronds, thorns etc. | |
| 5. | Fencing | |
| 6. | Application of fertilizers | |
| 7. | Digging | |
| 8. | Dehusking the nuts and copramaking | |
| 9. | Climbing on other trees | |
| 10. | Others (specify)<br>(1)<br>(2)<br>(3) | |
| | Total | |

8. Experience

How many years of experience you have in coconut climbing :

9. Family expenditure pattern

| Sl. No. | Item | Quantity consumed per month | Expenditure | |
|---|---|---|---|---|
| | | | Rate | Amount/month |
| 1. | Food items | | | |
| | a) Rice | | | |
| | b) Wheat | | | |
| | c) Pulses | | | |
| | d) Vegetables | | | |
| | e) Fish | | | |
| | f) Meat | | | |
| | g) Tubers | | | |
| | h) Provisions | | | |
| | i) Others (specify) | | | |
| 2. | Stimulants/Beverages | | | |
| | a) Tea | | | |
| | b) Coffee | | | |
| | c) Beedi | | | |
| | d) Tobacco | | | |
| | e) Toddy | | | |
| | f) Arrack | | | |
| | g) Others (specify) | | | |

3. Household expenses

   a) Clothing

   b) Bedding

   c) Kerosine

   d) Fuel

   e) Soap

   f) Others (specify)

4. Education for children

5. Recreation like cinema drama, festivals etc.,

6. Marriages & other social and religious ceremonies

7. Medical expenses

8. Expenditure on durable items like ornaments, furniture, Vehicle, TV, Radio etc.

9. Travelling expenses

10. Others, specify

---

10. Savings during the past one year

1) Cash in hand :

2) Cash deposited with others :

3) Cash in bank :

4) Repayment of debts :

5) Purchase of domestic articles :

6) Purchase of jewellery :

7) Purchase of other durable goods :

8) Remittance to chitfunds and other organisations :

11. Indebtedness

| Sl. No. | Source | Purpose of borrowing | Amount borrowed | Amount outstanding repayments | Terms |
|---|---|---|---|---|---|
| | | | | | |

12. Occupational mobility

i) Do you go to other villages for doing your job
Yes/No (1,0)

ii) If yes, a) give the frequency - Mostly (3)
- Sometimes (2)
- Rarely (1)

b) Is it outside your - Village (1)
- Taluk (2)
- District (3)

iii) Do you go for jobs other than coconut climbing
Yes/No (1,0)

iv) If yes, a) give the frequency - Mostly (3)
- Sometimes (2)
- Rarely (1)

b) Is it to - Agricultural
- Nonagricultural

13. Political participation

i) Are you a member of any of the trade unions Yes/No

if yes, a) Name of your union
b) To which party it is affiliated

ii) Are you an ordinary member/office bearer

iii) Frequency of participation in the trade union activities
Frequently/Often/Never

14. Social participation

Membership in organisations

a) No membership in any organisation - 0

b) Membership in each organisation - 1

c) Office bearer in each organisation - 2

Frequency of attending meeting

a) not attending any of the meetings - 0

b) Attending few meetings - 1

c) Attending all meetings - 2

15. Cosmopolite orientation

Please indicate your agreement or disagreement with each of the following statements A/UD/DA

i) A coconut climber can learn everything he needs through the experience in his own village

ii) All the things that a coconut climber needs to know for his own benefit are not necessarily found in his own village

iii) All the needs of a coconut climber can be entirely met with in his own village

iv) In the present days of increased transport and communication facilities, a coconut climber should know more about the things happening outside the village

16. Economical motivation

Indicate whether you agree or disagree with the following statements (A/D)

i) A coconut climber should work hard for economic profit

ii) Money is necessary for a goodliving, but everything in life cannot be defined in economic terms

iii) All I want from my job is to make just a reasonable living for the family

iv) I would work hard without rest inorder to earn maximum money to run my family

v) In addition to my job as a coconut climber, I like to take up some other enterprise to earn more money

vi) In addition to making a reasonable amount of profit, the engagement in working as a coconut climber is also important to me

17. Achievement motivation

Please indicate your degree of agreement with the following statements. (SA/A/UD/DA/SDA)

i) One should enjoy work as much as play

ii) one should work like a slave at everything one undertakes unless he is satisfied with a result

iii) One should succeed in his occupation even if one has been neglectful of his family

... even if one cannot get rest

vi) Even when one's interests are in danger, he should concentrate on his job and forget his obligation to others

vii) One should set difficult goals for oneself and try to reach them

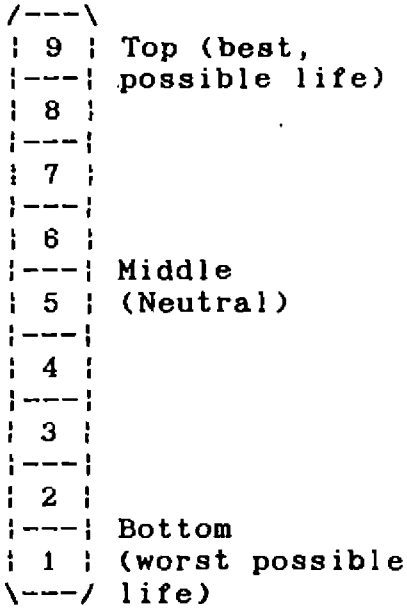
18. Level of aspiration

Here is a picture of a ladder. The top of the ladder represents the best possible life for you, the bottom the worst possible life for you and the middle neutral. After reading the following questions carefully, please select a number from the ladder.

i) Where on the ladder do you feel you personally stand at present ( )

ii) Where on the ladder would you say you were five years ago ? ( )

iii) Where on the ladder you think you would be five years from now ? ( )




19. Risk preference

Indicate your opinion about the following statements

(A/UD/DA)

i) An agricultural labourer should not select coconut climbing as his occupation since it is having more risk than any other agricultural labour

ii) The coconut climbers are actually forced to do the risky job of coconut climbing, for living

iii) A climber should not climb On a very long coconut palm, as it is risky

iv) A climber should not do his job of coconut climbing during rainy time

v) If various agricultural labour are available, among those one will not select coconut climbing, considering the high risk involved in it.

vi) A climber should rather take more of a chance in making a big profit than to be content with a smaller but less risky profit

20. Values related to Agriculture

State whether you agree or disagree with the following statements (A/DA)

i) God's blessing is the most important condition necessary for a good crop

ii) A coconut climber should not be sentimental in selling away old cattle

iii) It is below the dignity of a person of good social standing to engage in activities such as raising poultry eventhough they can be profitable

iv) It is below the status of a man belonging to a respectful family to work as a labourer in another man's farm

v) As pig is a dirty animal, a person belonging to a higher caste should not rear it

vi) In cultivating different crops, one's attempt should be to meet the requirements of one's family

vii) Only those persons whose occupation by tradition is the keeping of animals would succeed in dairy

viii) It is below the dignity of an educated young man to do field work

ix) One should try to start important agricultural work during auspicious periods

x) It is due to displeasure of god or humanbeings that it does not rain regularly in some occasions

21 Attitude of coconut climbers towards their profession

Indicate your degree of agreement or disagreement with the following statements (SA/A/N/DA/SDA)

i) Coconut climbing is a dull occupation

ii) Those who accept coconut climbing as the occupation are wasting their life

iii) It is difficult to pull on life with coconut climbing as the occupation

iv) One feels much ashamed in doing coconut climbing

v) Coconut climbing is a profitable occupation

vi) One should be proud of being a member among coconut climbers

vii) Nobody likes to become a coconut climbers, as they are the most neglected sector in the social system

viii) A coconut climber will be loyal to his job as a coconut climber

ix) Even if one gets any other job, he will not leave the job of a coconut climbing

22. Knowledge about plant protection in coconut

i) Making steps on the trunks should be avoided. For the control of which pest, this measure is advocated ?

a) Rhinocerous beetle

b) Red palm weevil

c) Coried bug

d) Rhizome weevil

ii) The pest of coconut responsible for immature nut fall

a) Rhinocerous beetle

b) Red palm weevil

c) Coried bug

d) Rhizome weevil

iii) The tender leaf base and soft tissues of the crown rot into slimy mass of decayed material emitting a foul smell. This is

a) Attack of Rhinocerous beetle

b) Attack of red palm weevil

c) Bud rot

d) Leaf rot

iv) Coried bug can be controlled using

a) Thiodan

b) Factamphos

c) Bordeaux mixture

d) Bordaeux paste

v) To control rhinocerous beetle, we can use

a) B.H.C and water

b) B.H.C. and sand

c) Furadan and water

d) Furadan and sand

vi) Budrot can be controlled using

a) Paramur

b) Boardeaux paste

c) Sevin

d) M.O.P

vii) The tablet used for controlling rats in coconut ?

a) Celphos

b) Sevin

c) Urea

d) Factamphos

viii) To prepare bordeaux mixture, we need

a) Salt, Blue vitriol and water

b) Blue vitriol and salt

c) Blue vitriol, slaked lime and water

d) Slaked lime, salt and water

23. Awareness and utilization of welfare programmes

1. a) Are you aware of the welfare scheme for tree climbers? (1980) Yes/No

   b) If a severe accident occurs while climbing on a tree the exgratia amount paid by the government is ...(R/W)

   c) Within how many days of the accident, you have to apply for the exgratia amount ? ..... (R/W)

ii a) Have any member of your family ever become eligible to get the exgratia amount ? (Yes/No)

   b) If yes, did you utilize it ? (Yes/No)

2. a) Are you aware the group insurance scheme for landless agricultural labourers (1988) ? (Yes/No)

   b) The age group of landless agricultural labourers to whom the scheme is useful ? (R/W)

   c) Whom do you have to approach to join the scheme ? (R/W)

ii a) Have you ever been a landless agricultural labourer ? (Yes/No)

   b) If yes, have you utilized the benefit of this scheme (Yes/No)

3) a) Are you aware of the Kerala Agricultural workers' pension scheme (1980) ? (Yes/No)

   b) The age to be completed for getting pension under this scheme is ..... (R/W)

   c) What is the limit of the annual income to be eligible for getting pension under this scheme ? (R/W)

ii a) Do any member of your family have the eligibility to get pension under this scheme ? ... (Yes/No)

   b) If yes, are you utilizing the scheme ?... (Yes/No)

4. a) Are you aware of the Kerala Agricultural worker's welfare found scheme (1990) ? (Yes/No)

b) What is the annual subscription towards this scheme? (R/W)

c) After 40 years of continuous contribution, how much amount will you get ?

ii a) Are you utilizing this scheme ? (Yes/No)

24. Constraints

| Sl. No. | Constraints | Rank |
|---|---|---|
| 1. | Lack of job security | |
| 2. | High risk in the job | |
| 3. | No fixed income during rainy season | |
| 4. | After attaining a certainage, even before becoming old, one cannot climb the palms | |
| 5. | Health problems | |
| 6. | Lack of proper knowledge regarding P.P. measures in coconut | |
| 7. | Problems created by pesticides | |
| 8. | Lack of a good union for the climbers | |
| 9. | | |
| 10. | | |
| 11. | | |
| 12. | | |

## ABSTRACT

The study, "profile of coconut climbers in Thiruvananthapuram District" was carried out with the following specific objectives.

1. To asses the availability of labour for coconut climbing as perceived by the coconut farmers.

2. To analyse the socio-psychological and economic profile of agricultural labourers engaged in coconut climbing.

3. To study the employment and wage pattern of coconut climbers.

4. To identify the constraints experienced by the coconut climbers with a view to suggest welfare measures, if any.

The study was confined to Thiruvananthapuram district of Kerala state. The total number of respondents for the study was 100 coconut farmers and 100 coconut climbers. Coconut farmers were selected using random

sampling technique and the coconut climbers were selected using key informant technique.

The study revealed that 52 per cent of the coconut farmers perceived the availability of coconut climbers as more than sufficient and 48 per cent perceived that the availability of coconut climbers is not sufficient to meet their requirements.

Majority of coconut climbers came under middle aged group with an average age of 38. More than 75 per cent of the climbers belonged to scheduled castes. Majority of the climbers had nuclear families with a family size of less than 5 members. On an average, the family educational status of the respondent was at primary school level. A great majority of them had a farm size of 6-15 cents, with low housing facilities. The experience of majority of the climbers in their profession was found to be upto 15 years. There was some mobility of labour among coconut climbers. However, 55 per cent of them had low occupational mobility.

The coconut climbers selected for the study had an average family annual income of Rs. 25055 and an average

family expenditure of Rs. 23317. Even though their average savings was found to be Rs. 2483 per year majority of them saved only less than this amount. Similarly, a great majority of the climbers had indebtedness of only less than the average indebtedness of Rs. 668 in an year.

Majority of the coconut climbers studied were having low political participation, low social participation, low economic motivation, low achievment motivation and low level of aspiration. On the other hand, they had high cosmopolite orientation, high risk preference and possessed only less amount of traditional values related to agriculture. The attitude of the coconut climbers towards their profession was found to be favourable.

Majority of the respondent climbers had only a limited knowledge about P.P measures in coconut. Similarly, they had only a very low awareness and utilization of welfare programmes.

It was also found that, on an average, the coconut climbers were employed for 218 days in an year, with 164 days in coconut climbing. They received maximum number of days of

employment during the month of March, May and February. The daily average wage rate of coconut climbers was Rs 82.30 with a monthly income of Rs. 1496. They earned higher income during May, followed by March, February and April.

Among the various constraints, 'After attaining a certain age, even before becoming old, one cannot climb the palms' and 'No fixed income during rainy season' were perceived by the coconut climbers as their major constraints.