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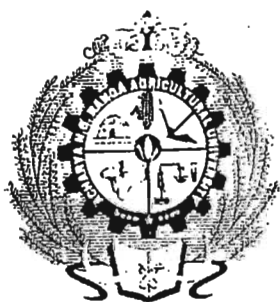
PERCEPTION OF DRUDGERY OF TRIBAL WOMEN IN SRIKAKULAM DISTRICT OF ANDHRA PRADESH

By

Ms.KEERTHY SARADA

B.H.Sc. (Rural)

THESIS SUBMITTED TO THE
ACHARYA N.G.RANGA AGRICULTURAL UNIVERSITY
IN PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE AWARD OF THE DEGREE OF
MASTER OF SCIENCE IN HOME SCIENCE
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SEPTEMBER, 1999

CERTIFICATE

Ms.K.SARADA has satisfactorily prosecuted the course of research and that the thesis entitled **PERCEPTION OF DRUDGERY OF TRIBAL WOMEN IN SRIKAKULAM DISTRICT OF ANDHRA PRADESH** submitted is the result of original research work and is of sufficiently high standard to warrant its presentation to the examination. I also certify that the thesis or part thereof has not been previously submitted by her for a degree of any University.

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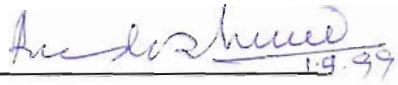
CERTIFICATE


This is to certify that the thesis entitled **PERCEPTION OF DRUDGERY OF TRIBAL WOMEN IN SRIKAKULAM DISTRICT OF ANDHRA PRADESH** submitted in partial fulfilment of the requirements for the degree of **MASTER OF SCIENCE IN HOME SCIENCE** of the Acharya N.G.Ranga Agricultural University, Hyderabad, is a record of the bonafide research work carried out by **Ms.K.SARADA** under my guidance and supervision. The subject of the thesis has been approved by the student's Advisory committee.

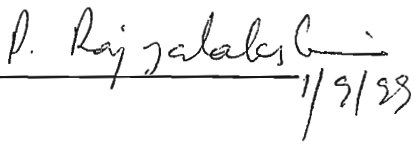
No part of the thesis has been submitted for any other degree or diploma or has been published. The published part has been fully acknowledged. All the assistance and help received during the course of investigations have been duly acknowledged by the author of the thesis.



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(K.SARADA)

DECLARATION

I, **Ms.K.SARADA** hereby declare that the thesis entitled **PERCEPTION OF DRUDGERY OF TRIBAL WOMEN IN SRIKAKULAM DISTRICT OF ANDHRA PRADESH** submitted to Acharya N.G.Ranga Agricultural University for the degree of **'MASTER OF SCIENCE IN HOME SCIENCE'** is the result of the original work done by me. It is further declared that the thesis or any part thereof has not been published earlier in any manner.

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ABSTRACT

Drudgery is generally conceived as physical and mental strain, agony, monotony and hardship experienced by human being. All these results in decline in living and working conditions affecting men and women alike. Since time immemorial women in rural and tribal areas are associated directly or indirectly with agricultural production, processing and distribution. Very few studies have so far been conducted to quantify drudgery of women scientifically. So a large gap still exists between the actual participation of tribal women in various farm and home activities and the hardships they encounter in their work. In view of these inadequacies, the present investigation made an attempt to study the perception of drudgery of tribal women due to their participation in farm and home activities.

Ex-post facto research design was followed for the study. The study was conducted in seethampeta and Veeragattam mandals of Srikakulam district of Andhra Pradesh state. From each of these mandals, three villages were selected at random. Thus, six villages, Kusimi, Goidi, Devanapuram, K.Ichapuram, chinnagora, Gangammampeta, were selected. 120 respondents were selected from 6 villages using proportionate random sampling method.

Interview schedule was developed, pretested and used to collect the data pertaining to the variables incorporated in the study.

Majority of the respondents were young, married, engaged in two occupation i.e cultivation and labour, with medium to small family size, owned marginal farm size, having average agricultural income coupled with labour income. Majority of the respondents were with average economic status, belonged to low indebtedness group with average food intake pattern, with average economic motivation and average religious belief.

Almost all the activities in nursery management were performed by men except hand weeding. In mainfield activities majority of the activities like transplanting, hand weeding, harvesting, carrying bundles, making bundles, destruction of affected part of plants, winnowing, cleaning and storing of grains were performed by women. In home activities majority of the activities performed by tribal women except shopping and selling of goods in shandies and borrowing and repaying of loans.

Average time spent by tribal women in nursery management activities was high in case of hand weeding followed by sowing in nursery beds. In mainfield activities most of the time spent in transplanting, hand weeding, harvesting, carrying bundles to the threshing floor, winnowing, cleaning and storing in bins. In home activities most of the time spent was in fetching of water, collection of fuel and care of cattle etc.

Perception of drudgery on the whole (Farm and Home activities) indicated that average perception of drudgery followed by high, very high, low and very low.

Problems encountered by tribal women in farm was transplanting, hand weeding, poducultivation and harvesting. In home was fetching of water, collection of fuel/preparation of cow dung cakes, borrowing and repaying of loans, mud plastering, food preparation and care of cattle and solutions suggested were equal pay for equal work, tools that reduce drudgery are to be made available to tribals, training the tribal women on latest technology to reduce the work load and making available the pesticides and weedicides at low cost. In home activities much emphasis was on digging bore-wells, construction of bio-gas plants and smokeless chulla that reduce the drudgery of tribal women.

INTRODUCTION

CHAPTER I

INTRODUCTION

India is inhabited by the people of varied customs and religions with divergent life styles. It is one among the few nations of the world noted for its tribal concentration. "A social group of simple kind, the members of which speak a common dialect have a single government and act together for common purposes" is a tribal.

The tribal India lives in the forest hills and naturally isolated regions known by different names meaning either the people of forest and hills or the original inhabitant and so on. The tribes differ considerably from one another in race, language, culture, and beliefs in their myths and customs.

Though the tribals constitute about eight per cent of the Indian population they have a very special position in Indian society because;

- The tribals are the oldest settlers if not the first settlers. The Hindi word "adivasi" means original inhabitants.
- The tribals in India (67.8 million, 1991 census) far out number the tribal population of any other country in the world.
- Constitution of India has provided several welfare measures for the well being of the tribals.

Women play a significant and crucial role not only in agriculture and allied fields including live stock production, horticulture, post-harvest operations, agro-forestry, fisheries, etc. but also in non-farm operations and household

activities. They have an equal contribution to make in every sphere of human development activity whether it is in agriculture, industry, services or small business, therefore, their role cannot be minimized. Their contribution in agriculture are roughly estimated to be around 70 per cent. They contribute as cultivators and labourers engaged in a number of farm operations with men, independently or jointly. The participation of women varies from carrying out actual farm operations in the field to supervision, management and decision making in different operations. Before an indepth appraisal can be made on the major role played by women in agriculture and their present status, it is necessary to make a brief mention of the demographic aspect of tribal population and tribal women.

1.1 DEMOGRAPHIC PROFILE

India has world's second largest concentration of tribal population. According to 1991 census the population of the scheduled tribes is 5.38 crores, constituting about 9.08 per cent of the total population of the country. Majority of tribal population is concentrated in nine states i.e., Madhya-Pradesh, Bihar, Orissa, Gujarat, Rajasthan, Assam, Maharastra West-Bengal and Andhra Pradesh.

Andhra Pradesh is the home for 41.99 lakhs of tribals belong to 33 different groups which works out to 6.31 per cent of total population. Among the tribal areas in 8 districts of Andhra Pradesh the tribal population of the SriKakulam district as per 1991 census provisional figures is 1,34,067 of the total population of 23,17,915.

In coastal Andhra out of the total population (8398371) of workers engaged in Agriculture 33.7 per cent are cultivators and 66.3 per cent constitute

Agriculture labours . While in Srikakulam District alone out of 75,7081 population engaged in Agriculture 40 per cent (3,33,823) are cultivators and 60 per cent (4,23,258) are Agriculture labours .

The tribal population in Srikakulam district is 1,34,067, out of which 67,231 (50.14 per cent) are males, and 66,836 (49.85 per cent) are females.

In Srikakulam district 12.54 per cent of tribal people are engaged in cultivation, 30.84 per cent are Agricultural labourers; 1.70 per cent in manufacturing, processing, servicing in household industry; 8.90 per cent form other workers, 2.66 per cent are marginal workers and 44.17 per cent are non-workers (1991 census).

1.2 ACTIVITIES PERFORMED BY WOMEN AND MEN IN FARM AND HOME

Women's active involvement in farm related activities with in and outside the household is persuasive throughout the third world. They constitute a formidable part of work force in agriculture, in its broadest sense, including subsidiary enterprises like dairy, poultry, sericulture, pisciculture and the like. So far as crop husbandry is concerned, women participate in almost all activities right from preparatory tillage to harvest, even in post harvesting tasks like processing, storage and marketing. This contribution made by them, in addition to their usual duties of housekeeping and child rearing, is often not adequately recognized and appreciated. In this regard a look at a few studies, summarizing women's participation would give a clear picture.

Singh and Punia (1988) cited some important features of women's participation in agriculture as:

- a) Irrespective of the geographical location and time period women had been the major contributor of labour in the agricultural sector.
- b) Division of labour in agriculture was influenced by gender.
- c) Cultural factors were important not only at the participation level, but also in the performance of activities.
- d) Women labourers in agriculture were much higher in number than men and it was the largest single avenue for their employment in rural areas.

Singh and Sharma (1988) reported that women's contribution in various enterprises in the rice based farming system were greater than that of men in hills and at par with men in plains of western U.P.

They also reported that women performed those activities which require lower level of skills, and which are repetitive and monotonous like transplanting of paddy, harvesting and threshing etc. This was because their social customs and traditions do not permit ploughing of land by women.

Wherever the operations are mechanised, men are operating them while the operations which need manual labour were done mainly by women.

Grover and Kapoor (1985) reported that women were most efficient than men as far as efficiency of work is concerned. They were more efficient by; 16 per cent in rice transplantation, 8 per cent in weeding in paddy and wheat fields, 24 per cent in harvesting pearl millet, and 37 per cent in picking cotton. Their

efficiency in harvesting and processing of tea, coffee and horticultural crops has never been in doubt. They perform virtually all jobs connected with husking, cleaning and storage.

The type and extent of participation by farm women in farm operations, however, vary from state to state. While the participation rate of women in crop production in Haryana and Punjab is only 1.45 per cent and 4.28 per cent respectively, it is higher in Maharashtra (29 per cent) and Tamilnadu (24 per cent) and the rate is still higher in northern and eastern region of Andhra Pradesh accounting for 70 per cent and 95 per cent respectively. In Tamilnadu, 67 per cent of the total agricultural labourers and 40 per cent of total cultivators are women. The respective figures in Kerala are 48 per cent and 6 per cent. Farm operations like sowing, transplanting, weeding, harvesting, shelling, threshing, cleaning, grading, storage and size reduction etc., are predominantly performed by farm women. They are also responsible for arranging water, collection of fuel for cooking, care of animals, cooking and cleaning of house. Most of the farm and home operations performed by them are strenuous, repetitive, monotonous and mostly involves drudgery.

Thus, it should be noted, that women's contribution to agriculture is much more than what is reflected in statistics and research studies. A large gap in the proper understanding of their roles and actual implementation of suitable programmes still exists in our country. In view of these inadequacies, the present investigation was attempted to gain information on women's participation in farm and home activities as well as the extent of perception of drudgery by tribal women.

1.3 NEED AND IMPORTANCE OF THE STUDY

The contribution of women in farm and home activities has been firmly established in the earlier context. In the recent past, gender issues in agricultural development and its allied sectors have become the subject of considerable debate throughout the world. More recently, need for research in this field has been recognized by social scientists, policy makers, administrators and politicians.

Women contribute significantly not only in agricultural development and its allied fields, but also in non farm operations and household activities. Participation of women simultaneously in farm and home activities would lead to physical and mental fatigue as these operations often tend to be very strenuous.

To bring women into a main stream of agricultural development, a proper and accurate interpretation of the operations performed by men and women in farm and home activities, the nature and type of work they do and the hardships they encounter, would be a great help in formulating future programmes for them. It is worthnoting that some of the observations made by eminent social scientists, regarding the need of research in this area.

National Seminar (1993) on "Women in Agriculture : Developmental issues" held at NAARM, Hyderabad recommended that because of the limited number of research studies under taken so far in the country by various institutions on the activities performed by women in the farm and home. The information available on drudgery and occupational health hazards of tribal women are very scanty. It is therefore, recommended that there is a need to conduct research in this area.

It should be noted that women's participation is coupled with physical hardship and greater drudgery than that of men. Though, some studies revealed the nature and type of participation of women, little effort has been made to get an insight of their activities which involve drudgery and physical stress. Keeping these vital observations, and the necessity of the present situation in view, the present investigation was conceived, planned and conducted with the major objective of studying the extent of perception of drudgery of tribal women in farm and home activities. The specific objectives of the study were as follows:

1.4 OBJECTIVES OF THE STUDY

1. To study the profile of the tribal families.
2. To enlist the activities performed by tribal men and women in farm and home activities.
3. To assess the time spent by tribal women in each activity of farm and home.
4. To assess the extent of perception of drudgery by the tribal women due to their involvement in farm and home activities.
5. To study the relationship between drudgery and selected profile of tribal women.
6. To study the problems faced by tribal women and suggest ways to reduce their drudgery.

1.5 SCOPE OF THE STUDY

1. The study facilitates to know the extent of participation of tribal women in farm and home activities. Hence the study will be useful to policy makers, planners, administrators, scientists and managers of agricultural development programmes to formulate, implement, monitor and evaluate agrarian reforms and development policies and programmes focussing on equity gender growth.
2. The information on their extent of perception of drudgery could be very useful in planning the type of skills for women and also developing suitable technologies to help them to reduce the drudgery.
3. The study enables to identify area wise activities, in which tribal women participate and to ascertain the farm and home technologies which could be introduced in the area. It also helps to solve the area specific problems on the adoption of new technologies.

Thus, the present study has the scope of analysing the tribal women participation and their hardships in various farm and home activities, and also to form a basis for any future developmental programmes designed for reducing the hardships faced by the tribal women.

1.6 LIMITATION OF THE STUDY

1. ✓ Being a post graduate research, this investigation has limitation of time and resources.
2. ✓ The study was carried out only on specified area and limited to only one district. As such generalisations of the present study regarding drudgery of tribal women have limited applicability.

3. The study was based on the perceived opinion of the respondents, which may not be totally free from bias inspite of all the precautions and efforts of the researcher.

1.7 ORGANISATION AND PRESENTATION OF THE THESIS

The report of this study is presented in five chapters. The first chapter deals with a brief introduction including scope and importance of the study, objectives and limitations. The second chapter deals with the review of related literature followed by third chapter which is composed of the details of materials and methods used for the study. The fourth chapter is assigned for the findings, results and a detailed discussion on the findings while the fifth and final chapter deals with summary, conclusion and implications. At the end references and appendices are presented.

REVIEW OF LITERATURE

CHAPTER II

REVIEW OF LITERATURE

A comprehensive review of literature is a must in any research endeavour. The main function of the review of literature is to make the researcher upto date with in the field of investigation so that the scope and direction of the study can be delineated properly.

Only the relevant review connected with both tribal population, farm women and drudgery were included in this chapter.

2.1 PROFILE OF TRIBAL FAMILIES

2.1.1 Age

Zotwana (1987) reported that majority of small, medium and big tribal farmers of Aizwal district of Mizoram were in the age group of 41-60 years.

Naidu (1987) found that majority of small, medium and big tribal farmers were in the age group of 41-60 years.

Kusumanjali (1995) reported that majority of the tribal women 87.5 per cent were in the young age category.

2.1.2 Occupation

Verma (1986) in his comparative study of tribals and non-tribals observed that 1/3 of the tribal functionaries were housewives, majority of tribals 42.0 per

cent were daily wage workers followed by agriculturists 20.0 per cent and only 10.0 per cent were self-employed or in business.

Virender Kumar (1992) in his study on women's employment in Himachal Pradesh found that 92.0 per cent of rural female workers directly depend on agriculture as cultivators and agricultural labourers. While household industry employees are less than one per cent in Himachal Pradesh.

Kusumanjali (1995) reported that majority 75.8 per cent of the tribals had a combination of three occupation followed by 22.5 per cent had combination of two and 1.6 per cent had agricultural operation and daily labours only.

2.1.3 Family size

Shavinder (1983) stated that majority of the respondents had nuclear families with a family size of 5 members and the family occupation being cultivation.

Ratha (1985) found that 45 per cent of tribal farmers had a family size of 4-6 members and 42.14 per cent belonged to the category of 7-12 members family size.

2.1.4 Farm size

Sen *et al.* (1985) observed that large proportion of the participating families in the farm forestry programmes belonged to small and marginal categories. Further it was reported that the average land holding is one hectare per family of 6 people.

Oberoi and Moorti (1989) found that the average size of holding on all farms of Gaddi tribes in Himachal Pradesh was 1.05 hectares and it varied from 0.73 hectares on small farmers to 1.18 and 1.46 hectares on medium and large farms respectively.

Prasad (1990) found that majority 60 per cent of tribal farmers of Khammam district, Andhra Pradesh were in middle age category, 67 per cent of them belonged to small farmers category whereas 20 per cent and 13 per cent belonged to marginal and big farmers category.

Babu (1992) stated that majority 53 per cent of the tribal farmers possessed medium farm i.e. 5 to 10 acres size followed by small farm size 19 per cent, large farm size 17 per cent and marginal farm size 11 per cent.

Kusumanjali (1995) reported that majority of the tribal farmers 41 per cent were small farmers followed by medium holdings 26 per cent, large holdings 11 per cent and landless 22 per cent.

Sankara Rao (1995) stated that majority of the tribal farmers had small land holdings, with nuclear families having five members, and had medium socio-economic status.

Karunasree (1996) stated that majority of tribal women had nuclear families with small farm holdings, and medium socio-economic status majority had medium level of religious belief.

2.1.5 Economic status

2.1.5.1 Income:

Oberoi and Moorti (1989) observed that the average annual income from all sources for tribal farm was Rs.1,132/- and reported that per capita annual income of small farmer was Rs.859/- and that of big farmer was Rs.1661/-.

Babu (1992) reported that majority 72 per cent of mango growing tribal farmers in Khammam district of Andhra Pradesh belonged to medium income group, whereas 17 per cent and 11 per cent belonged to high and low income group respectively. The average annual income of the tribal farmers was reported to be Rs.8346/-.

2.1.6 Economic Motivation

Rao (1987) reported that majority 60 per cent of the silk worm rearing tribal farmers had medium economic motivation whereas 18.67 per cent and 15.33 per cent had high and low economic motivation respectively.

Ratnakar (1990) found that majority of the respondents 40.60 per cent under ITDA belonged to medium category of economic motivation whereas 50.30 per cent of non-beneficiaries belonged to low category of economic motivation.

Kusumanjali 1995) reported that 49.2 per cent of the respondents possessed high economic motivation followed by medium economic motivation 32.5 per cent and low economic motivation.

2.1.7 Religious belief

Ratnakar (1990) found that 100 per cent of beneficiaries and non-beneficiaries of ITDA in Khammam district of Andhra Pradesh belonged to medium level of religious belief.

Adam Putla (1994) reported that majority 80 per cent of the lambadi tribes of Andhra Pradesh had medium level of religious belief followed by high level of religious belief 15.8 per cent and low level of religious belief 4.2 per cent.

2.2 ACTIVITIES PERFORMED BY TRIBAL MEN AND WOMEN IN FARM AND HOME

According to FAO (1981), in many cases in developing countries, women are primarily responsible for weeding, harvesting, transplanting, storing, processing and marketing, but they often contribute greatly to ploughing, planting and fertiliser application as well. In other cases, men and women have complementary labour roles for the same crop. Clearly, the agricultural activities of women and men vary according to region, the structure of the household, and the productive resources available.

Yadav *et al.* (1987) reported that participation of farm women in agricultural operations like transplanting, weeding and harvesting was 49 per cent.

Singh and Bhattacharya (1988) noted that the type and extent of participation of farm women in farm operations, however, vary from state to state. While the participation rate of women in crop production in Haryana and Punjab is only 1.45 per cent and 4.28 per cent respectively, it is higher in Maharastra 29

per cent and Tamil Nadu 24 per cent and the rate is still higher in northern and 15
eastern region and Andhra Pradesh accounting for 70 per cent and 95 per cent
respectively.

Singh and Punia (1988) in a paper on "the participation of farm women in agriculture with special reference to eastern Uttar Pradesh" revealed that the overall share of women in various operations of rice cultivation was recorded to be at 40 per cent. Activity-wise analysis showed that men and women were equal in transplanting, weeding, harvesting, threshing and storage activities.

Chaudhari and Ganorkar (1992) stated that farm women played a major role in weeding operations to the extent of 87 per cent. Application of fertilizers and thinning and gap filling jobs have been carried out by 56 per cent and 46 per cent of farm women respectively.

Chaudhari and Ganorkar (1992) reported that activities of home management were also attended to by farm women in respect of cleaning house 96 per cent, cleaning utensils and clothes 89 per cent, cleaning grains and its storage 76 per cent and collection of firewood 36 per cent.

Anon (1993) investigations conducted in selected states of India showed that more than 60 per cent of agricultural operations are performed by farm women.

National Seminar (1993) on "Women in Agriculture : Developmental Issues" cited that the participation of farm women in rice production is high. The farm women had highest participation in post harvest operations 77-100 per cent,

which is followed by after cultivation 66-82 per cent, and transplanting 62-69 per cent.

Meera Singh, Sitalakshmi and Verma (1996) observed that more than 89.0 per cent of farm women were involved in various post-harvest operations. 82.7 per cent participated actually in storage of food grains.

It was also reported that the involvement of women in household activities was very high ranging from 49.7 to 100.0 per cent.

The results further revealed that 98.2 and 87.5 per cent were actually involved in care of children, cooking the menu and serving the food respectively.

Bhagyalaxmi 1998) reported that majority 62.5 per cent of the respondents had medium participation followed by 28.33 per cent high and 9.16 per cent low participation in transplanting.

2.3 TIME SPENT BY TRIBAL WOMEN IN FARM AND HOME ACTIVITIES

Chakravarti (1975) observed that an active farm women spent 8-9 hours on the farm during peak agricultural season, 3-4 hours on taking care of cattle and 3-4 hours on other household chores per day.

Shanti (1975) revealed that an active farm women spent 8-9 hours on the farm during the peak agricultural season 3-4 hours on taking care of the cattle and 3-4 hours on their household activities.

Srivastava (1985) stated that all women irrespective of land holding status of the family, provide 14 to 18 hours of productive physical labour in different chores.

Sikka and Swarup (1988) in a study on the participation of women in farm and other related activities in Himachal Pradesh observed that on an average female labour puts more time (2625 hours) than male labour (9250 hours) per annum on various farm and non-farm activities.

Singh (1988) revealed that on an average a women spent 8.75 hours a day for cattle management, 1.84 hours in other activities including orchard management.

Ingle *et al.* (1990) found that tribal women are fully engaged throughout the day in various activities. It was found that more than two thirds of tribal women were engaged in 4-5 hours in agricultural activities and 6-10 hours in household activities.

Shashikala (1990) found that women of irrigated areas spent more time compared to women in the rainfed areas towards farm activities. It was reverse in the case of household activities.

Padmalatha (1993) found that farm women spent 64.38 per cent of their time for home activities, 32.92 per cent for farm activities and 2.5 per cent for allied farm activities.

Preethi Singh and Saroj Kasyup (1993) in a study entitled "Invisible contribution of rural women in rural development" revealed that the rural women

spends 3277.01 hrs/year in household activities, followed by 3104.145 hrs/year by farm or service woman.

Joginder, Malik, Narwal and Sushila Dahiya 1998) reported that one hectare farm women averages 640 hours for intercultural operations like weeding, 384 hours for irrigation, 150 hours for transplanting organic manures and seed sowing and 984 hours for harvesting and threshing.

Jane Sujatha's and Nanjaiyan (1999) reported that 83.66 per cent of farmers and 93.33 per cent of farm women worked more than 8 hours in farming activities during peak season. With respect to animal husbandry activities 93.11 per cent of farmers and 95.24 per cent of farm women worked more than 8 hours during peak season. Regarding poultry 96.93 per cent of farmers and 85.72 per cent of farm women worked more than 8 hours. With respect to fodder crops, sericulture and mushroom cultivation, 70.83 per cent and 73.33 per cent, 58.33 per cent and 66.66 per cent, 56.66 per cent and 70.83 per cent worked more than 8 hours in peak season in the case of farmers and farm women respectively.

2.4 DRUDGERY FACED BY THE TRIBAL WOMEN DUE TO THEIR INVOLVEMENT IN FARM AND HOME ACTIVITIES

Srivastava 1985) stated that all women irrespective of land status of the family provide 14 to 18 hours productive physical labour in different chores. Women spend long hours and much efforts and labour in respective operations resulting in fatigue and drudgery.

Dhillon and Rupender Sandhu (1986) in a research study entitled "Managerial problems of the employed farm housewives was conducted in the

district Amritsar, Punjab. These employed farm house wives reported that the home making problems are most crucial ones, which pertain to food preparation, dish washing laundry, sanitation, fuel etc. These tasks are more difficult to perform in villages where there are insufficient water and sanitation facilities.

Sanghi (1988) identified the following jobs as involving physical hardship for women.

- a. Threshing of paddy in hill areas.
- b. Harvesting and threshing of wheat.
- c. Transplanting in paddy.
- d. Harvesting thorny crops.
- e. Harvesting in an urgency in shattering crop of sesamum and lodged crop of paddy.

International Conference (1988) on appropriate technology for farm women held at New Delhi cited the following operations involve drudgery for farm women.

- a. Hard physical work in care and management, harvesting, threshing/ processing, marketing and bartering of produce.
- b. Transplanting rice in mud, to remain for a long time under rains and scorching sun.
- c. Harvesting by bending with traditional sickles.
- d. Weeding with conventional implements by hand in hot sun, rain and cold for long hours.

- e. Drying of produce by standing under scorching sun.
- f. .Winnowing in dust and sun for a long time.
- g. Dehusking/shelling, pounding, grinding of cereals and pulses by hand, hand operated chakki and okhali etc.

Rajani (1989) reported that farm women perceived more drudgery in transplanting 87.5 per cent, weeding 49.6 per cent, and harvesting 93.33 per cent, and medium drudgery in post harvesting practices 65.84 per cent. Majority from both landless labour and family labour also perceived more drudgery in transplanting 90 and 85 per cent, respectively and harvesting 96.66 per cent and 100 per cent respectively.

Bhagyalaxmi (1998) reported that farm women perceived greater extent of drudgery in fetching of water 46.6 per cent collection fuel 45 per cent. Rest of the home activities were perceived as medium drudgery by farm women.

Fetching of water was perceived as more drudgery ridden activity by majority 46.7 per cent of the respondents, followed by 35 per cent and 18 per cent perceiving as medium and less drudgery respectively.

Kulkarni (1998) opined that most of the women felt moderate physical strain in harvesting 82.50 per cent, application of fertilizer and manure 77.50 per cent, thinning 75 per cent, winnowing 72.50 per cent, sowing, drying and stubble collection 62.50 per cent. In operations of threshing and weeding, women felt moderate fatigue 90 per cent. About 87.50 per cent of women expressed moderate fatigue in thinning and harvesting. In operations like stubble collection, sowing and

application of manure and fertilizer, moderate fatigue was reported by 75 per cent, 72.50 per cent, and 65 per cent of women labour respectively. 21

Kulkarni (1998) found that the perception of drudgery by 25.71 per cent of women was low, as against 47.14 per cent and 27.15 per cent of women. Who expressed medium and high drudgery.

2.5 RELATIONSHIP BETWEEN DRUDGERY AND SELECTED PROFILE OF TRIBAL WOMEN

Laxmi Devi (1983) concluded that caste, education, localite value and conservatism of rural women had significant negative association with their role performance in farm and home management. Family size had significant positive relationship with the dependent variable, whereas, age, land holding, social participation, socio-economic status, family income, urban contact and decision making pattern, had no significant relationship with role performance.

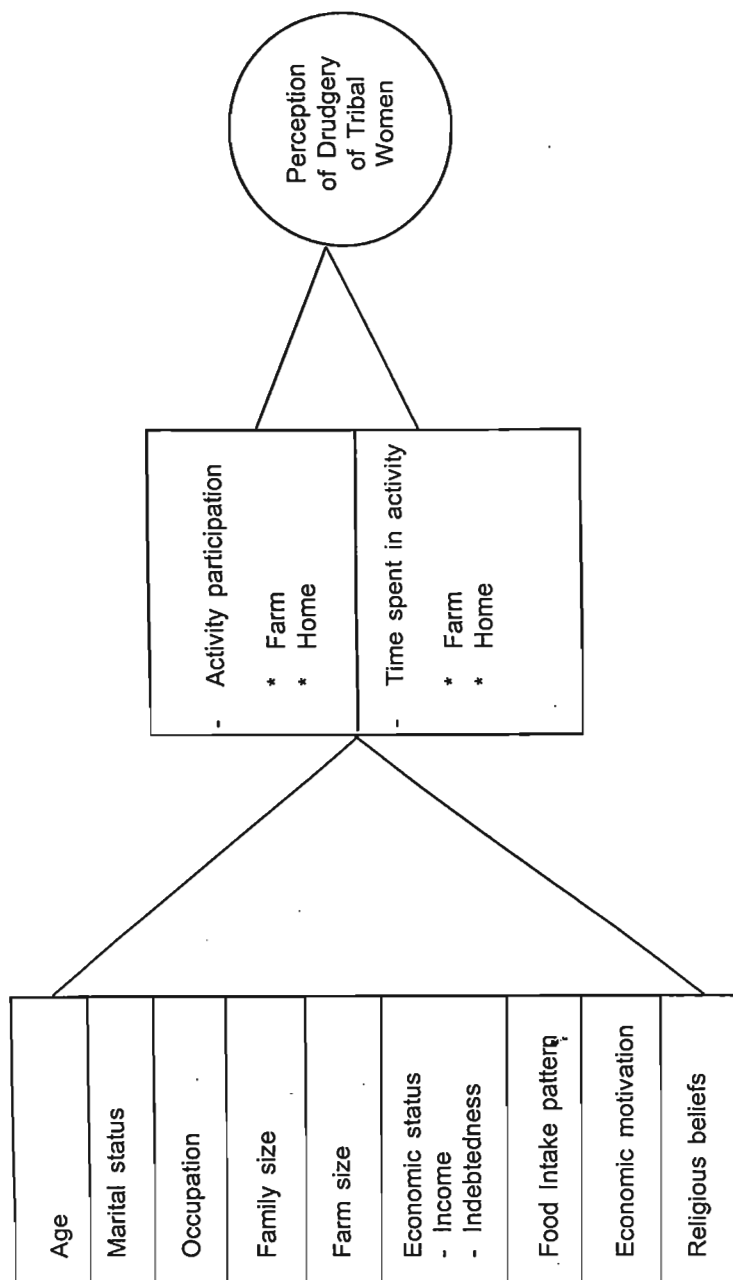
Makkena (1987) observed that there was no significant relationship between caste, age, and education, of both the contact farmers wives and non-contact farmers wives and their role performance in the implementation of practice. However, the relationship though negative was not significant in the case of non contact farmers.

Charulata, Shashi Kant Verma and Vinita Jain (1997) revealed that in case of women respondents, occupation, land holding and socio-economic status were found to be significantly but negatively correlated with drudgery in paddy cultivation.

2.6 CONCEPTUAL MODEL OF THE STUDY

The conceptual model presented in Fig.1 depict the possible relationship between perception of drudgery of tribal women and selected characteristics of the respondents. It also indicated the direction in which the research investigator has to proceed in order to achieve the objectives of investigation. This model further indicate the method of measuring the perception of drudgery of tribal women in farm and home activities. The activity performed by tribal men and women and the average time spent by tribal women in farm and home activities.

Fig.1
CONCEPTUAL FRAME WORK OF THE STUDY
FARM, HOME AND TOTAL ACTIVITIES



MATERIALS AND METHODS

CHAPTER - III

MATERIALS AND METHODS

In this chapter the methodology adopted for the study, namely; the research design, location of the study, sampling procedure, variables and their empirical measurement, methods of data collection and the statistical tests used are described.

This chapter is presented under four major divisions. The first chapter enumerates the sampling procedure adopted in the study. The second, details the variables and their empirical measurement. The third, deals with the methods used for collection of data and the fourth covers the statistical procedures used in the analysis of the data.

3.1 RESEARCH DESIGN

The research design followed for the study was ex-post facto. It was preferred as the variables of the study had already occurred and measurement of the selected variables was taken up only after occurrence of events in the field.

3.2 SAMPLING PROCEDURE

3.2.1 Selection of State

Andhra Pradesh State was selected for the purpose of the present investigation as the investigator hails from the State and intends to impress upon the officials of Tribal development to utilize the findings of the study for further improving the living conditions of the tribal people in the State.

3.2.2 Selection of District

Andhra Pradesh consists of three regions, namely; Coastal Andhra, Rayalaseema and Telangana. Coastal Andhra was selected at random. Among the coastal districts, the districts having tribal families were listed and arranged alphabetically, using random numbers Srikakulam district was chosen which consists of 1,34,057 tribals as per 1991 census figures (provisional). During review it was found out that no research work was undertaken so far in the direction of finding out the perception of extent of drudgery of tribal women in farm and home activities in the district. Therefore it was decided to choose Srikakulam district for the purpose of present investigation.

3.2.3 Selection of Mandals

All the mandals having tribal population in Srikakulam district were arranged alphabetically and numbered. Two mandals namely, Seethampeta, Veeragattam were selected at random using random tables.

3.2.4 Selection of villages

The villages having tribal population in each selected Mandal were listed. Arranged alphabetically and numbered. By using random tables three villages from each Mandal were selected.

3.2.5 Selection of respondents

120 respondents were selected from 6 villages using proportionate random sampling method. The population of each selected village and

sample selected in proportion to village population is presented in the following table. 28

Table 1: Population of tribal families in the selected villages and size of the sample selected from each village by adopting proportionate random sampling technique

Name of the mandal selected	Name of the village selected	Tribal population in each selected village	Size of the required sample	
			from each mandal	from each village
1. Seethampeta	1. Goidi	233		19
	2. Kusimi	253		21
	3. Devanapuram	258	62	22
	Total of 3 villages	744		62
2. Veeragatlam	1. K.Ichapuram	253		21
	2. Chennagora	309		26
	3. Gangammapetal	137	58	11
	Total of 3 villages	699		58

3.3 SELECTION OF CROP PRODUCTION PRACTICES

The following farm and home activities were selected in consultation with the scientists in Agriculture and Home Science faculties and the student advisory committee members.

(A) FARM ACTIVITIES

I. Nursery management

- a) Preparing nursery beds
- b) Sowing in nursery beds
- c) Applying fertilizers to nursery beds by broad-casting

- d) Applying chemicals to control pests/diseases in nursery beds
- e) Hand weeding in nursery beds.

II. Main Field Activities

1. Transplanting
2. Hand weeding
3. Fertilizer management
 - a. Applying basal dose of fertilizer by broadcasting
 - b. Top dressing of fertilizers by placement
4. Plant protection practices
 - a. Destruction of affected plants/plant parts
 - b. Preparing spray solution
5. Harvesting by sickles
6. Making bundles of harvested produce
7. Post harvest practices
 - a. Carrying harvested bundles to the threshing floor
 - b. Threshing by beating with sticks
 - c. Winnowing
 - d. Drying the grains
 - e. Cleaning the grains
 - f. Storing in gunny bags
 - g. Storing in bins.

(B) HOME ACTIVITIES

1. Food preparation
 - a. Cooking
 - b. Grinding
 - c. Serving food

2. Fetching of water
3. Collection of fuel/preparation of cow dung cakes
4. Child care
5. House keeping
 - a. Dusting and sweeping
 - b. Cleaning utensils
 - c. Washing and folding clothes
 - d. Control of household pests
 - e. Mud plastering
 - f. Stitching and mending of clothes
6. Loans and purchases
 - a. Shopping and selling of goods in shandies
 - b. Borrowing and repaying of loans.
7. Care of cattle

3.4 VARIABLES AND THEIR MEASUREMENT

The following dependent and independent variables were included in the present investigation. These variables were chosen from review of relevant literature, discussion with experts and student advisory committee. The following measurement tools were used to measure these variables.

Table 2: Variables and their empirical measurement

S.No.	Variables	Emperical measurement
1.	Dependent variable	
i.	Perception of Drudgery	Schedule was developed
2.	Independent variables	
1.	Age	
2.	Marital status	
3.	Occupation	
4.	Family size	Schedule was developed
5.	Farm size	
6.	Economic status	
a.	Income	
b.	Indebtedness	
7.	Food intake pattern	
8.	Economic motivation	Scale developed by Supe (1970) with suitable modifications
9.	Religious belief	Scale developed by Sadamate (1978) with suitable modifications

3.5 OPERATIONALISATION AND MEASUREMENT OF VARIABLES, SCORING AND GROUPING OF SAMPLED RESPONDENTS

3.5.1 Independent variables (profile of respondents)

3.5.1.1 Age:

Age was operationalised as the number of years completed by the respondent at the time of investigation. The respondents were categorised using Havighurst classification

Categories	Age intervals
a. Young age	Below 35 years
b. Middle age	35 to 55 years
c. Old age	Above 55 years

3.5.1.2 Marital status:

This variable was operationalised as the present status of the respondent in respect of the marriage as married, unmarried, and others, and the respondents were classified accordingly.

3.5.1.3 Occupation:

Occupation was operationalised as nature of job held by the respondent. Occupation refers to the status of tribal women in terms of farming and other professions. A score "one" was given to cultivation and "two" was assigned to cultivation + labour and the respondents were classified into these categories of occupation.

Categories

Cultivation

Cultivation + Labour

3.5.1.4 Family size:

The family size of the respondents was operationalised as the total number of family members in the family. The respondents were then categorised using class interval method in to the following categories.

- a) Small (1 to 3 members)
- b) Medium (4 to 6 members)
- c) Large (7 to 9 members)

3.5.1.5 Farm size:

This variable was operationalised as number of standard acres possessed by the farmers at the time of enquiry. The conversion of farm size into standard acres was done based on Andhra Pradesh Land Ceiling Act No.1 (1973) and the categorisation of respondents was as follows:

Categories

- a) Marginal
(Upto 2.5 acres)
- b) Small
(2.6 to 5 acres)
- c) Medium
(5.1 to 10 acres)
- d) Large
(Above 10 acres)

3.5.1.6 Economic status:**3.5.1.6.1 Income (Agriculture):**

The agricultural income of the farm families was computed by the income obtained from agriculture. A score of one was given for every 100 rupees income from agriculture. Mean and S.D. of the respondents were calculated and as the S.D. was greater than mean, the respondents were classified into two groups as;

Categories	Income range
a) No income	< 0
b) Below average income	< 1810
c) Above average income	> 1810

3.5.1.6.2 Income (Labour):

The labour income of the farm families was computed by the income obtained from labour. A score of one was given for every 100 rupees income from labour using mean \pm one S.D. the respondents were grouped as

Categories	Income range
a) Low income group	< 8721
b) Medium income group	8722 - 22871
c) High income group	22872

3.5.1.6.3 Income (Annual):

The annual income of the farm families was computed by summing up the income obtained from agriculture and labour per annum. A score of one was given for every 100 rupees total income using mean \pm one S.D. the respondents were grouped as

Categories	Income range
a) Low income group	< 10207
b) Medium income group	10208 - 25006
c) High income group	> 25007

3.5.1.6.4 Indebtedness:

Indebtedness was operationalised as the loan amount (in rupees) outstanding from different sources at the time of investigation. For every 100 rupees outstanding debt one score was assigned.

The respondents were grouped based on mean score. As the standard deviation was greater than the mean, only two categories were made as follows.

	Categories	Range of indebtedness
a)	No indebtedness	0
b)	Low indebtedness	< 1255
c)	High indebtedness	> 1255

3.5.1.7 Food Intake Pattern:

The food intake pattern in this study was operationalised as the frequency with which the tribal families use cereals, pulses, vegetables, milk and meat products in their daily diets. The frequency was measured in terms of daily, two times a week, and fortnight, with a score of 4, 3, 2 and 1 respectively. The mean, SD of the scores were computed to categorise the respondents as;

Categories	Score range
Low	9.1 and below
Medium	9.2 - 11.4
High	11.5 and above

3.5.1.8 Economic motivation:

Economic motivation was operationalised, as the degree to which a tribal woman is oriented towards profit maximization in her main occupation and the relative value placed by them on economic ends.

The scale developed by Supe (1970) with slight modifications was used. The response was scored on a three point scale as agree (3), undecided (2) and disagree (1). The final score of respondent on economic motivation was arrived at by summing up the response score on all statements. Mean \pm one standard deviation method was used to categorise the respondents as follow.

Categories	Score range
Low	14.7 and below
Medium	14.8 - 17.4
High	17.5 and above

3.5.1.9 Religious belief:

In the present study the religious belief has been operationalised as the relationship that is believed to exist between religious practices and farming.

For measurement of this variable the scale developed by Sadamate (1978) was adopted. The items were read out to the respondents and they were asked to respond to them in terms of agree, undecided and disagree and the scores of 3, 2, and 1 were given respectively. The total score of respondent on

religious belief was arrived at by summing up the score on all items. Mean \pm one S.D. was used to categorise and group the respondents.

Categories	Score range
Low	15.3 and below
Medium	15.4 - 18.1
High	18.2 and above

3.5.2 Perception of drudgery

A normal individual works either in the farm or home for a period of 8 hours/day without facing mental and/or physical strain (drudgery). The term perception of drudgery in this investigation is operationally defined as perception of feeling mental (or) physical strain of tribal women by working either in the farm and home over and above 8 hours/day.

With the help of experts/scientists in the field of Agriculture and Home Science faculties, the farm and home activities were listed, pretested with the group of respondents (other than the sample) and final farm and home activities were included in the schedule.

On each farm and home activity the respondent was asked whether she perceives the particular activity as drudgerous if so to what extent. The extent of drudgery was measured as very high drudgery, high drudgery, average drudgery, low drudgery and very low drudgery, with a score of 5, 4, 3, 2 and 1 respectively. Score of a respondent was seperately worked out farm as well as home and for

total activities. The respondents were grouped based on the response categories itself as;

Categories

1. Very low drudgery
2. Low drudgery
3. Average drudgery
4. High drudgery
5. Very high

3.6 TOOLS AND METHODS OF DATA COLLECTION

The data pertaining to the study of different variables was collected with the help of an interview schedule, which was prepared after a thorough review of the available literature, in consultation with experts in the field, students advisory committee and discussions with the personnel in the area of the study. The interview schedule was grouped under 3 parts.

Part A: Consisted of the items related to the profile of the respondents such as; Age, marital status, occupation, family size, farm size, economic status, food intake pattern, economic motivation and religious belief.

Part B : Consisted of three sections. The first section was earmarked for enlisting the activities performed by tribal men and women in farm and home.

The second section deals with the assessment of the time spent by tribal women in each activities of farm and home.

The third section with the perception of extent of drudgery of tribal women. 39

Part C : This part was framed to collect the information on problems encountered by tribal women in farm and home activities and their suggestions.

3.7 PRE-TESTING OF THE INTERVIEW SCHEDULE

Prior to the administering of the interview schedule to the sampled respondents, it was pretested with 30 tribal women, identical to the sample but not from the sampled tribal women. Necessary changes were made in the schedule based on the pretesting and final schedule was used to collect the data.

3.8 ESTABLISHING NECESSARY RAPPORT

Necessary rapport with the respondents was very important step in any research study. First few days were devoted to get acquainted with the respondents selected for the study with the help of the liason workers and local leaders. Later the investigator made informal and friendly visits to their home. All these methods were helpful in getting the desired cooperation in addition to valid and reliable information.

3.9 METHOD OF DATA COLLECTION

Each respondent was interviewed personally in local language i.e., Telugu by the investigator and the responses were recorded by the investigator on interview schedule directly. The data thus called was coded for statistical analysis.

3.10 STATISTICAL PROCEDURES FOLLOWED

For the purpose of statistical analysis of the coded data, the following statistical tools were used.

1. Arithmetic mean
2. Standard deviation
3. Frequencies and percentages
4. Correlation coefficient

Arithmetic mean : The arithmetic mean is the quotient that results when sum of all the items in the series is divided by the total numbers of items.

$$\text{Arithmetic mean (X)} = \frac{\Sigma X}{N}$$

where,

ΣX = Sum of individual items in the series

N = Total number of items in the series.

Standard deviation : The standard deviation was calculated by taking the difference between the arithmetic mean and each item of the series, squaring this difference, summing all the squared differences, dividing by the number of items and then deriving the root of it.

$$\sigma = \sqrt{\frac{1}{n} \Sigma X^2 - \frac{(\Sigma X)^2}{n}}$$

where,

- σ = Standard deviation
 X^2 = Summation of squares of each individual items
 $(\Sigma X)^2$ = Summation of all items
 n = number of observations.

The mean and standard deviation tests were used to categorise and group the respondents on a given variable.

Frequency and percentages

Frequency and percentages were used to know the distribution pattern of respondents according to variables under study.

Percentages were used for standardization of size by calculating the number of individuals that would be under the given category, if the total number of cases were 100.

Pearson's correlation coefficient (r) : It was used to test the relationship between dependent variable and independent variables.

$$r = \frac{\Sigma XY - \frac{(\Sigma X \cdot \Sigma Y)}{n}}{\sqrt{\left(\Sigma X^2 - \frac{(\Sigma X)^2}{n}\right) \left(\Sigma Y^2 - \frac{(\Sigma Y)^2}{n}\right)}}$$

where,

r	=	Correlation coefficient
ΣX	=	Sum of scores of independent variables
ΣY	=	Sum of scores of dependent variables
ΣX^2	=	Sum of square of score of independent variables
ΣY^2	=	Sum of square of scores of dependent variables
n	=	number of observations

The computed 'r' values were then compared with the tabular values of coefficient of correlation at one/ five per cent level of significance and the inferences were drawn with regard to the relationship between dependent and independent variable. The data processing was done with the help of computer.

RESULTS AND DISCUSSION

CHAPTER IV

RESULTS AND DISCUSSION

The data collected through interview schedule was coded and analysed by applying the relevant statistical methods and the results generated out of the analysis are presented in the following sections.

1. The profile of the tribal families.
2. Enlisting the activities performed by tribal men and women in farm and home activities.
3. Assessing the time spent by tribal women in each activity of farm and home.
4. Assessing the extent of perception of drudgery faced by the tribal women due to their involvement in farm and home activities.
5. The relationship between perception of drudgery and selected profile of tribal women.
6. The problems faced by tribal women and suggest ways to reduce their drudgery.

4.1 THE PROFILE ANALYSIS OF THE SAMPLED TRIBAL FAMILIES

In this section the respondents were classified into groups on the basis of their personal, socio-economic characteristics. Nine characteristics, viz., age, marital status, occupation, family size, farm size, economic status, food intake pattern, economic motivation and religious belief were studied to know the type of distribution of respondents. The distribution of respondents into different categories for each variable are presented in the following tables.

4.1.1 Age

Table:3 Distribution of respondents according to their chronological age
N=120

S.No.	Category	Frequency	Percentage(%)
1.	Young (< 35 years)	110	91.67
2.	Middle (35-55)	10	8.33
3.	Old (> 55)	-	-
Total		120	100

It is evident from the table 3 that majority of the respondents 91.67 per cent were young, followed by middle age 8.33 per cent.

4.1.2 Marital Status

Table:4 Distribution of respondents according to their marital status
N=120

S.No.	Category	Frequency	Percentage(%)
1.	Married	120	100
2.	Un-Married	-	-
3.	Others	-	-
Total		120	100

It is clear from Table 4 that all the respondents 100 per cent were married.

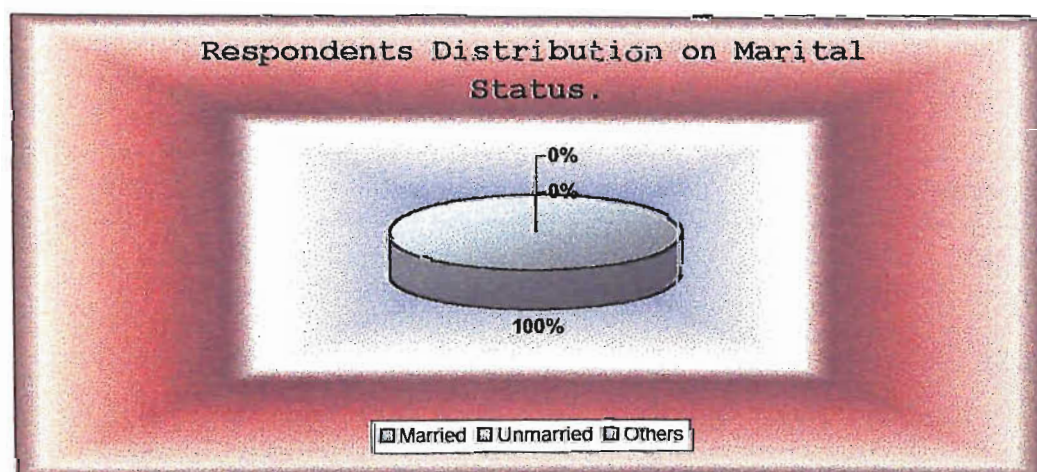
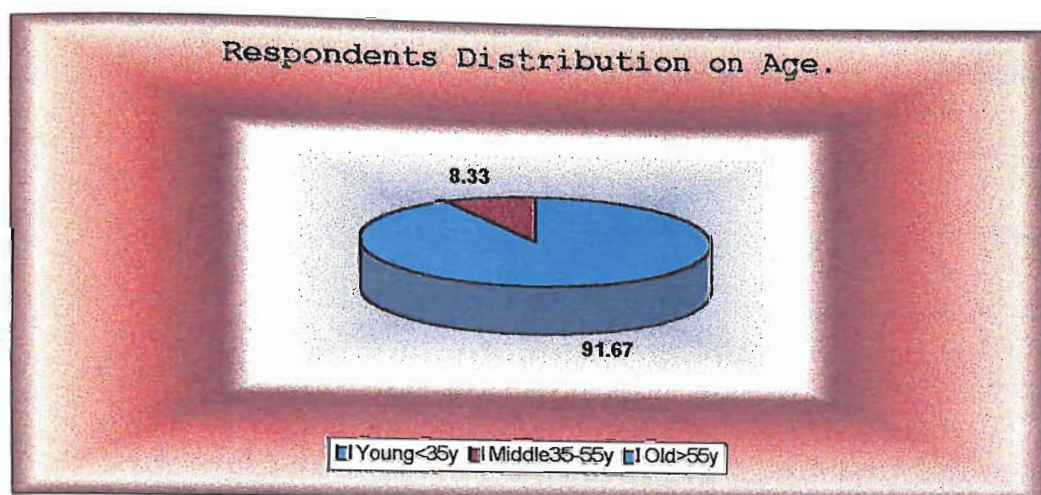


Fig. 4

4.1.3 Occupation

Table 5: Distribution of respondents according to their occupation.

N=120

S.No.	Category	Frequency	Percentage(%)
1.	Cultivation	3	2.5
2.	Cultivation + Labour	117	97.5
	Total	120	100

Table 5 revealed that majority 97.5 per cent of the women were engaged in two occupation ie cultivation and labour, where as only 2.5 per cent engaged in cultivation.

4.1.4 Family Size:

Table 6: Distribution of respondents according to their family size

N=120

S.No.	Category	Frequency	Percentage(%)
1.	Small (1-3 members)	50	41.66
2.	Medium (4-6 members)	51	42.5
3.	Large (7-9 members)	19	15.84
	Total	120	100

It is vivid from the Table 6 that majority of tribal women 42.5 per cent had medium family size having 4-6 members, followed by 41.66 per cent had small

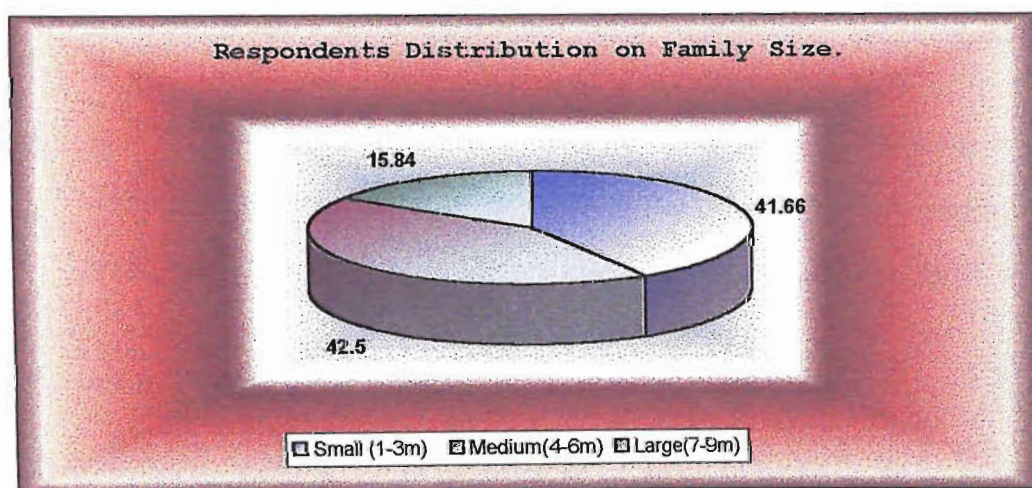
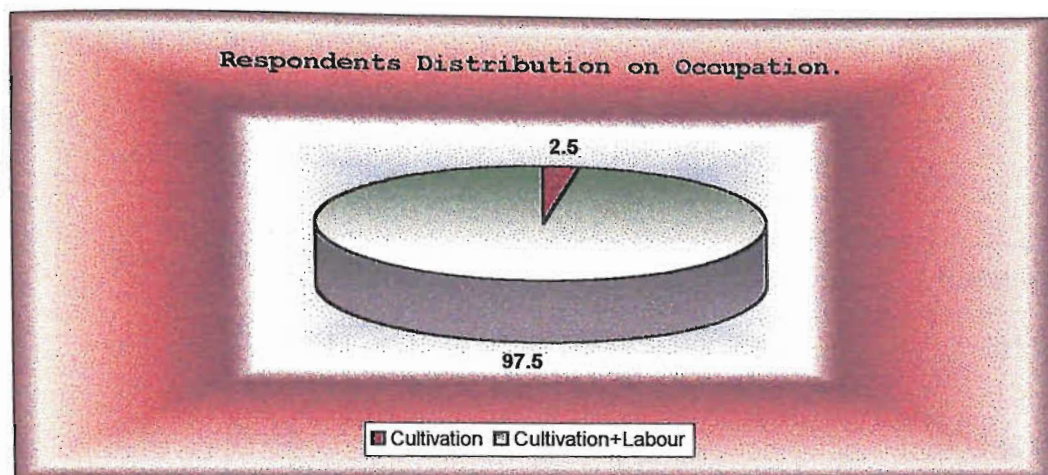


Fig. 5

family size having 1-3 members, 15.84 per cent had large family size having 7-9 members.

4.1.5 Farm Size

Table 7: Distribution of respondents according to their farm size

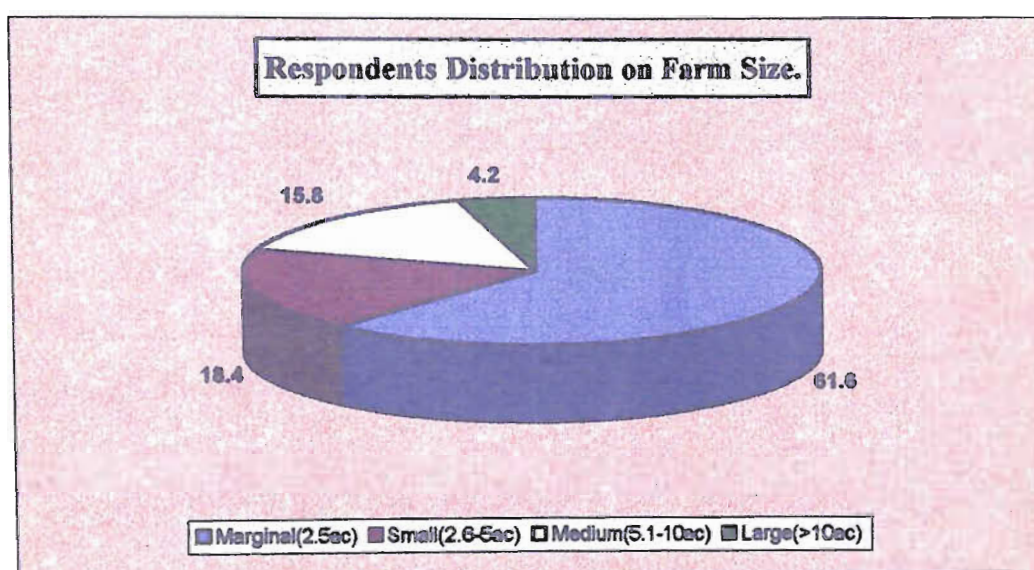
N=120

S.No.	Category	Frequency	Percentage(%)
1.	Marginal (upto 2.5 acres)	74	61.6
2.	Small (2.6 to 5 acres)	22	18.4
3.	Medium (5.1 to 10 acres)	19	15.8
4.	Large (above 10 acres)	5	4.2
Total		120	100

It can be observed from Table 7 that majority 61.6 per cent of the respondents owned marginal farms while 18.4 per cent of the respondents had small farms, 15.8 per cent had medium and 4.2 per cent had large size farms.

4.1.6 Economic Status

Economic status as stated earlier was measured interms of Income from agriculture, labour seperately and arrived at total income together per annum.

**Fig. 6**

4.1.6.1 Income from agriculture

Table 8: Distribution of respondents based on their annual income from Agriculture
N=120

S.No.	Category	Frequency	Percentage(%)
1.	Above average income (>Rs.1810)	64	53.3
2.	Below average income (<Rs.1810)	56	46.66
Total		120	100

Mean : 1810.41

Distribution on the basis of income from Agriculture revealed Table 8 that majority of the respondents had above average income 53.3 per cent followed by below average income 46.66 per cent.

4.1.6.2 Income from labour wages:

Table 9: Distribution of respondents based on their annual income from labour wages.
N=120

S.No.	Category	Frequency	Percentage(%)
1.	High Labour wages Above 22871	21	17.5
2.	Average Labour wages (8722-22871)	73	60.84
3.	Low Labour Below 8721	26	21.66
Total		120	100

Mean - 15797.08 SD - 7075.78

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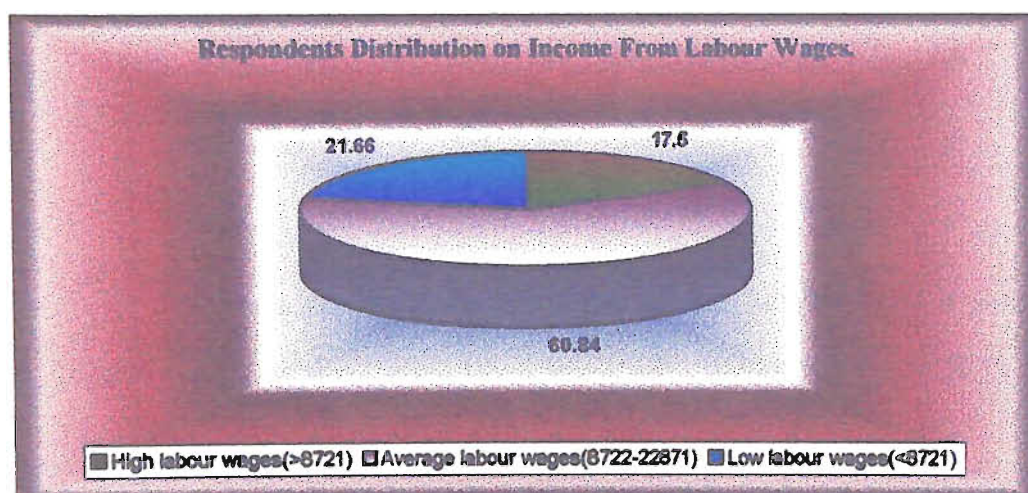
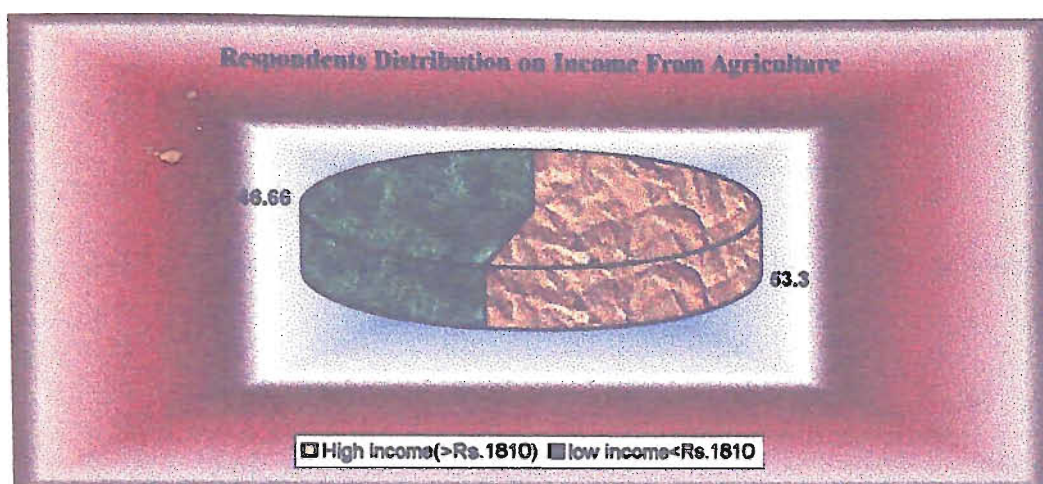


Fig. 7

It can be observed from Table 9 that majority 60.84 per cent of respondents had average income followed by low income 21.66 per cent and high income 17.5 per cent from labour wages.

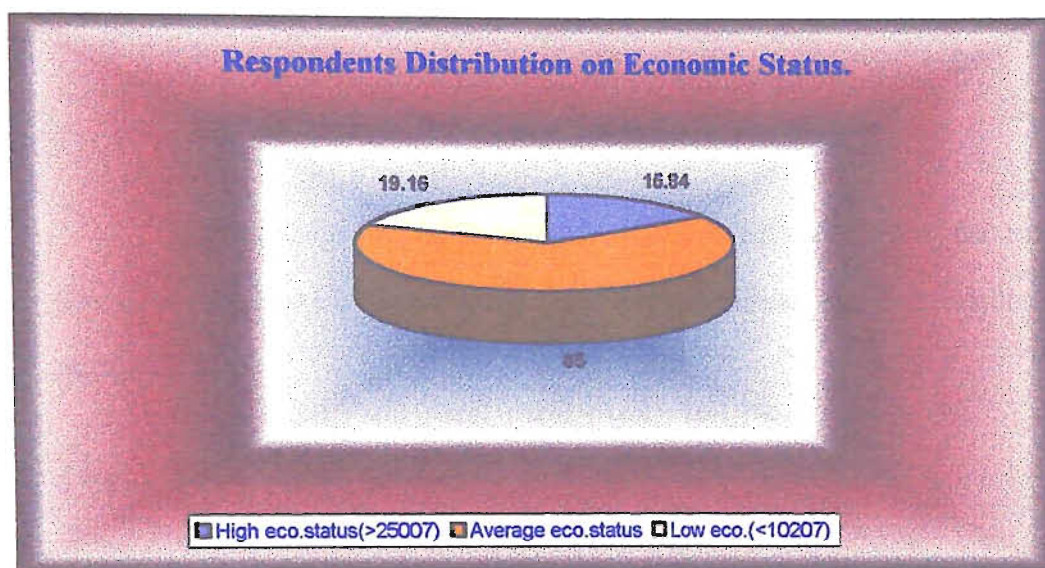
4.1.6.3 Economic Status:

(Income from Agriculture + Income from wages)

Table:10 Distribution of respondents according to their Economic status.

N=120			
S.No.	Category	Frequency	Percentage(%)
1.	High Economic status Above 25007	19	15.84
2.	Average Economic status (10208-25006)	78	65.00
3.	Low Economic status Below 10207	23	19.16
Total		120	100
Mean - 17607.50		SD - 7400.22	

It can be observed from table.10 that majority 65.00 per cent of respondents had average total income per annum followed by low 19.16 per cent and high 15.84 per cent.

**Fig. 8**

4.1.7 Indebtedness

Table:11 Distribution of respondents according to their Indebtedness.
(Sample of loan taken)

N=99

S.No.	Category	Frequency	Percentage(%)
1.	High indebtedness (>1255)	24	24.24
2.	Low indebtedness (<1255)	75	75.76
Total		99	100.00

Mean - 1255.04

Distribution on the basis of Indebtedness revealed (Table 11) that majority of respondents had low indebtedness 62.5 per cent followed by high indebtedness 20.00 per cent.

4.1.8 Food intake pattern:

Table:12 Distribution of respondents according to their food intake pattern.

N=120

S.No.	Category	Frequency	Percentage(%)
1.	High (9.1 and above)	12	10.00
2.	Average (9.2-11.4)	86	71.76
3.	Low (9.1 and below)	22	18.33
Total		120	100

Mean - 10.30

SD - 1.20

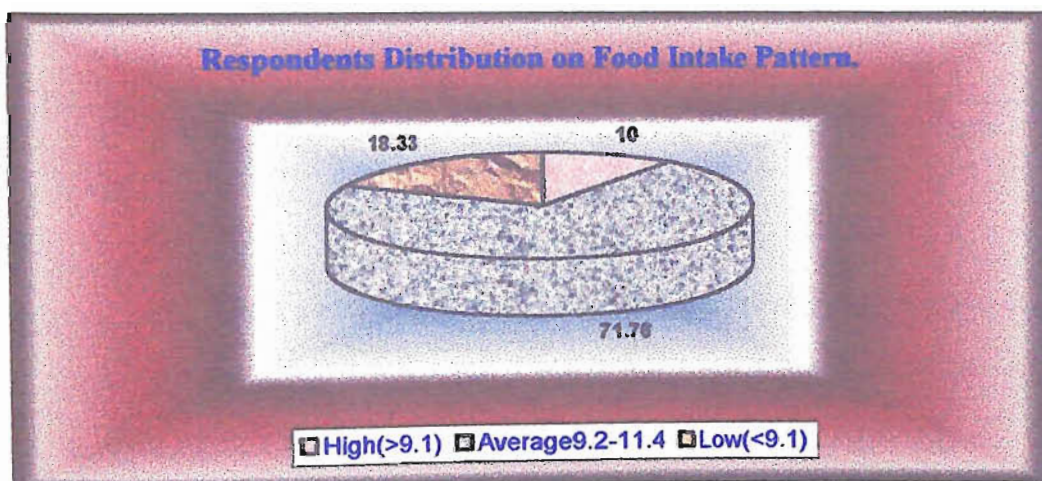
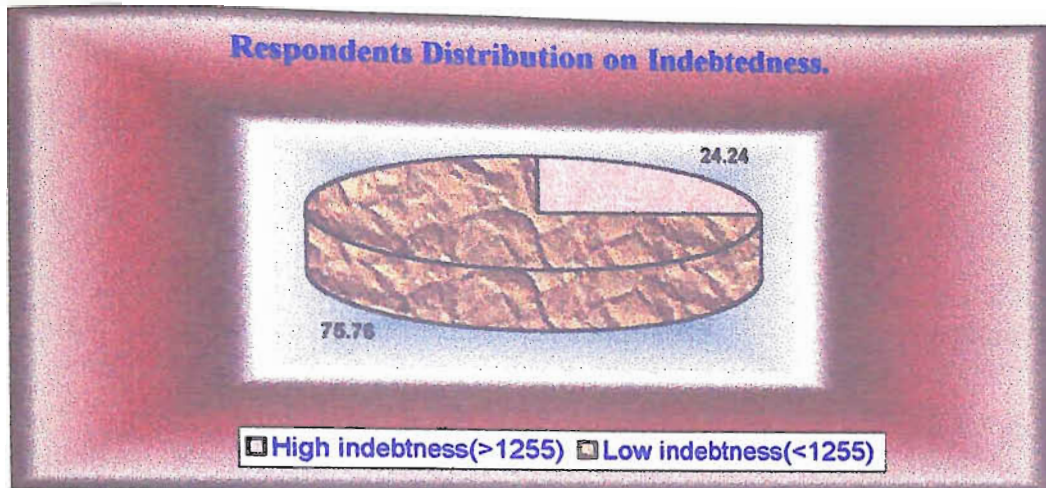


Fig. 9

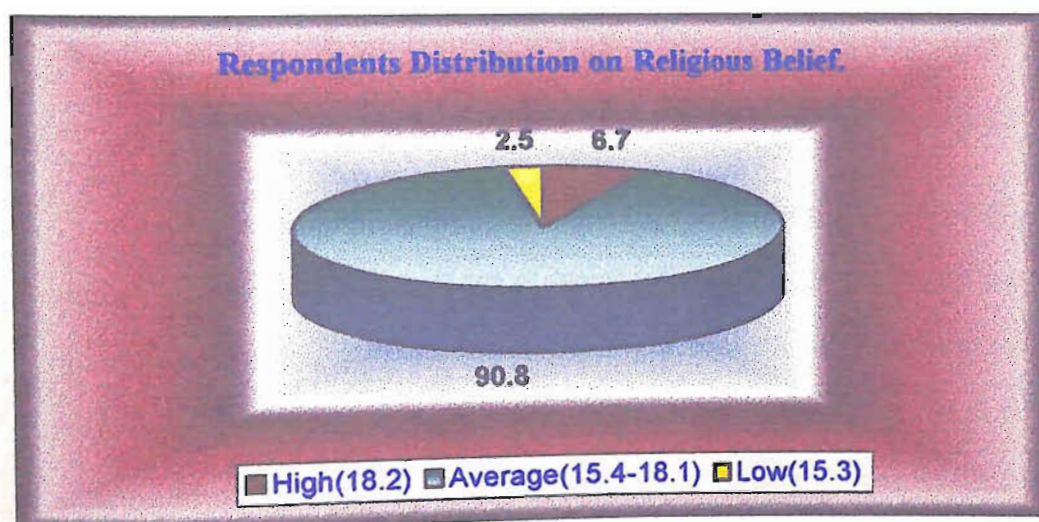
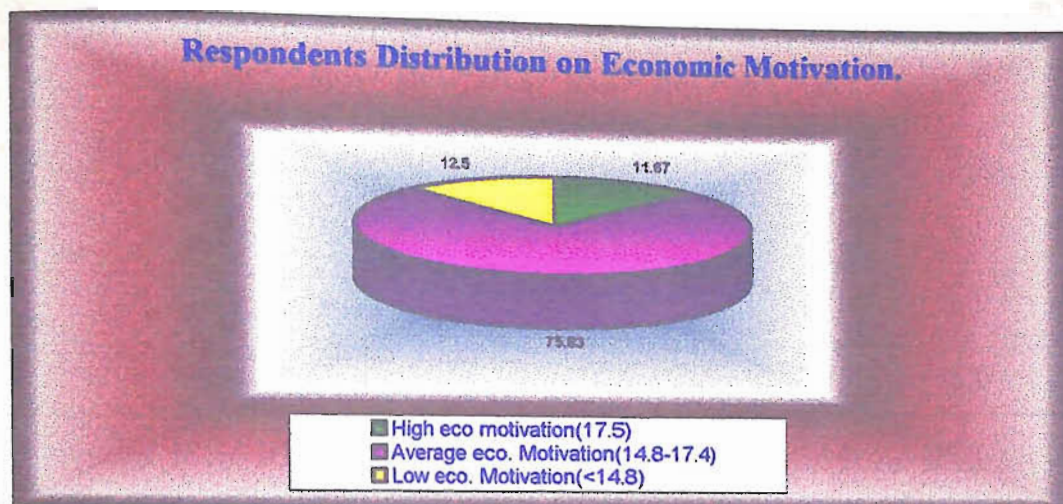
Table 12 revealed that majority of respondents had average 71.76 per cent food intake pattern followed by low food intake pattern 18.33 per cent and high food intake pattern 10.00 per cent.

4.1.9 Economic Motivation

Table:13 Distribution of respondents according to their Economic motivation.
N=120

S.No.	Category	Frequency	Percentage(%)
1.	High Economic Motivation (17.5 and above)	14	11.67
2.	Average Economic Motivation (14.8 - 17.4)	91	75.83
3.	Low Economic Motivation (14.8 and below)	15	12.5
Total		120	100
Mean - 16.17		SD - 1.40	

Table 13 indicates that 75.9 of the respondents had average economic motivation followed by high economic-motivation 14.6 per cent and low economic motivation 12.5 per cent.

**Fig. 10**

4.1.10 Religious belief:

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Table 14: Distribution of respondents according to their Religious belief.

N=120

S.No.	Category	Frequency	Percentage(%)
1.	High (18.2 and above)	8	6.7
2.	Average (15.4-18.1)	109	90.8
3.	Low (15.3 and below)	3	2.5
Total		120	100

Mean - 16.783 SD - 1.479

Table 14 revealed that majority of the respondents 90.8 per cent had average religious belief followed by high religious belief 6.7 per cent and low religious belief 2.5 per cent respectively

DISCUSSION

The socio-demographic profile of tribal families indicated that majority of them were young, married with major occupations being cultivation and labour, majority of the tribal families are nuclear with a family size of 4-6. Most of the tribal families owned marginal farms and having agricultural income of Rs.1810/- supplemented with an average annual labour income ranging from Rs.8702 - 22800.

The profile further indicated that majority of the respondents were with average economic status, belonged to low indebtedness group with average food intake pattern having average economic motivation and religious belief.

These results do confirm to the characteristics of the tribal population such as the main occupation of tribals though cultivation the major source of income is only in shape of wages due to working as labour and their holdings range from marginal to small with average to low income and economic status, as such majority of the tribal families will be in debts. Because of their poor economic status and non-availability of food items, their consumption of food in terms of variety and frequency as assessed by food intake pattern was found to be average to low. Another characteristic feature of the tribal population is the firm religious belief. All these characteristics resulted out of profile analysis indicate that the sample selected for the purpose of the present investigation do possess the characteristics of tribal population, and as such the results generated out of this research could be generalized to the tribal population of Srikakulam district.

4.2 ENLISTING THE ACTIVITIES PERFORMED BY TRIBAL MEN AND WOMEN IN FARM AND HOME

Though the main objective of the present investigation was to find out the extent of perception of drudgery due to participation in farm and home activities by tribal women, and this concept being intangible in terms of its direct measurement, the researcher attempted to find out first the gender participation in different activities and the average time spent by tribal women in each farm and home activity.

Once the activities in which the tribal women had more participation were identified and average time spent in each activity was elicited, it was relatively easy to assess the validity of extent of perception of drudgery of tribal in these activities. It was assumed that wherever the tribal women had more number of

activities to be performed than their counterparts and spent more time per day in these activities result in physical strain and mental fatigue. Therefore with this assumption, an attempt was made to enlist the activities that are purely women's domain, work out the time spent in each activity and then relate with their perception of extent of drudgery to draw reliable conclusions. The results of the responses of tribal women in these three areas viz., gender wise participation activities, average time spent by tribal women in each activity and perception of extent of drudgery by tribal women due to their participation in different activities of farm and home are presented herein.

Table 15: Activities performed by tribal men and women in farm and home
N=120

A. FARM ACTIVITIES	Frequency	
	MEN	WOMEN
I. Nursery Management		
a. Preparing nursery beds	120	-
b. Sowing in nursery beds	120	-
c. Applying fertilizers to nursery beds by broadcasting	120	-
d. Applying chemicals to control pests/diseases in nursery beds	120	-
e. Hand weeding in nursery beds	-	120
II Main Field Activities		
1. Transplanting	-	120
2. Hand Weeding	-	120

Contd..

Activities performed by tribal men and women in farm and home

Sl. No.	I. Nursery management	Frequency	
		MEN	WOMEN
1	Preparing nursery beds.	120	0
2	Sowing in nursery beds.	120	0
3	Applying fertilizers to nursery beds By broadcasting.	120	0
4	Applying chemicals to control pests and diseases in nursery beds.	120	0
5	Hand weeding in nursery beds.	0	120

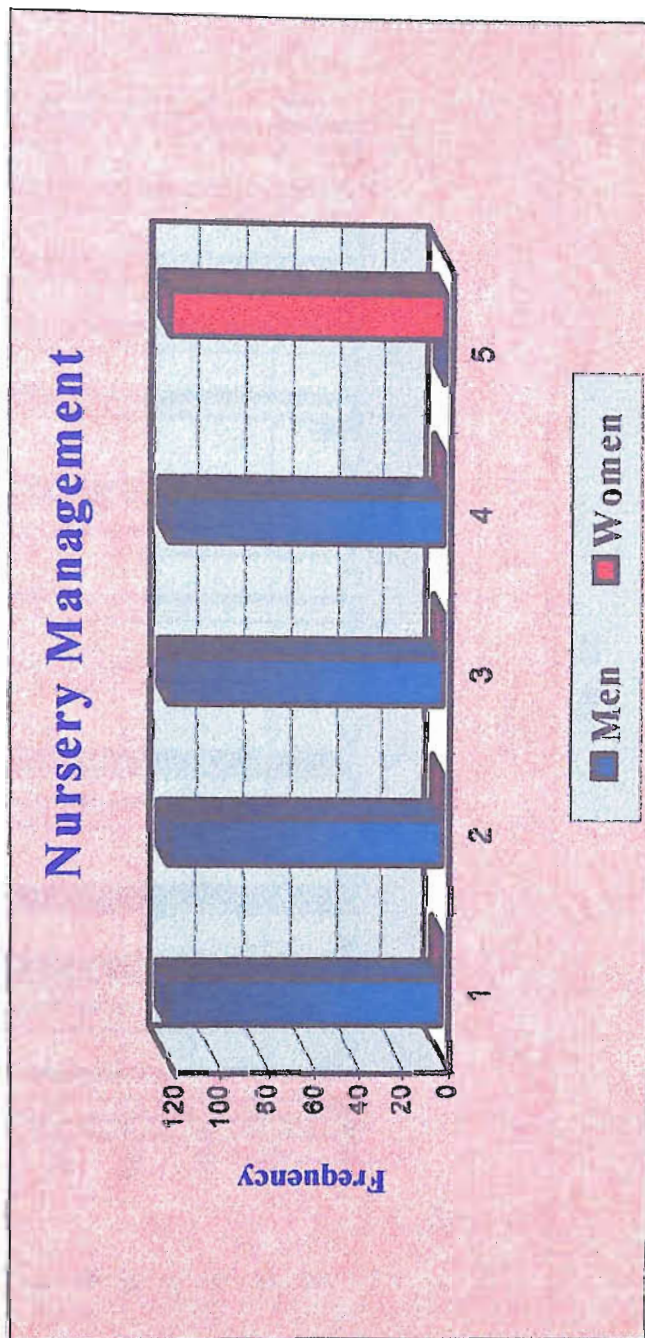


Fig. 11

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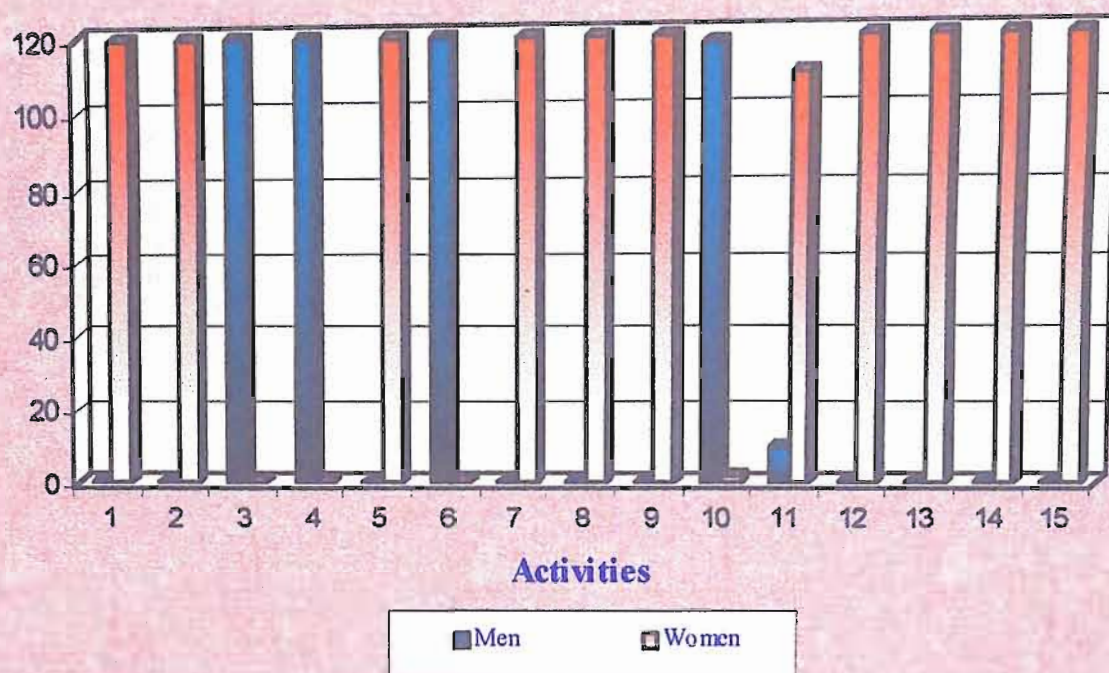


Fig. 12

A. FARM ACTIVITIES

		Frequency	
		MEN	WOMEN
3.	Fertilizers management		
a.	Applying basal dose of fertilizer by broadcasting	120	-
b.	Top dressing of fertilizers by placement	120	-
4.	Plant protection practices		
a.	Destruction of affected plants/ plant parts	-	120
b.	Preparing spray solution	120	-
5.	Harvesting by sickles	-	120
6.	Making bundles of harvested produce	-	120
7.	Post harvest practices		
a.	Carrying harvested bundles to the threshing floor	-	120
b.	Threshing by beating with sticks	118	2
c.	Winnowing	10	110
d.	Drying the grains	-	120
e.	Cleaning the grains	-	120
f.	Storing in gunny bags	-	120
g.	Storing in bins	-	120
B.	HOME ACTIVITIES		
1.	Food Preparation		
a.	Cooking	-	120
b.	Grinding	-	120
c.	Serving food	-	120

Contd..

HOME ACTIVITIES

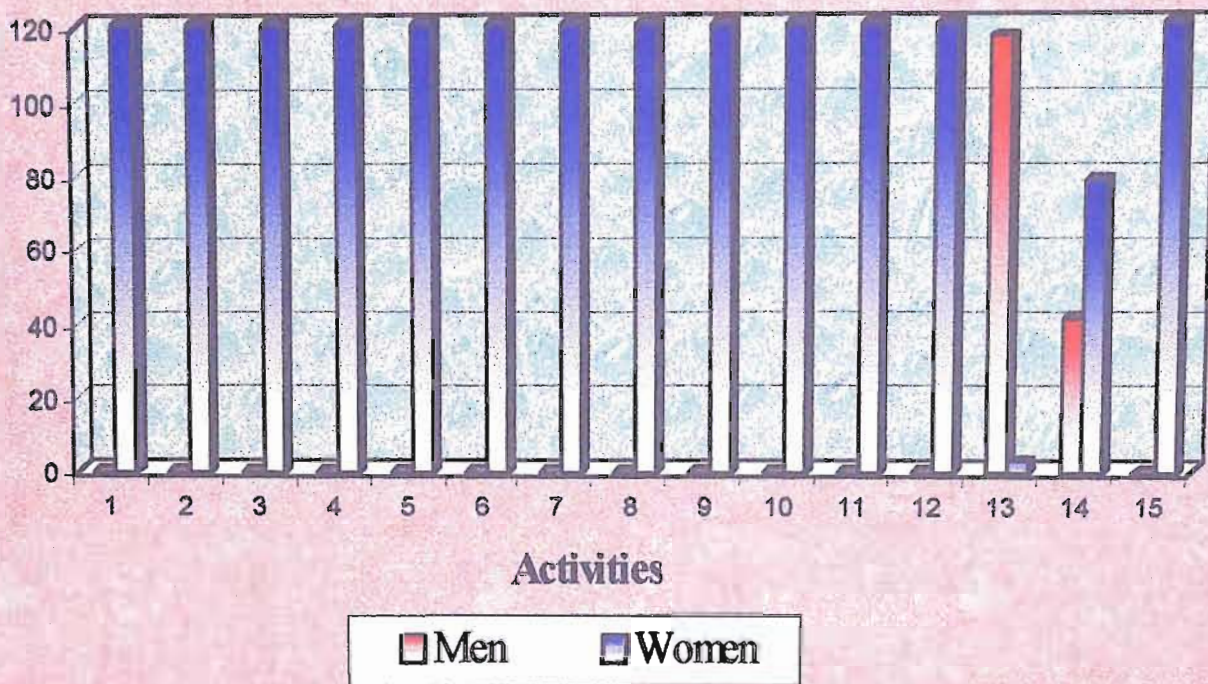


Fig. 13

B. HOME ACTIVITIES		Frequency	
		MEN	WOMEN
2.	Fetching of water	-	120
3.	Collection of fuel/preparation of cow dung cakes	-	120
4.	Child care	-	120
5.	House keeping		
	a. Dusting and Sweeping	-	120
	b. Cleaning utensils	-	120
	c. Washing and folding colthes	-	120
	d. Control of household pests	-	120
	e. Mud plastering	-	120
	f. Stitching and mending of clothes	-	120
6.	Loans and purchases		
	a. Shopping and selling of goods in shandies	117	3
	b. Borrowing and repaying of loans	41	79
7.	Care of cattle	-	120

Activities performed by tribal men and women in farm and home:

FARM ACTIVITIES

Nursery Management:

Almost all the activities in nursery management like preparation of seed bed, sowing, fertilizer and chemical application were performed by men 100 per cent and only hand weeding was done by women 100 per cent.

Main field activities;

Activities in main field like basal dose application, top dressing of fertilizers, preparing spray solution (100 per cent), threshing by beating with sticks (98.33 per cent) and winnowing (8.33 per cent) were done by men and transplanting, hand weeding, destruction of affected plants/plant parts, harvesting, bundle making, carrying harvested bundles to the threshing floor, drying the grains, cleaning, storing in gunny bags, stroing in bins (100 per cent), winnowing (91.66 per cent) and threshing by beating with sticks (1.66 per cent) were done by women.

Home activities:

Activities in home like food preparation, fetching of water, collection of fuel/preparation of cow dung, child care, house keeping, care of cattle (100 per cent), borrowing and repaying of loans (65.83 per cent), shopping and selling of goods in shandies (2.5 per cent) were done by women except shopping and selling of goods in shandies (97.5 per cent) and borrowing and repaying of loans (34.16 per cent) were done by men.

DISCUSSION

Out of five activities of nursery management, the activities "like hand weeding in nursery beds" were performed by tribal women (100 per cent).

Among fifteen activities in main field, eleven activities were performed by tribal women like transplanting, hand weeding, harvesting and most of the post harvested practices. All these activities were done by women exclusively because

in agricultural activities these were earmarked as women activities as per the response of the sampled tribal women.

Critical analysis of the results presented in the Table 15 clearly indicate that mainfield activities in agriculture was almost the tribal women dominated activity. Out of the fifteen mainfield activities eleven operation were carried out by tribal women which accounts to (73 per cent) of activities in this category. Most strenuous activities like, transplanting, hand weeding, harvesting, bundling, carrying bundles to threshing floor, winnowing and cleaning the grains were carried out by tribal women. And these operations do involve lot of physical strain on women and resulting fatigue.

In case of home activities out of the fifteen activities, fourteen activities were performed by tribal women account to 93 per cent. Limited participation of men was noticed in areas like, shopping and selling of goods and borrowing and repaying of loans only.

Thus the analysis indicated that women apart from their primary household activities, their involvement in agriculture as an enterprise was maximum compared to that of their men counterparts.

These results are in confirmity with Yadav (1987), Chowdary and Ganorkar (1992) and Meera Singh, Sithalakshmi and Verma (1996) respectively.

4.3 AVERAGE TIME SPENT BY TRIBAL WOMEN IN EACH ACTIVITIES OF FARM AND HOME

Table 16: Average time spent by tribal women in Farm and Home activities

A. FARM ACTIVITIES		Average time spent/week
I. Nursery Management		
a.	Preparing nursery beds	1.33
b.	Sowing in nursery beds	4.25
c.	Applying fertilizers to nursery beds by broadcasting	1.75
d.	Applying chemicals to control pests/diseases in nursery beds	0.85
e.	Hand weeding in nursery beds	6.39
	Total	14.75 hrs/week
	Average of Nursery management	14.75
		= 2.11 hrs/day 7 days
II Main Field Activities		
1.	Transplanting	7.61
2.	Hand Weeding	6.4
3.	Fertilizers management	
a.	Applying basal dose of fertilizer by broadcasting	1.25
b.	Top dressing of fertilizers by placement	1.25
4.	Plant protection practices	
a.	Destruction of affected plants/ plant parts	3.79
b.	Preparing spray solution	0.5

Contd..

AVERAGE TIME SPENT BY TRIBAL WOMEN IN FARM AND HOME ACTIVITIES.

Sl. No.	FARM ACTIVITIES	
	Nursery management	Average Time
1	Preparing nursery bed	1.33
2	Sowing in nursery bed	4.25
3	Applying fertilizers to nursery beds by broadcasting	1.75
4	Applying chemicals to control pests/diseases in nursery beds	0.85
5	Hand weeding in nursery beds	6.39

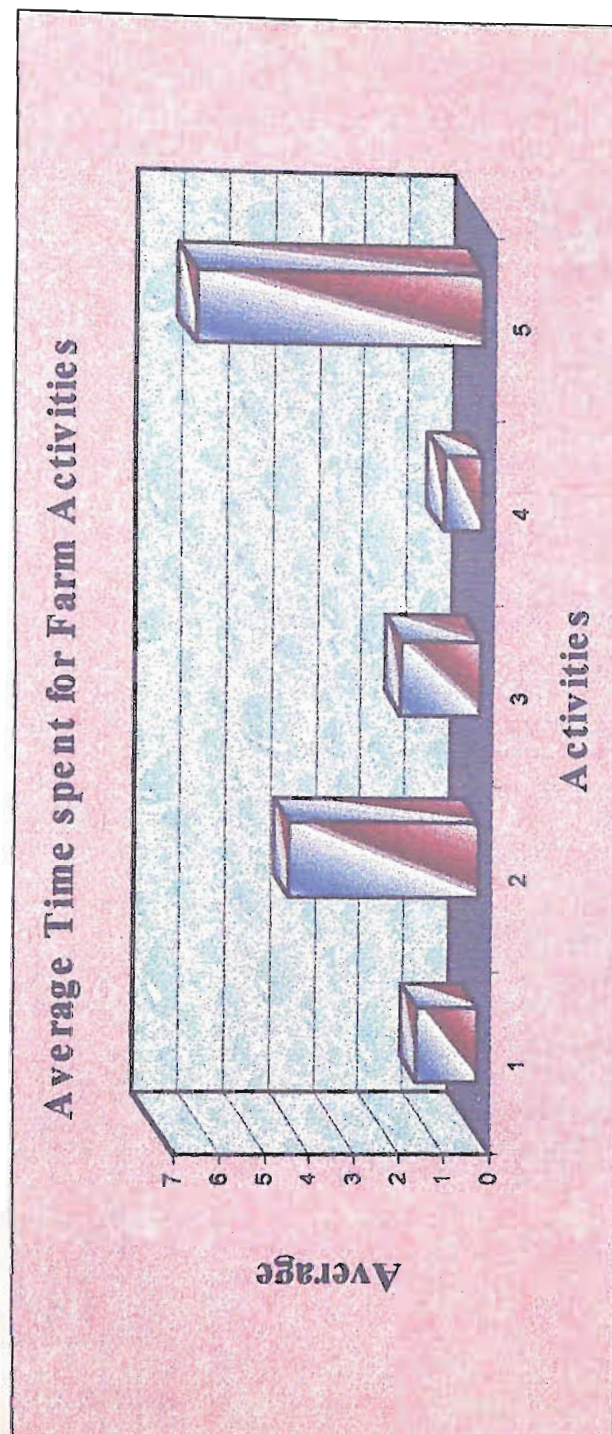


Fig. 14

Average Time Spent for Main Field Activities.

Sl. No.	MAIN FIELD ACTIVITIES	Average
1	Transplanting	7.61
2	Hand weeding	6.4
	Fertilizer management	
3	Applying basal dose of fertilizer by broadcasting	1.25
4	Top dressing of fertilizers by placement	1.25
	Plant protection practices	
5	Destruction of affected plants/plant parts	3.79
6	Preparing spray solution	0.5
7	Harvesting by sickles	5.66
8	Making bundles of harvested product	4.63
	Post harvested practices	
9	Carrying harvested bundles to the threshing floor	5.6
10	Threshing by beating with sticks	3.75
11	Winnowing	5.61
12	Drying the grains	3.94
13	Cleaning the grains	5.16
14	Storing in gunny bags	3.61
15	Storing in bins	4.14

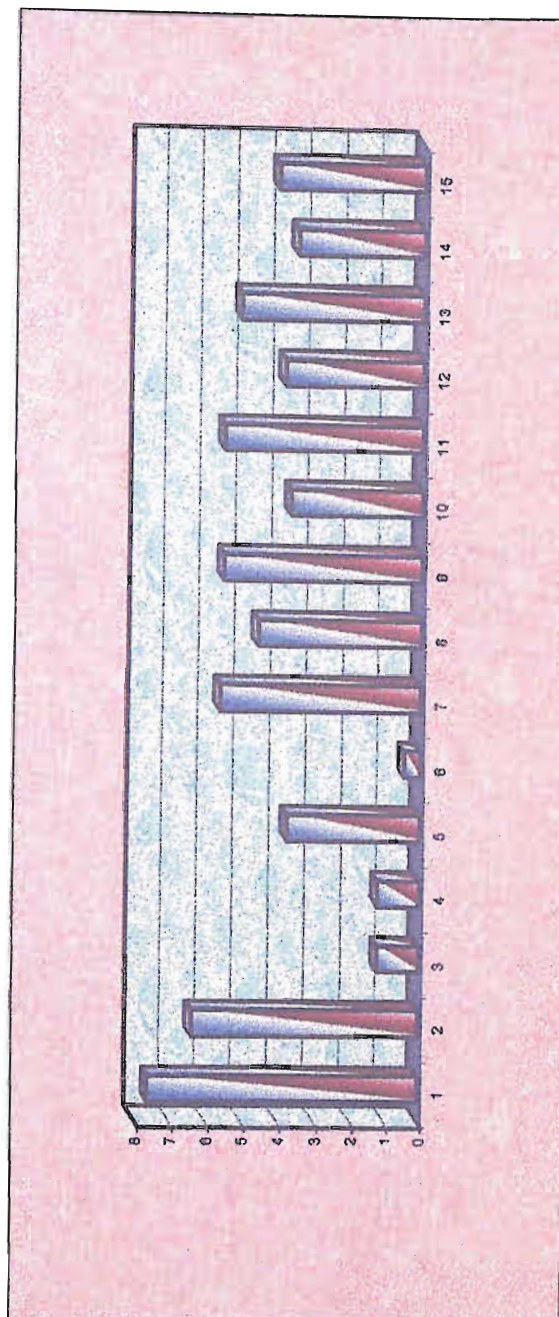


Fig. 15

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A. FARM ACTIVITIES		Average time spent/week
5.	Harvesting by sickles	5.66
6.	Making bundles of harvested produce	4.63
7.	Post harvest practices	
a.	Carrying harvested bundles to the threshing floor	5.6
b.	Threshing by beating with sticks	3.75
c.	Winnowing	5.61
d.	Drying the grains	3.94
e.	Cleaning the grains	5.16
f.	Storing in gunny bags	3.61
g.	Storing in bins	4.14
Total		62.9 hrs/week
Average of main field activity		62.9/7 days
		= 8.99 hrs/day

B. HOME ACTIVITIES	AVERAGE
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1.	Food Preparation	
a.	Cooking	0.6
b.	Grinding	0.28
c.	Serving food	0.39
2.	Fetching of water	2.98
3.	Collection of fuel/preparation of cow dung cakes	2.67
4.	Child care	1.60
5.	House keeping	
a.	Dusting and Sweeping	0.5
b.	Cleaning utensils	0.41

Contd..

Average Time Spent for Home Activities.

Sl. No.	HOME ACTIVITIES	Average
	Food preparation	
1	Cooking	0.6
2	Grinding	0.28
3	Serving food	0.39
4	Fetching of water	2.98
5	Collection of fuel/preparation of cow dung cakes	2.67
6	Child care	1.6
	House keeping	
7	Dusting and sweeping	0.5
8	Cleaning utensils	0.41
9	Washing and folding clothes	0.46
10	Control of household pests	0.33
11	Mud plastering	1.93
12	Stitching and mending of clothes	0.7
	Loans and purchases	
13	Shopping and selling of goods in shanties	0.79
14	Borrowing and repaying of loans	1.74
15	Care of cattle	2.01

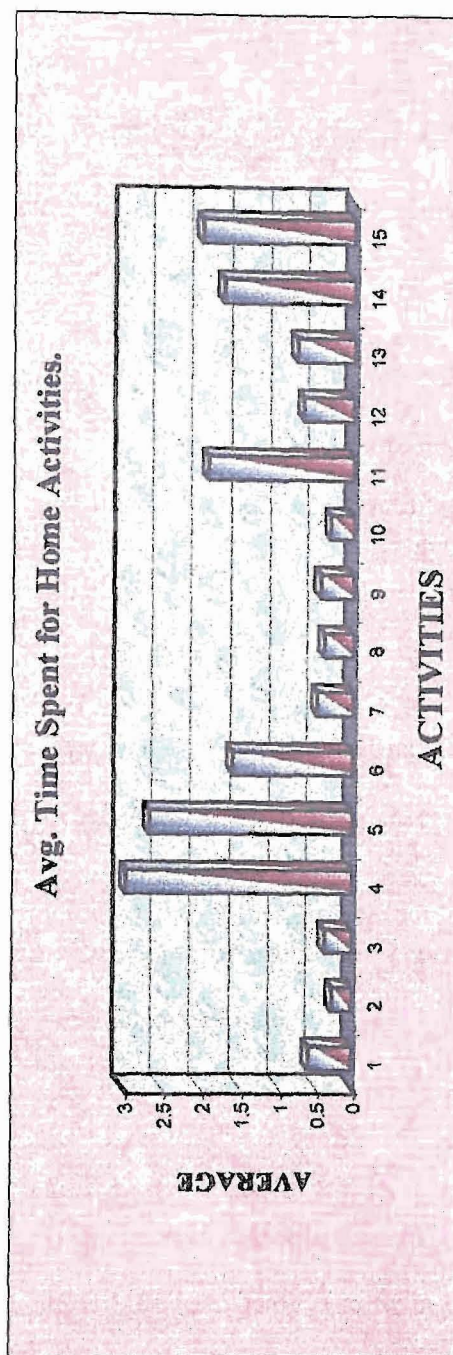


Fig. 16

B. HOME ACTIVITIES		Average time spent/week
c.	Washing and folding clothes	0.46
d.	Control of household pests	0.33
e.	Mud plastering	1.93
f.	Stitching and mending of clothes	0.70
6.	Loans and purchases	
a.	Shopping and selling of goods in shandies	0.79
b.	Borrowing and repaying of loans	1.74
7.	Care of cattle	2.01
Total		17.39 hrs/week
Average of Home Activities		17.39/7days
		= 2.48 hrs/day
Total hours spent per day (2.11 + 8.99 + 2.48)		= 13.58 hrs/day

Nursery management

Average time spent by tribal women in nursery management activities was high in handweeding (6.39 hr/week) followed by sowing in nursery beds (4.25 hr/week), applying fertilizers to nursery beds by broadcasting (1.75 hr/week), preparing nursery beds (1.33 hr/week), and applying chemical (0.85 hr/week). The average time spent by tribal women per day in nursery management was 2.11 hrs.

Main field activities

Average time spent by tribal women in main field activities was high in transplanting (7.61 hrs/week), hand weeding (6.40 hr/week), harvesting (5.66 hr/week),

winnowing (5.61 hr/week), carrying harvested bundles to the threshing floor (5.60 hr/week), cleaning the grains (5.16 hr/week), making bundles of harvested produce (10.63 hr/week), storing in bins (4.14 hr/week), drying the grains (3.94 hr/week), destruction of affected plants/plant parts (3.79 hr/week), threshing by beating with sticks (3.75 hr/week), storing in gunny bags (3.61 hr/week), applying basal dose of fertilizers and top dressing of fertilizers (1.25 hr/week) and preparing spray solution (0.5 hr/week) respectively. The average time spent by tribal women per day in main field activities was 8.99 hrs.

Home activities

Average time spent by tribal women in home activities was high in fetching of water (2.98 hr/week), collection of fuel/preparation of low dung cakes (2.67 hr/week), care of cattle (2.01 hr/week), mud plastering (1.93 hr/week), borrowing and repaying of loans (1.74 hr/week), child care (1.60 hr/week), shopping and selling of goods in shandies (0.79 hr/week) stitching and mending of clothes (0.70 hr/week) cooking (0.6 hr/week), dusting and sweeping (0.5 hr/week), washing and folding clothes (0.46 hr/week), cleaning utensils (0.41 hr/week), serving food (0.39 hr/week), control of household pests (0.33 hr/week), grinding (0.28 hr/week). The average time spent by tribal women per day in home activities is 2.48 hrs.

DISCUSSION

The average time spent by tribal women in nursery management was 2.11 hrs/day, in the mainfield operations 8.99 hrs/day and in home activity 2.48 hrs/day totalling to 13.58 hrs/day.

In nursery management practices, out of 2.11 hrs/day much time is spent in hand weeding and sowing nursery. In mainfield, much time was spent in carrying out operation like; Transplanting, hand weeding, harvesting, carrying harvesting bundles, Winnowing, cleaning grains, storing, drying, destruction of affected parts of plants, threshing by beating with sticks etc. All these operations are strenuous in nature and also involve skills of tribal women.

Characteristically the sampled tribal women spent much time in collection of fuel wood, care of cattle, mud plastering and little time for child care and other home activities.

The analysis indicated that on an average the tribal women works 13.58 hrs/day. This amounts to 5½ hrs more than normal working time/day. These results are in confirmity with the findings of Srivastava (1985), Ingle (1990) and Jane Sujaths and Nanjaiyan (1999) respectively.

4.4 PERCEPTION OF EXTENT OF DRUDGERY BY TRIBAL WOMEN IN FARM AND HOME ACTIVITIES PARTICIPATION

Table 17: Perception of extent of drudgery by tribal women

Perception of drudgery	Farm activities		Home activities		Total (Farm + Home activities)	
	F	%	F	%	F	%
Very high	36	29.88	16	13.33	26.0	21.66
High	49	40.67	18	14.99	34.0	28.34
Average	35	29.45	55	45.83	45.0	37.50
Low	-	-	22	18.36	11.0	9.17
Very low	-	-	9	7.49	4.0	3.33
Total	120	100.0	120	100.0	120	100.0

Perception of extent of drudgery by tribal women in farm and home activities participation

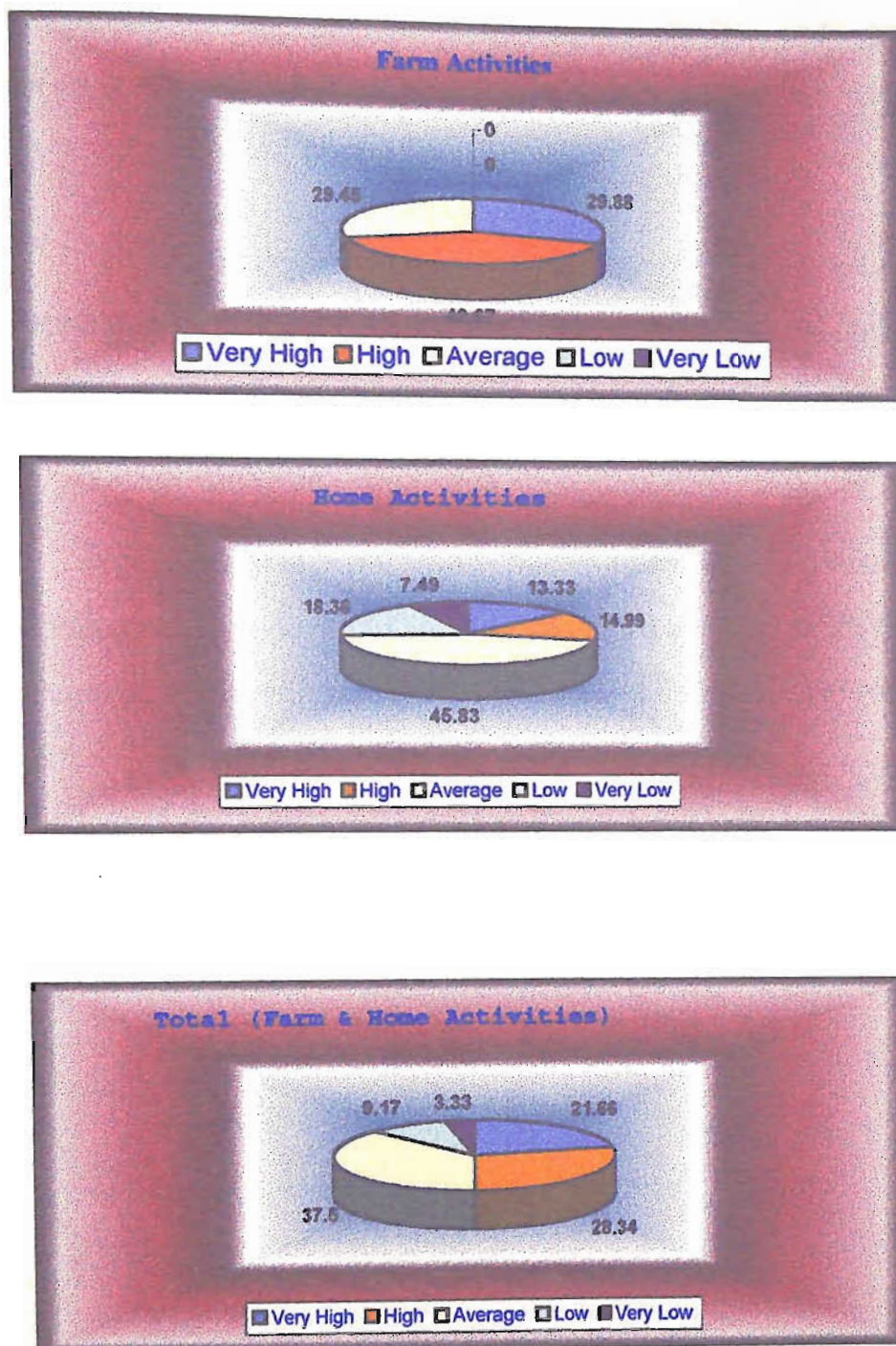


Fig. 17

On close observation of results presented in the Table 17, it is evident that 40.67 per cent of the tribal women felt that the drudgery due to participation in farm activities was high followed by very high (29.88%) and average (29.45 per cent). It is further noticed that not even a single tribal women responded that the drudgery was low or very low.

With regard to perception of drudgery of tribal women due to their participation in home activities, it was average as felt by majority (45.83 per cent) of tribal women followed by low (18.36), high (14.99 per cent), very high (13.33 per cent) and very low (7.49 per cent).

Perception of drudgery on the whole (participation in both activities) also indicated similar trend. It was average with (37.50 per cent) of the tribal women responding followed by high (28.34 per cent), very high (21.66 per cent) low (9.17 per cent) and very low (3.33 per cent) in that order.

4.4.1 Perception of degree of drudgery of tribal women due to their participation in farm and home activities - Response Analysis

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Table 18: Perception of drudgery of tribal women due to their participation in farm and home activities - Response Analysis

S.No.	Farm activities	Degree of perception of drudgery					Total
		Very high	High	Average	Low	Very low	

I. Nursery Management							
1.	Preparing nursery beds	-	9 (7.50)	53 (44.16)	-	-	62 (51.66)
2.	Sowing in nursery beds	-	4 (3.33)	-	-	-	4 (3.33)
3.	Applying chemicals to control pests/diseases in nursery beds	-	-	2 (1.66)	-	-	2 (1.66)
4.	Hand weeding in nursery beds	120 (100)	-	-	-	-	120 (100)
II Main Field Activities							
1.	Transplanting	120 (100)	-	-	-	-	120 (100)
2.	Hand Weeding	120 (100)	-	-	-	-	120 (100)
3.	Fertilizers management						
a.	Applying basal dose of fertilizer by broadcasting	-	-	4 (3.33)	-	-	4 (3.33)
b.	Top dressing of fertilizers by placement	-	-	4 (3.33)	-	-	4 (3.33)
4.	Plant protection practices						
a.	Destruction of affected plants/ plant parts	-	83 (69.16)	37 (30.83)	-	-	120 (100)
b.	Preparing spray solution	-	-	4 (3.33)	-	-	4 (3.33)
5.	Harvesting by sickles	12 (10.00)	105 (87.50)	3 (2.50)	-	-	120 (100)
6.	Making bundles of harvested produce	9 (7.50)	104 (86.66)	7 (5.83)	-	-	120 (100)
7.	Post harvest practices						
a.	Carrying harvested bundles to the threshing floor	11 (9.16)	86 (71.66)	23 (19.16)	-	-	120 (100)
b.	Threshing by beating with sticks	4 (3.33)	10 (8.33)	-	-	-	14 (11.66)
c.	Winnowing	-	33 (27.50)	41 (34.16)	-	-	74 (61.66)

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S.No.	Farm activities	Very high	High	Average	Low	Very low	Total
d.	Spraying the grains	-	36 (30.00)	66 (55.00)	-	-	102 (85.00)
e.	Cleaning the grains	-	53 (44.16)	65 (54.16)	-	-	118 (98.33)
f.	Storing in gunny bags and bins	-	8 (6.66)	94 (78.33)	-	-	102 (85.00)
B. HOME ACTIVITIES							
1.	Food Preparation						
a.	Cooking	-	5 (4.16)	112 (93.33)	2 (1.66)	1 (0.83)	120 (100)
b.	Grinding	-	-	86 (71.66)	25 (20.83)	9 (7.50)	120 (100)
c.	Serving food	-	-	63 (52.50)	42 (35.00)	15 (12.50)	120 (100)
2.	Fetching of water	120 (100)	-	-	-	-	120 (100)
3.	Collection of fuel/preparation of cow dung cakes	120 (100)	-	-	-	-	120 (100)
4.	Child care	-	-	105 (87.50)	15 (12.50)	-	120 (100)
5.	House keeping						
a.	Dusting and Sweeping	-	-	60 (50.00)	48 (40.00)	12 (10.00)	120 (100)
b.	Cleaning utensils	-	13 (10.83)	105 (87.50)	2 (1.66)	-	120 (100)
c.	Washing and folding clothes	-	-	52 (43.33)	42 (35.00)	26 (21.66)	120 (100)
d.	Control of household pests	-	-	28 (23.33)	64 (53.33)	28 (23.33)	120 (100)
e.	Mud plastering	1 (0.83)	109 (90.80)	10 (8.33)	-	-	120 (100)
6.	Loans and purchases						
a.	Shopping and selling of goods in shandes	-	-	1 (0.83)	77 (64.16)	42 (35.00)	120 (100)
b.	Borrowing and repaying of loans	-	43 (35.83)	73 (60.83)	4 (3.33)	-	120 (100)
7.	Care of cattle	-	79 (65.83)	41 (34.16)	-	-	120 (100)

Nursery management

Degree of perception of drudgery of tribal women in nursery management was very high in handweeding (100 per cent), high in preparing nursery beds (7.5 per cent), sowing (3.33 per cent), average in preparing nursery beds (44.16 per cent), applying chemicals and fertilizers (1.66 per cent).

Main field activities

Degree of perception of drudgery of tribal women in main field activities was very high in transplanting (100 per cent), hand weeding (100 per cent), harvesting (10.00 per cent), carrying harvested bundles to the threshing floor (9.16 per cent), making bundles (7.50 per cent), threshing by beating with sticks (3.33 per cent), high in harvesting (87.50 per cent), making bundles (86.66 per cent), carrying harvested bundles to the threshing floor (71.66 per cent), destruction of affected plants/plant parts (69.16 per cent), winnowing (27.50 per cent), cleaning (44.16 per cent), drying the grains (30.00 per cent), threshing *by* beating with sticks (8.33 per cent), storing in gunny bags and bins (6.66 per cent), average in storing in gunny bags and bins (78.3 per cent), drying the grains (55 per cent), cleaning the grains (54.16 per cent), winnowing (34.16 per cent), destruction of affected plant/plant parts (30.83 per cent), carrying harvested bundles to the threshing floor (19.16 per cent), making bundles of harvested produce (5.83 per cent), applying basal dose of fertilizers, top dressing, preparing spray solution (3.33 per cent), harvesting 2.5 per cent respectively.

In case of home activities very high in fetching of water (100 per cent), collection of fuel/preparation of cow dung cakes (100 per cent), mud plastering (0.83 per cent), high in mud plastering (90.80 per cent), care of cattle (65.83 per cent), shopping and selling of goods in shandies (35.83 per cent), borrowing and repaying of loans (21.66 per cent) cleaning of utensils (10.83 per cent) cooking (4.16 per cent), average in cooking (93.33 per cent), child care, cleaning of utensils (87.50 per cent), borrowing and repaying of loans (75 per cent), grinding (71.66 per cent), shopping and selling of goods in shandies (60.83 per cent), serving food (52.50 per cent) dusting and sweeping (50.00 per cent), washing and folding clothes (43.33 per cent), care of cattle (34.16 per cent), control of household pests (23.33 per cent), mud plastering (8.33 per cent), stitching and mending of clothes (0.83 per cent), low in stitching and mending of clothes (64.16 per cent), control of household pests (53.33 per cent), dusting and sweeping (40 per cent), washing and folding clothes (35.00 per cent), grinding (20.83 per cent), child care (12.50 per cent), shopping and selling of goods in shandies, borrowing and repaying of loans (3.33 per cent), cleaning of utensils, cooking (1.66 per cent), very low in stitching and mending of clothes (35.00 per cent), control of household pests (23.33 per cent), washing and folding clothes (21.66 per cent), serving food (12.50 per cent), dusting and sweeping (10.00 per cent), grinding (7.50 per cent), cooking (0.83 per cent) respectively.

DISCUSSION

The analysis of responses of tribal women on their perception of extent of drudgery indicated that the perception was high to very-high in case of their

participation in farm activities. Where as the extent of perception of drudgery in home activities was average to high. Similar trend was also noticed in case of perception of tribal women about drudgery of both farm and home activities together, it was average to high and very-high.

Response analysis of perception of extent of drudgery in each farm and home activities indicate an unanimous agreement among tribal women as where high drudgery in operations like; hand weeding, transplanting, fetching of water, collection of fuel etc. (100 per cent).

Where as the perception of drudgery was high as per the response of the tribal women. In case of mud plastering, harvesting by sickles, making bundles, carrying harvested bundles, destruction of affected plant parts, care of cattle etc.; (more than 65 per cent).

Average perception of drudgery was noticed in case of their participation in activities cooking, cleaning of utensils, child care, storing the grains, grinding, borrowing and repaying of loans, cleaning the grains, serving food, cleaning the house etc., (more than 50 per cent).

None of the tribal women perceived low and verylow drudgery in any one of the agricultural operations. Where as few per cent of the tribalwomen (less than 35 per cent) expressed that operations like, control of house hold pests, washing clothes, dusting and sweeping, serving food, grinding etc., cause low to verylow drudgery.

As stated in the methodology chapter the drudgery was not directly measured in terms of physical and mental strain in the present investigation due

to the intangibility of the concepts as such the drudgery was measured in terms of perception of tribal women. This perception as perceived in present investigation in the off shoot of the tribal women participation in both farm and home activities as to their day to day core of activities. Therefore, the perception of drudgery is directly proportional to their involvement in these activities. As could be seen from the results of participation and perception of drudgery together wherever the participation of tribal women in different activities was more in terms of hours per day the perception of drudgery was found to be very high. Thus the average time spent by tribal women in activities like, handweeding, transplanting, harvesting, making bundles, carrying bundles was higher side when compared to other activities in agriculture therefore the tribal women perceived very high drudgery due to these operations.

Similar trend was also noticed in case of home activities like, fetching of water, collection fuel, mud plastering and care of cattle. All these results indicate higher the participation of tribal women in activities resulting average time spent per day which is almost all more than 5 1/2 hrs than normal working hours per day resulted in feeling of drudgery high to very high by tribal women.

4.5 RELATIONSHIP BETWEEN PERCEPTION OF DRUDGERY AND PROFILE OF TRIBAL WOMEN

In this section an attempt was made to find out the relationship between selected characteristics of respondents (independent variables) with the extent of perception of drudgery by tribal women due to their participation in farm and home activities with the help of correlation analysis and the results are presented in the following table.

Table 19: Relationship between perception of drudgery with profile of tribal women

Variable No.	Independent variables	Perception of drudgery		
		Farm	Home	Total
X ₁	Age	0.2071*	0.1496	0.2186*
X ₂	Occupation	-0.0286	0.0451	-0.0050
X ₃	Family size	-0.1200	0.0925	-0.0561
X ₄	Farm size	-0.1698	-0.0675	-0.1578
X ₅	Occupation (Agriculture income)	0.1597	0.0315	0.1357
X ₆	Occupation (Labour income)	-0.0068	0.0401	0.0033
X ₇	Annual income	0.0708	0.0215	0.0589
X ₈	Indebtedness (Outstanding loan)	-0.1434	-0.1523	-0.1582
X ₉	Food intake pattern	0.0190	-0.1228	-0.0378
X ₁₀	Economic status	0.1605	0.0618	0.1429
X ₁₁	Religious beliefs	0.1954*	0.2479**	0.2432**

* Significant at 5% level of probability

** Significant at 1% level of probability

Null hypothesis

There will be no significant relationship between the selected characteristics of tribal women with their perception of extent of drudgery.

The correlation values with regard to variables like age, religious belief in case of perception of drudgery of farm activity, religious belief with home activity, age and religious belief with total activity were found to be positively significant.

Therefore, the null hypothesis in respect of these variables were rejected and concluded that these profiles of tribal women effect the perception of drudgery. All other characteristics were found to be not significant in influencing the perception of drudgery of tribal women.

DISCUSSION

The results on correlation analysis indicated that age and religious belief in case of perception of tribal women's drudgery due to their participation in both farm activities as well as total activities and religious belief, in case of home activities were found to be positively significant indicating linear relationship. This result indicate that as the women progresses in age she will not be in a position to withstand the physical strain due to their participation in activities of farm and total with result they feel drudgery which was reflected in the positive relationship between these variables. Like wise it a fact that religion plays a vital role on tribals and religious beliefs in case of tribals force them to be tradition bound due their strong bondage with their religion. Thus forcing the tribal to remain traditional in nature with little exposure to modernization. The process of modernization reduces the work load in carrying out activities by the tribal population either in farm or home. As result of influence of the religious belief the tribal women performing their activities with whatever knowledge and skills mostly traditional in nature as result of which more time is spent in performing these activities resulting in high rate of drudgery both in farm, home as well as total. Therefore, there existed a positive relationship between religious belief with the extent of drudgery due to their participation in farm, home and total activities.

4.6 PROBLEMS FACED BY TRIBAL WOMEN AND SUGGEST WAYS TO REDUCE THEIR DRUDGERY 86

One of the objective in the present investigation was to unearth the problems faced by the respondents which are directly related to drudgery of tribal women in farm and home activities and also to find out solutions to overcome these problems. The data was elicited from the respondents through open ended questions and the analysis of responses in terms of frequency and rankings are presented in the following table.

Table 20: Problems faced by tribal women

S.No.	Activities	Frequency	Rank
Farm Activities			
1.	Hand weeding	120 (100)	I
2.	Transplanting	120 (100)	I
3.	Podu cultivation	108 (90.0)	III
4.	Harvesting	89 (74.1)	IV
Home activities			
1.	Fetching of water	120 (100)	I
2.	Collection of fuel/ preparation of low dung cakes	120 (100)	I
3.	Mud plastering	73 (60.8)	IV
4.	Borrowing and repaying of loans	81 (67.5)	III
5.	Care of cattle	27 (22.5)	VI
6.	Food preparation cooking	53 (44.1)	V

Farm activities

The analysis of responses presented in the table clearly indicate that transplanting and hand weeding (100 per cent) was expressed as a major constraint by the tribal women followed by podu cultivation (90 per cent) and harvesting (74.1 per cent).

Home activities

In home activities, major problems were fetching of water and collection of fuel/preparation of cow dung cakes (100 per cent) followed by borrowing and repaying of loans (67.5 per cent), mud plastering (60.8 per cent), food preparation (cooking) (44.1 per cent), and care of cattle (22.5 per cent), respectively.

Solutions to overcome the problems

Table 21: Solutions for reducing the drudgery of tribal women

S.No.	Solutions of the problems	Frequency	Rank
1.	Availability of pesticides and weedicides at low cost	106	III
2.	Equal pay for equal work	142	I
3.	Training on latest technology to reduce the load on tribal women	98	IV
4.	Tools and equipment that reduce the work load to be made available	118	II

Contd..

S.No.	Solutions of the problems	Frequency	Rank
Home activities			
1.	To construct bio-gas plant	86	III
2.	Provide bore-wells	113	I
3.	Smokeless chulha that reduce the work load to be made available	111	II

Solutions for the problems to reduce their drudgery

The analysis of problems on the earlier para indicated that the tribal women have attributed the prime reason as heavy work load which result in drudgery of tribal women. In order to reduce the drudgery of tribal women in farm and home activities the solutions suggested were equal pay for equal work so that tribal women may get mental satisfaction and as well as can afford to spend the additional gains on food and nutrition items which can improve the health of the women and family. Tools that reduce drudgery are to be made available to tribals training the tribal women on latest technology to reduce the work load and giving pesticides and weedicides at low cost to the tribals in their opinion will reduce the mental and physical strain and stress.

In home activities much emphasis was on digging of bore-wells. Women spent most of their time in fetching of water and thereby they face severe fatigue everyday. Therefore suggested digging borewells. They further suggested to construct bio-gas plants and smokeless chulha that reduce the drudgery of tribal women.

SUMMARY AND CONCLUSIONS

CHAPTER VI

SUMMARY AND CONCLUSION

"A social group of simple kind, the members of which speak a common dialect have a single government and act together for common purposes" is a tribal. The tribal India lives in the forest hills and naturally isolated regions known by different names meaning either the people of forest and hills or the original inhabitant and so on. The tribes differ considerably from one another in race, language, culture and beliefs in their myths and customs. The tribals constitute about eight per cent of the Indian population.

Women play a significant and crucial role not only in agriculture and allied fields including live stock production, horticulture, post-harvest operations, agro-forestry and fisheries etc., but also in non-farm operations and household activities. They have an equal contribution to make in every sphere of human development activity wheather it is in agriculture, industry, service or small business, therefore, their role cannot be minimized.

Women's participation in agriculture is not merely a matter of numbers, definitions and concepts or inclusion - exclusion of certain operations or tasks which are carried out mainly by women. Women's participation or non participation is linked to what happens in the entire spectrum of agricultural and household production coupled with the ideology which dictates women's place in the society.

In the National conference on women in agriculture, developmental issues in 1993, many scientists pointed out the inadequacies in research studies on women and their participation in agriculture. Many researchers were of the opinion

that to involve this vast majority in development process, a clear understanding of their nature and type of participation in various farm and home activities is essential. Also, very few studies had dealt with hardships and drudgery of women's work on farm as well as in home. Thus in the present study, an attempt has been made to gain an insight into extent of perception of drudgery of tribal women in farm and home activities with the following objectives.

5.1 SPECIFIC OBJECTIVES

1. To study the profile of the tribal families.
2. To enlist the activities performed by tribal men and women in farm and home activities.
3. To assess the time spent by tribal women in each activity of farm and home.
4. To assess the extent of perception of drudgery by the tribal women due to their involvement in farm and home activities.
5. To study the relationship between drudgery and selected profile of tribal women.
6. To study the problems faced by tribal women and suggest ways to reduce their drudgery.

5.2 RESEARCH DESIGN

Ex-post facto research design was followed in the present investigation.

5.3 SAMPLING PROCEDURE

5.3.1 Selection of state

Andhra Pradesh state was selected for the purpose of the present investigation as the investigator hails from the state and intends to impress upon the officials of tribal department to utilize the findings of the study for further improving the living conditions of the tribal people in the state.

5.3.2 Selection of district

Andhra Pradesh consists of three regions, namely; coastal Andhra, Rayalaseema and Telangana. Coastal Andhra was selected at random. Among the coastal districts, the districts having tribal families were listed and arranged alphabetically, using random numbers Srikakulam district was chosen at random.

5.3.3 Selection of mandals

Two mandals namely, Seethampeta, Veeragattam were selected at random.

5.3.4 Selection of villages

Three villages from each mandal were selected by using random tables.

5.3.5 Selection of respondents

120 respondents were selected from 6 villages using proportionate random sampling method.

5.4 VARIABLES SELECTED

5.4.1 Independent variables

Age, marital status, occupation, family size, farm size, economic status (income, indebtedness), food intake pattern, economic motivation, religious belief.

The above variables were selected in consultation with the experts, review of available literature and in relation to the objectives framed for present investigation.

Devices used for data collection

The data pertaining to the variable incorporated in the study was collected with the help of interview schedule which was developed, pretested, modified and finalised. The investigator interviewed all the respondents personally and the responses were recorded in the schedules.

5.6 STATISTICAL PROCEDURES FOLLOWED

The data collected was coded, classified and appropriate statistical tests like; Arithmetic mean, standard deviation, correlation were used to analyse the data to draw meaningful conclusions. A part from these statistical procedures frequencies and percentages were also computed whenever necessary for interpretation of data.

5.7 SUMMARY OF THE FINDINGS OF THE STUDY

5.7.1 Profile analysis of the tribal families

The findings indicate that 91.67 per cent of the respondents were young, 100 per cent were married. In case of occupation majority (97.5 per cent) were engaged in cultivation and labour with medium to small family size (61.6 per cent) were with marginal farm size (61.6 per cent), with above average agricultural income (53.3 per cent), with average labour income (60.84 per cent).

The profile further indicated that majority of the respondents were with average (65.00 per cent), economic status, belonged to (62.50 per cent) low indebtedness group with (71.76 per cent) average food intake pattern, 75.9 per cent were average economic motivation and 90.8 per cent were average religious belief.

5.7.2 Activities performed by tribal men and women in farm and home activities

FARM ACTIVITIES

Almost all the activities in nursery management like preparation of seed bed, sowing, fertilizer and chemical application (100 per cent) were performed by men and only hand weeding was done by women (100 per cent) in main field like basal dose application, top dressing of fertilizers, preparing spary solution (100 per cent), threshing by beating with sticks (98.33 per cent) and winnowing (8.33 per cent) were done by men and transplanting, hand weeding, destruction of affected plants/plant parts, harvesting, bundle making, carrying harvested bundles

to the threshing floor, drying the grains, cleaning, storing in gunny bags, storing in bins (100 per cent), winnowing (91.66 per cent) and threshing by beating with sticks (1.66 per cent) were done by women.

Home activities

Activities in home like food preparation, fetching of water, collection of fuel/preparation of cow dung, child care, house keeping, care of cattle (100 per cent), Borrowing and repaying of loans (65.83 per cent), shopping and selling of goods in shandies (2.5 per cent) were done by women except shopping and selling of goods in shandies (97.5 per cent) and borrowing and repaying of loans (34.16 per cent) which were done by men.

5.7.3 Average time spent by tribal women in each activities of farm and home

Farm activities

Average time spent by tribal women in nursery management activities was high in handweeding (6.39 hr/week) followed by sowing in nursery beds (4.25 hr/week), applying fertilizers to nursery beds by broadcasting (1.75 hr/week), preparing nursery beds (1.33 hr/week), and applying chemical (0.85 hr/week). The average time spent by tribal women per day in nursery management in 2.11 hrs. In main field activities was high in transplanting (7.61 hrs/week), hand weeding (6.40 hr/week), harvesting (5.66 hr/week), winnowing (5.61 hr/week), carrying harvested bundles to the threshing floor (5.60 hr/week), cleaning the grains (5.16 hr/week), making bundles of harvested produce (10.63 hr/week), storing in bins (4.14 hr/week), drying the grains (3.94 hr/week), destruction of affected plants/plant parts (3.79

hr/week), threshing by beating with sticks (3.75 hr/week), storing in gunny bags (3.61 hr/week), applying basal dose of fertilizers and top dressing of fertilizers (1.25 hr/week) and preparing spray solution (0.5 hr/week) respectively. The average time spent by tribal women per day in main field activities is 8.99 hrs.

Home activities

Average time spent by tribal women in home activities was high in fetching of waters (2.98 hr/week), collection of fuel/preparation of cow dung cakes (2.67 hr/week), care of cattle (2.01 hr/week), mud plastering (1.93 hr/week), borrowing and repaying of loans (1.74 hr/week), child care (1.60 hr/week), shopping and selling of goods in shandies (0.79 hr/week) stitching and mending of clothes (0.70 hr/week) cooking (0.6 hr/week), dusting and sweeping (0.5 hr/week), washing and folding clothes (0.46 hr/week), cleaning utensils (0.41 hr/week), serving food (0.39 hr/week), control of household pests (0.33 hr/week), grinding (0.28 hr/week). The average time spent by tribal women per day in home activities is 2.48 hrs.

5.7.4 Degree of perception of drudgery by tribal women due to their participation in farm and home activities

Farm activities

Degree of perception of drudgery of tribal women in nursery management was very high in handweeding (100 per cent), high in preparing nursery beds (7.5 per cent), sowing (3.33 per cent), average in preparing nursery beds (44.16 per cent), applying chemicals and fertilizers (1.66 per cent). In main field activities

was very high in transplanting (100 per cent), hand weeding (100 per cent), harvesting (10.00 per cent), carrying harvested bundles to the threshing floor (9.16 per cent), making bundles (7.50 per cent), threshing by beating with sticks (3.33 per cent), high in harvesting (87.50 per cent), making bundles (86.66 per cent), carrying harvested bundles to the threshing floor (71.66 per cent), destruction of affected plants/plant parts (69.16 per cent), winnowing (27.50 per cent), cleaning (44.16 per cent), drying the grains (30.00 per cent), threshing the beating with sticks (8.33 per cent), storing in gunny bags and bins (6.66 per cent), average in storing in gunny bags and bins (78.3 per cent), drying the grains (55 per cent), cleaning the grains (54.16 per cent), winnowing (34.16 per cent), destruction of affected plant/plant parts (30.83 per cent), carrying harvested bundles to the threshing floor (19.16 per cent), making bundles of harvested produce (5.83 per cent), applying basal dose of fertilizers, top dressing, preparing spray solution (3.33 per cent), harvesting 2.5 per cent respectively.

Home activities

Perception of drudgery by tribal women was very high in fetching of water (100 per cent), collection of fuel/preparation of cow dung cakes (100 per cent), mud plastering (0.83 per cent), high in mud plastering (90.80 per cent), care of cattle (65.83 per cent), shopping and selling of goods in shandies (35.83 per cent), borrowing and repaying of loans (21.66 per cent) cleaning of utensils (10.83 per cent) cooking (4.16 per cent), average in cooking (93.33 per cent), child care, cleaning of utensils (87.50 per cent), borrowing and repaying of loans (75 per cent), grinding (71.66 per cent), shopping and selling of goods in shandies (60.83 per cent), serving food (52.50 per cent) dusting and sweeping (50.00 per cent), washing and folding clothes (43.33 per cent), care of cattle (34.16 per cent), control

of household pests (23.33 per cent), mud plastering (8.33 per cent), stitching and mending of clothes (0.83 per cent), low in stitching and mending of clothes (64.16 per cent), control of household pests (53.33 per cent), dusting and sweeping (40 per cent), washing and folding clothes (35.00 per cent), grinding (20.83 per cent), child care (12.50 per cent), shopping and selling of goods in shandies, borrowing and repaying of loans (3.33 per cent), cleaning of utensils, cooking (1.66 per cent), very low in stitching and mending of clothes (35.00 per cent), control of household pests (23.33 per cent), washing and folding clothes (21.66 per cent), serving food (12.50 per cent), dusting and sweeping (10.00 per cent), grinding (7.50 per cent), cooking (0.83 per cent) respectively.

5.7.5 Relationship between perception of drudgery with the profile of tribal women

The analysis indicated that age and religious belief in case of perception of tribal women's drudgery due to their participation in both farm activities as well as total activities and religious belief, in case of home activities were found to be positively significant indicating linear relationship.

5.7.6 Problems faced by tribal women and suggest ways to reduce their drudgery

Farm activities

The analysis of responses clearly indicate that transplanting and hand weeding (100 per cent) was expressed as a major constraint by the tribal women followed by podu cultivation (90 per cent) and harvesting (74.1 per cent).

Home activities

In home activities, major problems were fetching of water and collection of fuel/preparation of cow dung cakes (100 per cent) followed by borrowing and repaying of loans (67.5 per cent), mud plastering (60.8 per cent), food preparation (cooking) (44.1 per cent), and care of cattle (22.5 per cent), respectively.

Solutions

The analysis of problems on the earlier para indicated that the tribal women have attributed the prime reason as heavy work load which result in drudgery of tribal women. In order to reduce the drudgery of tribal women in farm and home activities the solutions suggested were equal pay for equal work so that tribal women may get mental satisfaction and as well as can afford to spend the additional gains on food and nutrition items which can improve the health of the women and family. Tools that reduce drudgery are to be made available to tribals training the tribal women on latest technology to reduce the work load and giving pesticides and weedicides at low cost to the tribals in their opinion will reduce the mental and physical strain and stress.

In home activities much emphasis was on digging of bore-wells. Women spent most of their time in fetching of water and thereby they face severe fatigue everyday. Therefore suggested digging borewells. They further suggested to construct bio-gas plants and smokeless chulha that reduce the drudgery of tribal women.

5.8 IMPLICATIONS OF THE STUDY

Eversince the beginning of civilization women have played an important role in agriculture in almost every country of the world. Infact nobody can think of agriculture without participation of women in rural areas who form the most important productive work force and their participation in food production had two aspects first as a farmer the second as a farm labour. They often have to face the double drudgery of being major contributors to family income in addition to being responsible for household family maintenance and agrobased subsidiary enterprises. Inspite of being the major producers of food by undertaking most tiring and strenous operations in crop production, women's contribution in agri .culture has not been recognised properly and are not viewed as agriculturists.

Further wherever the operations in agriculture are mechanised men taken up such postions while the operations which need manual labour were passed on to the women farmers. Even while training the women farmers many institutions conceived the training programmes purely on nutrition, child welfare, mother care etc., neglecting completely the importance of training in improving the skills in agriculture in order to reduce the drudgery of women.

The present investigation has already focussed its attention on three important aspects like, member of activities performed by tribal women, time spent on each activity and perception of extent of drudgery.

1. The study revealed that twelve out of twenty farm activities and fourteen out of fifteen items in home activities were women domain activities. All these operations are very strenuous and are more drudgery reden.

Therefore there is an urgent need to carry out research by scientist to evolve simple and easy to use implement that could reduce the physical strain on the part of the women as well as reduce the period of working in the farm as well as home. The time gained by the use of such improved implements could be effectively used by the women apart from reduction in physical strain, for productive activities that could supplement their family income.

2. Some of the technological peripatetic training programmes. To these tribal women in both acquisition operation and maintainance of these equipment which ultimately reduce the pressure of workload on tribal women.
3. Their appears to be certain misconceptions with regard to sharing of activities between men and women in farm and home activities. It is therefore necessary that both these genders need to be trained highlighting the importance of equitable distribution of work based on physical strength of gender but not based on social compulsion. Such trainings will make the genders to appreciate the rationale behind sharing of different activities which ultimately reduce the extent of drudgery of tribal women.
4. The key problems expressed by tribal women have direct barring on the drudgery like, hand weeding, transplanting and harvesting. These problem could be overcome as said earlier by providing improved implements reduce the drudgery. The problems come under home activities which have direct barring on drudgery like fetching of water,

collection of fuel/ preparation of cow dung cakes, loans, mud plastering of walls of houses etc. which are very vital and could no longer be neglected any more. The officers consend with tribal development should focuss their attention on two most important problems that is fetching of water and collection of fuel/preparation of cow dung cakes. The former problem can be overcome by digging borewells whereas later can be by providing. Alternative non-conventional energy sources capital for practising agriculture and allied activites is also a problem which appears to be bothering to be a tribal families therefore liberalized loaning policies by financial institutions should be taken up priority basis.

5.9 SUGGESTIONS FOR FUTURE RESEARCH

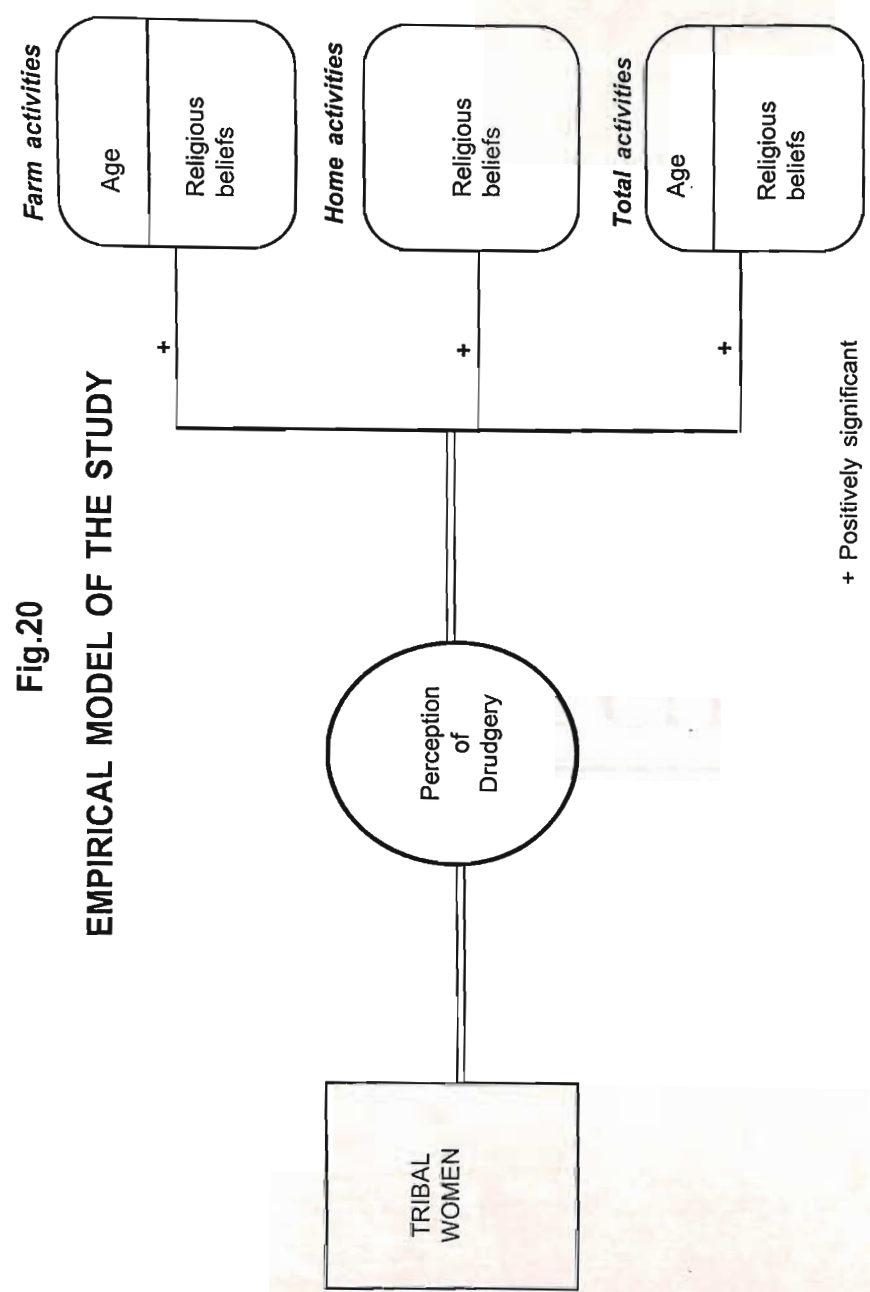
1. At present been study was confine to only 6 vilages in 2 mandals of Srikakulam district the future studies could extent to other areas were tribal population is predominant inorder to rationalised and journalised the results.
2. The study was further opined to two major activities of farm and home. The future studies in order to correctly include the other enterprises such as dairy, poultry, home stead activities management etc.
3. The study regarded to indirect measurement of drudgery interms of tribal women perception whereas the future studies could focuss their attention by regarding to direct measurements interms of time spent in addition to the symptoms of physical strain like, fatigue, head ache, palms, and health condition due to excess hours working by tribal women.

4. Few experimental studies involving anthropometric data could also be attempted in order to assess the extent of drudgery and its effect on the health of tribal women in such cases a few case studies would add to the effectiveness of the research outcome.

5.10 EMPIRICAL MODEL OF THE STUDY

The conceptual model developed in the present investigation was tested by means of correlation analysis in order to establish the relation between the selected characteristics of tribal women and perception of drudgery of tribal women in farm and home activities. The model was also tested the activities performed and average time spent by tribal women in farm and home activities. Based on the above analysis an empirical model was prepared and presented in Fig.20.

As per the model it is evident that age and religious belief in case of perception of tribal women's drudgery due to their participation in both farm activities as well as total activities and religious belief, in case of home activities were found to be positively significant indicating linear relationship.



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APPENDICES

INTERVIEW SCHEDULE

Title of Research: Perception of Drudgery of tribal women in
Srikakulam district of Andhra Pradesh

Section A: RESPONDENT PROFILE

1. Name of the mandal :
2. Name of the village :
3. Name of the respondent :
4. Age (in years) :
5. Marital status : Married/Unmarried/Others
6. Occupation :

- a. Cultivation
- b. Cultivation + Subsidiary occupation
- c. Cultivation + Labour + Subsidiary occupation

7. Family size :

- a. Small
- b. Medium
- c. Large

8. Farm size

No. of acres :

- | | | |
|--------|-------------|---------|
| a. Dry | a. Marginal | () |
| b. Wet | b. Small | () |
| ----- | c. Medium | () |
| Total | d. Large | () |
| ----- | | |

9. Economic status

- a. Income per annum

- | | |
|---------------------------------------|-----|
| i) From Agricultural source | Rs. |
| ii) From Subsidiary occupations | Rs. |
| iii) From Wages | Rs. |
| iv) Any other source (please specify) | Rs. |

Total

Rs.

b. Indebtedness

- i) Have you taken any loan so far Yes/No
 ii) If 'Yes' what is the amount outstanding
 Particulars

Source of Loan	Purpose	Amount taken	Amount paid	Outstanding loan
1. Friends				
2. Relatives				
3. Commercial banks				
4. Private money lenders				
5. Societies/Corporations				
6. Any other (specify)				

Total indebtedness

Rs. _____ (a - b)

Rs. _____

11. Nutritional status
Number of meals/day

Extent of use

 Daily / twice / Weekly / Fort-
 a week a week nightly

- In every meal are they using:
- a) Cereals
 - b) Pulses
 - c) Vegetables
 - d) Meat products
 - e) Milk products

12. Economic motivation :

Please state the degree of your agreement to disagreement with each statement on the following three point scale.

A U.D. D.A.

1. A farmer should work towards economic gains.
2. The most successful is one who make more profits.
3. A farmer should try new farming ideas which may earn him more money.

A U.D. D.A.
7 ✓ /

4. It is difficult for the farmers children to make good start unless they are provided with economic assistance.
5. A farmer must earn him living but the most important thing in life cannot be defined in economic terms.
6. A farmer should practice improved technology to increase monetary profits than depending on traditional technology.
- B. Religious belief of tribal farmers :
 1. Neglect of religious practice makes supernatural powers angry and revengful.
 2. The blessings of God/Godess are responsible for the prosperity.
 3. One should not eat new produce unless some religious practices are performed.
 4. To avoid the pest/disease attack one has to follow the advice of local religious, leaders
 5. Dusting and spraying of insecticides is not desirable as it irritates God.
 6. Hunting is desired by the God to bless for higher production.
 7. One should not apply chemical fertilizer as it is irritates the God.
 8. Animal sacrifice is essential at the time of harvest to please the God.

SECTION - B

- I. Enlisting the activities performed by tribal men and women in farm and home.

Men Women

(A) FARM ACTIVITIES

I. Nursery management

- a. Preparing nursery beds
- b. Sowing in nursery beds
- c. Applying fertilizers to nursery beds by broadcasting
- d. Applying chemicals to control pests/diseases in nursery beds
- e. Hand weeding in nursery beds

II. Main field activities

1. Transplanting
2. Hand weeding
3. Fertilizer management
 - a. Applying basal dose of fertiliser by broadcasting
 - b. Top dressing of fertilizers by placement
4. Plant protection practices
 - a. Destruction of affected plants/plant parts
 - b. Preparing spray solution
5. Harvesting by sickles
6. Making bundles of harvested produce
7. Post harvest practices
 - a. Carrying harvested bundles to the threshing floor
 - b. Threshing by beating with sticks
 - c. Winnowing

Men Women

- d. Drying the grains
- e. Cleaning the grains
- f. Storing in gunny bags
- g. Storing in bins

(B) HOME ACTIVITIES

- 1. Food preparation
 - a. Cooking
 - b. Grinding
 - c. Serving food
- 2. Fetching of water
- 3. Collection of fuel/preparation of cow dung cakes
- 4. Child care
- 5. House keeping
 - a. Dusting & sweeping
 - b. Cleaning utensils
 - c. Washing & folding clothes
 - d. Control of household pests
 - e. Mud plastering
 - f. Stitching and mending of clothes
- 6. Loans and purchases
 - a. Shopping and selling of goods in shandies
 - b. Borrowing and repaying of loans
- 7. Care of cattle

II. Assessment of the time spent by tribal women in each activities of farm and home.**(A) FARM ACTIVITIES**

Time spent by
Women in each
activity
(No.of hours:)

- 1. Nursery management
 - a. Preparing nursery beds
 - b. Sowing in nursery beds
 - c. Applying fertilizers to nursery beds by broad casting

- d. Applying chemicals to control pests/
diseases in nursery beds
 - e. Hand weeding in nursery beds
2. Main field activities
- 1. Transplanting
 - 2. Hand weeding
 - 3. Fertilizer management
 - a. Applying basal dose of fertiliser by
broadcasting
 - b. Topdressing of fertilizers by
placement
 - 4. Plant protection practices
 - a. Destruction of affected plants/plant
parts
 - b. Preparing spray solution
 - 5. Harvesting by sickles
 - 6. Making bundles of harvested produce
 - 7. Post harvest practices
 - a. Carrying harvested bundles to the
threshing floor
 - b. Threshing by beating with sticks
 - c. Winnowing
 - d. Drying the grains
 - e. Cleaning the grains
 - f. Storing in gunny bags
 - g. Storing in bins

(B) HOME ACTIVITIES

- 1. Food preparation
 - a. Cooking
 - b. Grinding
 - c. Serving food

Time spent by
Women in each
activity
(No. of hours:)

2. Fetching of water
3. Collection of fuel/preparation of cow dung cakes
4. Child care
5. House keeping
 - a. Dusting and sweeping
 - b. Cleaning utensils
 - c. Washing and folding clothes
 - d. Control of household pests
 - e. Mud plastering
 - f. Stitching and mending of clothes
6. Loan & Purchases
 - a. Shopping and selling of goods in shandies
 - b. Borrowing and repaying of loans
7. Care of cattle

III. PERCEPTION OF EXTENT OF DRUDGERY OF TRIBAL WOMEN

(A) FARM ACTIVITIES

Perception of Extent of Drudgery

Very high/High/Average/Low/V. low/Nil

1. Nursery management
 1. Preparing nursery beds
 2. Sowing in nursery beds
 3. Applying chemicals to control pests/diseases in nursery beds
 4. Hand weeding in nursery beds
2. Main field activities
 1. Transplanting
 2. Hand weeding
 3. Fertilizer management
 - a. Applying basal dose of fertilizer by broadcasting

Perception of Extent of Drudgery

Very high/High/Average/Low/V. low/Nil

- b. Top dressing of fertilizers by placement
- 4. Plant protection practices
 - a. Destruction of affected plants/plant parts
 - b. Preparing spray solution
- 5. Harvesting by sickles
- 6. Making bundles of harvested produce
- 7. Post harvest practices
 - a. Carrying harvested bundles to the threshing floor
 - b. Threshing by beating with sticks
 - c. Winnowing
 - d. Sprying the grains
 - e. Cleaning the grains
 - f. Storing in gunny bags and bins

II. HOME ACTIVITIES

- 1. Food preparation
 - a. Cooking
 - b. Grinding
 - c. Serving food
- 2. Fetching of water
- 3. Collection of fuel/preparation of cow dung cakes
- 4. Child care
- 5. House keeping
 - a. Dusting & sweeping
 - b. Washing & folding clothes
 - c. Control of household pests

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Perception of Extent of Drudgery

Very high/High/Average/Low/V.low/Nil

- d. Cleaning of utensils
 - e. Mud plastering
 - f. Stitching and mending
of clothes
6. Loans & purchases
- a. Shopping and selling
of goods in shandes
 - b. Barrowing & repaying
of loans
7. Care of cattle

SECTION - C

PROBLEMS ENCOUNTERED BY TRIBAL WOMEN IN
FARM AND HOME ACTIVITIES AND THEIR SUGGESTIONS

(A) PROBLEMS

Farm
activitiesHome
activities

1.

2.

3.

4.

5.

6.

(B) SOLUTIONS

Farm
activitiesHome
activities

1.

2.

3.

4.

5.

6.