CHAPTER IV

RESULTS AND DISCUSSION

This chapter focuses on findings based on objectives of the study and are presented in various sections as follows :

1. Description of the Sample
2. Occupational Profile of the Employed Respondents
3. Role of Respondents in Household, Agricultural and Allied Activities
4. Time Utilization Profile of Tribal Women
5. Monetary Valuation of Non-Market Work and Economic Role Performed by Tribal Women
6. Status of 'Gaddi' Women
7. Household Development
8. Testing of Hypotheses
9. Discussion of Findings

1. Description of the Sample

This section of the study deals with the description of the demographic information - personal and family characteristics and situational factors of the respondents. The housewives were the key respondents for the investigation along with supporting information from other family members.

1a. Personal Characteristics of Respondents

Age, educational level, marital status and employment status comprised the personal characteristics of respondents (Table-1).

Age

The mean age of respondents was 34.70 years. Maximum number of employed respondents belonged to age group of 30-44 years, whereas, most of the non-employed respondents belonged to the age group of below 30 years. However, irrespective of employment status least number of respondents belonged to the age group of 45 years and above.

Educational Level

Irrespective of employment status, maximum number of respondents were illiterate. Mean complete years of education was 4 years and 1.6 years in case of employed and non-employed respondents respectively. Amongst employed respondents 23 per cent studied upto high school level but only 15 per cent could complete it, whereas, amongst non-employed respondents only 5 per cent studied upto high school and 4 per cent could complete it. Only 8 per cent employed respondents had technical and college education and none amongst non-employed respondents had college and/or technical education.

Employment Status

On the whole the sample comprised of 50 per cent employed and 50 per cent non-employed respondents.

Marital Status

Marital status of the respondents showed that maximum number of respondents were married. Amongst employed respondents 27 per

cent were widows and 3 per cent were separated from husbands and among non-employed respondents 5 per cent were widows.

Table 1 : Personal Characteristics of Respondents

Personal Characteristics	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	%
Age : (Years)				
Below 30	31.00	42.00	73	36.50
30-44	54.00	39.00	93	46.50
45 and above	15.00	19.00	34	17.00
Mean	34.60	34.80	34.70	
S.D.	8.50	10.50	9.50	
Education				
Illiterate	52.00	75.00	127	63.50
Primary	13.00	16.00	29	14.50
Middle	4.00	4.00	8	4.00
High	23.00	5.00	28	14.00
College	8.00	-	8	4.00
Mean	4.00	1.60	2.80	
S.D.	4.60	2.90	4.10	
Employment Status				
Employed	100.00	-	100	50.00
Non-employed	-	100.00	100	50.00
Marital Status				
Married	70.00	95.00	165	82.50
Widows	27.00	5.00	32	16.00
Separated	3.00	-	3	1.50

1b. Family Characteristics of Respondents

Variables undertaken in the study were family type, family size, family income, main family occupation, caste, land holding size and migration pattern (Table 2).

Table 2 : Family Characteristics of Respondents

Family Characteristics	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	%
Family Type				
Nuclear	64.00	60.00	124	62.00
Joint	36.00	40.00	76	38.00
Family Size				
1 to 4 members	41.00	21.00	62	31.00
5 to 7 members	45.00	60.00	105	52.50
8 or more members	14.00	19.00	33	16.50
Mean	5.10	6.50	5.80	
S.D.	2.00	3.40	2.90	
Family Income (Rs.)				
upto 1500	39.00	37.00	76	38.00
1501 to 3000	23.00	33.00	56	28.00
3001 to 4500	10.00	15.00	25	12.50
4501 and above	28.00	15.00	43	21.50
Mean	3095.90	2665.20	2880.50	
S.D.	2603.10	2109.50	2373.10	
Main Family Occupation				
Farming	8.00	6.00	14	7.00
Goat and Sheep	1.00	9.00	10	5.00
Casual/Agriculture Labour	18.00	35.00	53	26.50
Shop/Business/Small Scale Industry	6.00	15.00	21	10.50
Service	67.00	35.00	102	51.00
Caste				
Higher Caste	77.00	84.00	161	80.50
Scheduled Caste	23.00	16.00	39	19.50
Land Holding Size (Acres)				
0 - 0.5	57.00	58.00	115	57.50
0.6 - 1.0	26.00	31.00	57	28.50
1.1 - 1.5	6.00	7.00	13	6.50
1.6 and above	11.00	4.00	15	7.50
Mean	0.06	0.06	0.06	
S.D.	0.08	0.07	0.07	

Family Type

Maximum number of respondents belonged to nuclear family type in employed (64 per cent) as well as non-employed (60 per cent) categories.

Family Size

The mean family size of the sample was 5.8. Mean family size of employed respondents was 5.1 and of non-employed respondents 6.5. About one half of the respondents (52.5 per cent) in the total sample had the family size of 5 to 7 members. More number of non-employed respondents (60 per cent) had family size of 5 to 7 members than employed respondents (45 per cent). More employed respondents belonged to small family size of 1-4 members (41 per cent) than non-employed (21 per cent). On the whole, the data showed a trend of small to medium family size and there were only a few families with large number of members.

Family Income

Family income ranged from Rs. 1500 to Rs. 4501 and above. Mean family income was Rs. 2880.50 (S.D. Rs. 2373.10). Mean income of employed households was Rs. 3095.90 (S.D. 2603.1) and of non-employed households Rs. 2665.20 (S.D. 2109.50). About two-fifths (38 per cent) of respondents belonged to income range of Rs. 1500. Twenty eight per cent employed and 15 per cent non-employed households had income range of Rs. 4501 and above. Hence, it was observed that employed respondent households belonged to higher income group than non-employed respondent households (Table 2).

Main Family Occupation

About one half of the respondents (51.0 per cent) belonged to families employed in various government, semi-government or private organisations and one-fourth of the respondents belonged to casual/agricultural labourer category as their main family occupation. Only 7 per cent respondents belonged to farming families - as their main occupation. However, farming has been taken up by most of the respondents as a subsidiary occupation because land is not so fertile and holdings are small; therefore, it was not a dependable source of income. Nearly 9 per cent non-employed and 1 per cent employed respondent households followed traditional 'Gaddi' tribal occupation of rearing goat and sheep. More than three-fifths of employed and nearly two-fifths of non-employed respondent households were from government service. In both employed and non-employed groups 18 per cent and 35 per cent families respectively were engaged in casual/agricultural labour as their main occupation. Both employed (6 per cent) and non-employed (15 per cent) families were in business such as tea stalls, stationery, grocery shop and some were also engaged in traditional occupation like spinning, weaving and sale of milk (Table 2).

Caste

Nearly four-fifth of respondent families belonged to higher caste. A significantly higher percentage of both employed (84 per cent) and non-employed respondent (77 per cent) families belonged to higher caste. Only 23 per cent of employed and 16.0 per cent of non-employed families belonged to scheduled castes (Table 2).

Land Holding Size

More than half of the sample households (57.50 per cent) had marginal land holding size (0 - 0.5 acres) and 28.5 per cent households had 0.6 - 1.0 acres of land holding size. Only 7.50 per cent sample households possessed more than 1.6 acres of land. Data showed that there was not much difference between land holding size of employed and non-employed respondent households (Table 2).

Table 3 : Sources of Family Income of Respondents

Sources of Income	Employed				Non-employed		Total			
	Males (N=63)		Females (N=104)		Males (N=27)		Males (N=140)		Females (N=104)	
	f	%	f	%	f	%	f	%	f	%
Independent Occupation										
Govt. service	40	63.49	90	86.53	43	55.84	83	59.28	90	86.53
Private service	13	20.63	9	8.65	10	12.98	23	16.42	9	8.65
Pension	7	11.11	5	4.80	8	10.38	15	10.71	5	4.80
Business	3	4.76	-	-	16	20.77	19	13.57	-	

Combined Family Occupation	Employed (N=56)		Non-employed (N=81)		Total (N=137)	
	f	%	f	%	f	%
Labour	18	32.14	36	44.44	54	39.41
Farming	6	10.71	3	3.70	9	6.56
Horticulture	16	28.57	24	29.62	40	29.19
Goat and sheep rearing	4	7.14	10	12.34	14	10.21
Spinning	1	1.78	-	-	1	0.72
Weaving	1	1.78	3	3.70	4	2.91
Sale of milk	4	7.14	4	4.93	8	5.83
Kitchen garden	2	3.57	1	1.23	3	2.18
Tailoring	4	7.14	-	-	4	2.91

Pattern of family income was categorized on the basis of sources of income earned individually and through combined family occupation by male and female members of a family (Table 3). It was observed that maximum number of family members both males (59.28 per cent) and females (86.53 per cent) earned income through employment in government service. It was followed by income earned through employment in private service and pensions 16.42, 8.65 and 10.71, 4.80 for both males and females respectively. However, only male members earned income from business and small scale industry. Similar trend was observed in occupational pattern of male family members belonging to employed and non-employed category.

Family members also earned income from combined family occupation such as labour (39.41 per cent), horticulture (29.19 per cent), Goat and sheep rearing (10.21 per cent), farming (6.56 per cent) and sale of milk (5.83 per cent). Least number of family members earned income from occupations such as weaving and tailoring (2.91 per cent each), kitchen gardening (2.18 per cent) and spinning, (0.72 per cent). Almost similar trend was observed in participation in various occupations by family members belonging to employed and non-employed category (Table 3).

1c. Situational Variables

Situational variables included both exposure to mass-media channels as well as interpersonal channels, exposure to community and development programmes, extent of participation and reasons for non participation in development programmes.

Table 4 : Exposure to Mass-Media by the Respondents

Exposure to Mass-Media	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	Total (N=200) %
Level of Exposure				
Regular exposure	88.00	80.00	168	84.00
Type of Media				
Radio and tape recorder	79.00	75.00	154	77.00
Television	69.00	57.00	126	63.00
Newspaper	37.00	7.00	44	22.00
Magazines	47.00	4.00	51	25.50
Type of Programmes				
News	65.00	47.00	112	56.00
Women's programme	58.00	44.00	102	51.00
Programme on agriculture	40.00	29.00	69	34.50
Stories and plays	46.00	38.00	84	42.00
Film songs	81.00	65.00	146	73.00

Exposure to Mass-Media

The data on exposure to mass-media indicated that majority of respondents (84 per cent) had frequent exposure and remaining 16 per cent did not have regular exposure (Table 4). Further analysis according to employment status showed an encouraging picture as relatively large percentage of both employed (88 per cent) and non-employed (80 per cent) category had frequent exposure to mass-media. It was observed that radio was the most common source available to respondents followed by television (Plate 1). Printed material was least used by non-employed respondents (7.0 per cent) as compared to employed respondents (37.0 per cent). The general trend in order of preference

PLATE 1. TRIBAL MEN AND WOMEN WATCHING TELEVISION

regarding popularity of audio-visual programmes was found to be film songs (73 per cent), news (56 per cent), women's programmes (51 per cent), stories and plays (42 per cent) and programmes on agriculture (34.50 per cent).

Table 5 : Extent of Exposure to Mass-Media by Respondents

Level of Exposure	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	Total (N=200) %
Low	10.00	22.00	32	16.00
Medium	61.00	57.00	118	59.00
High	29.00	21.00	50	25.00

The respondents were categorized on the basis of frequency of exposure to mass-media (Table 5). It was found that majority of respondents had medium level of exposure (59 per cent) followed by high level of exposure (25 per cent). Least percentage of (16 per cent) respondents had low level of exposure to mass-media. Further scrutiny of data indicated that more number of employed respondents had exposure to mass-media channels of communication than non-employed respondents.

Participation in Community and Development Programmes

The data showed that on the whole, maximum contact of respondents was with Gram Sevikas i.e. 66.5 per cent and nurses i.e. 65 per cent (Table 6). The non-employed respondents contacted extension personnel relatively more than employed respondents. Lack of time was the reason attributed for less contact with extension agents by employed respondents.

Table 6 : Exposure to Community and Development Programmes by the Respondents

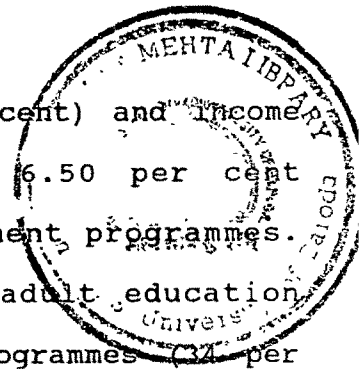
Exposure to Community and Development Programmes	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	%
Type of Exposure				
Meet Gram Sevika	62.00	71.00	133	66.50
Meet nurse	62.00	68.00	130	65.00
Type of Information Received				
No information	66.00	59.00	125	62.50
About new programmes	31.00	39.00	70	35.00
About progress of on going programmes	26.00	26.00	52	26.00
About participation in new programmes	23.00	27.00	50	25.00
Type of Development Programmes				
Mahila Mandals	70.00	73.00	143	71.50
Adult education	58.00	26.00	84	42.00
Income generating programmes	34.00	26.00	60	30.00
Anganwadi	77.00	59.00	136	68.00
No knowledge	9.00	4.00	13	6.50

About 62.5 per cent respondents did not receive any information about extension programmes. Information regarding new programmes was reported by 35 per cent respondents, about progress of on going programmes by 26 per cent and about participation in these programmes by 25 per cent respondents. More number of non-employed respondents were better aware about development programmes than the employed respondents as they had more time to have contact with concerned workers.

Majority of respondents were aware of various development programmes such as Mahila Mandals (71.50 per cent), Anganwadi (68

PLATE 2. ANGANWADI IN A REMOTE VILLAGE

PLATE 3. ANGANWADI CHILDREN AND WORKERS



per cent), adult education programmes (42 per cent) and income generating programmes (30 per cent). Only 6.50 per cent respondents had no information about development programmes. Employed respondents were more aware about adult education programmes (58 per cent); income generating programmes (34 per cent) and Anganwadi (77 per cent) as compared to non-employed respondents i.e., 26 per cent, 26 per cent and 59 per cent respectively. However, employed (70 per cent) and non-employed (73 per cent) respondents were well aware about Mahila Mandal programmes (Plate 2,3).

Table 7 : Level of Extension Contact of the Respondents

Level of Extension Contact	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	%
Low	36.00	32.00	68	34.00
Medium	40.00	48.00	88	44.00
High	24.00	20.00	44	22.00

The respondents were categorized on the basis of frequency of contact with extension personnels (Table 7). It was found that majority of respondents (44.0 per cent) had medium level of extension contact whereas, 34 per cent had low and only 22 per cent had high level contact. On the whole, same trend was revealed when data was scrutinized according to employment status.

Table 8 : Extent of Participation in Community and Development Programmes

Level of Participation in Programmes	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	%
Low	72.00	60.00	132	66.00
Medium	9.00	12.00	21	10.50
High	19.00	28.00	47	23.50

Extent of participation in community and development programmes by the respondents was measured on a three point scale (Table 8). Scores were given according to frequency of attendance and participation in discussions and decision-making in developmental programmes. Hence, the minimum possible score was 1 and maximum 9. On the whole, more than three-fifths (66 per cent) of respondents showed low level of participation and nearly one fifth of respondents showed high level of participation. Only 10.5 percentage of respondents showed medium level of participation in development programmes. However, more number of non-employed respondents showed high level of participation i.e., 28 per cent as compared to the employed respondents i.e., 19 per cent. Lack of time on the part of employed respondents was the reason attributed for their lower level of participation than the non-employed respondents.

Table 9 : Impact of Participation in Development Programmes as Perceived by the Respondents

Perception Regarding Impact of Programmes	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	Total (N=200) %
Helped to provide employment	7.00	6.00	13	6.50
Increased knowledge and skill	17.00	21.00	38	19.00
Increased Status Amongst				
Family	19.00	27.00	46	23.00
Friends	54.00	28.00	82	41.00
Community	12.00	16.00	28	14.00

Nineteen per cent respondents perceived that participation in development programmes increased knowledge/skill whereas, only 6.50 per cent respondents reported that it helps to provide employment (Table 9). Forty one per cent of respondents perceived that participation in development programmes has increased their status amongst friends. Twenty three per cent of the respondents perceived that participation increased status amongst family and 14 per cent of respondents perceived that participation increased status in the community.

Further analysis showed that about one-half of employed respondents and one-fourth of non-employed respondents perceived that participation in development programmes increased their status amongst friends. Only 19 per cent employed and 27 per cent non-employed respondents reported that it increased status amongst other family members.

Table 10 : Reasons of Non Participation in Community and Development Programmes Reported by Respondents

Reasons of Non-Participation	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	Total (N=200) %
Objection from family members	3.00	4.00	7	3.50
No time	72.00	60.00	132	66.50
Unsuitable time of programmes	1.00	3.00	4	2.00
No income from them	4.00	2.00	6	3.00
Irregular programmes	11.00	3.00	14	7.00
Young children neglected	11.00	2.00	13	6.50
No interest in programmes	12.00	16.00	28	14.00

Data showed that majority of respondents (66.5 per cent) felt time constraint in participation while nearly 14 per cent respondents expressed no interest in these programmes (Table 10). Irregularity of programmes and young children being neglected were reported as constraints by 7 per cent and 6.5 per cent respondents respectively. No direct income incurred from these programmes was also a reason for non participation in these programmes (3 per cent). Objection from family members was reported as a reason of non participation by 3.5 per cent respondents. Almost equal per centage of employed and non-employed respondents reported similar reasons for non participation in development programmes.

1d. Migration Pattern of Respondents

The climatic conditions of the tribal area affect the life style of its population. The agricultural production is low because of small and scattered land holdings and single crop season due to extreme cold climate. In order to co-exist with climatic conditions 'Gaddis' have adopted a mixed, agro-pastoral economy. The 'Gaddis' call their flock 'Dhan' i.e., wealth. Although agriculture provides the bulk of staple food, the 'Gaddis' themselves give importance to sheep rearing occupation as mountain meadows and grass lands in the area facilitate the raising of sheep and goat. Accumulation of snow in winter months prevent the year - round sustenance of large flocks. Consequently, a pattern of transhumance is followed which consists of cyclical movements from low lands to high lands. The 'Gaddis' along with their flocks of sheep and goats move between relatively fixed points in an annual circle i.e., from alpine pastures in the summer to foot hills of state in winter months. As the spring progresses the pastures at low and middle elevations begin to dry up and the migration to the higher pastures is resumed. With the onset of winter, the shepherds are back in the foot hills and the same routine goes on every year.

The flock, generally comprise of 300-600 sheep and goats and is looked after by 2-3 shepherds and a sheep dog. A real nomadic life of the 'Gaddis' can be observed while they are in migration (Plate 4). 'Gaddi' women carry loads equal to that of men across the passes in the Himalayan ranges. They cover a distance of about 8-12 K.M. per day. They carry little luggage with them

PLATE 4. COOKING DURING MIGRATION

during migration. Only a few essential utensils are carried to cook simple meals. Their toggery consists of a single 'Chola' and it is really interesting to see them in their fascinating dress ambling and whistling after their flock. They do not carry any tent with them and sleep under open sky. The thickly woven all purpose water resistant blanket serves the purpose of the umbrella in the rains and saves them from blizzard and chill in winter.

Table 11 : Migration Pattern of Respondents

Features of Migration Pattern	Employed (N=6)		Non-employed (N=17)		Total (N=23)	
	f	%	f	%	f	%
Migrant families	6	100.0	17	100.0	23	100.0
Season During Migration						
Summer	-	-	1	4.34	1	4.34
Winter	3	50.0	12	70.58	15	65.21
Both	3	50.0	4	17.33	7	30.43
Duration (No. of months)						
1-2	-	-	5	29.4	5	21.73
3-4	2	33.3	1	5.88	3	13.04
5-6	4	66.6	11	64.70	15	65.21
Responsibility of Flock						
N.A.	1	16.66	2	11.76	3	13.04
Family member	5	83.33	8	47.05	13	56.52
Paid help	-	-	2	11.76	2	8.69
Both	-	-	5	29.41	5	21.73
Mode of Journey						
On foot	1	16.66	3	17.64	4	17.39
By bus	1	16.66	3	17.64	4	17.39
Both	4	66.66	11	64.70	15	65.21

The various aspects of migration included features such as number of migrant households, season of migration, duration of migration, mode of journey and responsibility of flock. In addition, reasons of migration, problems encountered and type of work at place of migration were also studied.

It was observed that out of total sample only 23 families had migrated, of which 6 per cent were from employed and 17 per cent from non-employed households (Table 11). Only 7 per cent families migrated completely, whereas in the rest of the cases old parents, women and children were left at home. Maximum migration took place in winter season (65.21 per cent) followed by both the seasons (30.43 per cent). Trend of seasonal migration was similar for both employed and non-employed sample households.

Maximum period of migration in respondent households ranged between 5 to 6 months (65.21 per cent) followed by 1 to 2 months (21.73 per cent). On the whole, majority of employed (66.6 per cent) and non-employed (64.70 per cent) respondent households reported a maximum duration of migration of 5 to 6 months. Only 11.76 per cent non-employed and none of employed respondent households received paid help for looking after their flocks.

Maximum migratory members (65.21 per cent) both from employed as well as non-employed respondent households travelled on foot as well as by bus to the place of migration. It was found that persons moving along with flock travelled on foot, whereas other family members travelled by bus.

Table : 12 Reasons of Migration as Reported by Respondents

Reasons of Migration	Employed (N=6)		Non-employed (N=17)		Total (N=23)	
	f	%	f	%	f	%
Scarcity of fodder for flocks	4	66.6	12	70.58	16	69.56
Harsh climate for flock and humans	3	50.0	14	82.35	17	73.91
Scarcity of food for family	3	50.0	9	52.94	12	52.17
Economic necessity	5	83.33	9	52.94	14	60.86
Non availability of seasonal employment	4	66.6	6	35.29	10	43.47
Cultivation of land at lower hills	2	33.33	8	47.05	10	43.47
An urge to migrate by habit	1	16.66	2	11.76	3	13.04

The migratory families attributed the following reasons for their migration : harsh climate for flock and humans (73.91 per cent), scarcity of fodder for flocks (69.56 per cent), economic necessity (60.86 per cent), scarcity of food for family (52.17 per cent), non-availability of seasonal employment, cultivation of land at lower hills (43.47 per cent each) and an urge to migrate by habit (Table 12). Employed respondent households enlisted the following order of reasons of their migration : Economic necessity (83.33 per cent), scarcity of fodder for flocks, non availability of seasonal employment (66.6 per cent each), harsh climate for livestock and humans and scarcity of

food for family (50.0 per cent each). Non-employed households enumerated the following reasons for their migration : Harsh climate (82.35 per cent), scarcity of fodder (70.58 per cent), scarcity of food and economic necessity (52.94 per cent each) and cultivation of land at lower hills (47.05 per cent). An urge to migrate by habit was reported least by employed (16.66 per cent) as well as non-employed (11.76 per cent) respondents.

Table 13 : Problems Encountered by Respondents Due to Migration

Problems	Employed (N=6)		Non-employed (N=17)		Total (N=23)	
	f	%	f	%	f	%
No problems	4	66.66	6	35.29	10	43.47
Less members to share work	3	50.00	3	17.64	6	26.08
Education of children suffers	-	-	4	23.52	4	17.39
Health of all Suffers	-	-	1	5.88	1	4.34
Increased responsibility of family members at home	-	-	1	5.88	1	4.34
Increased responsibility of cattle at home	-	-	3	17.64	3	13.04
Increased responsibility of crop	-	-	1	5.88	1	4.34

More than two-fifth migratory families reported that they did not encounter any problem due to migration (Table 13). Similar trend was disclosed by employed (66.66 per cent) as well

as non-employed (35.29 per cent) respondents. About one-fourth respondents reported that at home workload increased as there were less family members to share it. Migratory families amongst employed category did not report any other problems besides those stated above. Non-employed families further disclosed that education of their children suffered (23.52 per cent), followed by increased responsibility of tending to livestock at home as important practical problems.

Table 14 : Type of Work at Place of Migration

Type of Work	Employed (N=6)		Non-employed (N=17)		Total (N=23)	
	f	%	f	%	f	%
Only goat and sheep rearing.	3	50.00	1	5.88	4	17.39
Casual labour	1	16.66	4	23.52	5	21.79
Work on land	2	33.33	8	47.05	10	43.47
Work in homes as servants	3	50.00	6	35.29	9	39.13
Spinning	-	-	3	17.64	3	13.04

Findings disclosed that majority of migratory families worked on their land at place of migration (43.47 per cent), followed by work in homes as servants (39.13 per cent) and work as casual labourers (21.79 per cent), Table 14. Majority of respondents amongst employed category either did not do any extra work besides goat and sheep rearing or worked in other's homes as servant. Nearly one-half of respondents (47.05 per cent) amongst non-employed category worked on their land followed by work in homes as servants (35.29 per cent).

2. Occupational Profile of Employed Respondents

The findings pertinent to occupational pattern, earnings, source of training for employment, opinions, perception of status and satisfaction from market work of respondents have been included in this section.

The main aspects of occupational pattern of employed respondents under study included type of occupation, number of years of employment and number of hours of work per day (Table 15). It was observed that about 50 per cent of the respondents were working on part-time basis as Anganwadi helpers, sweepers, peons followed by teachers (23 per cent) and nurses (9 per cent).

Forty per cent of respondents were employed since last 5 years followed by 37 per cent working since last 6-10 years. Only 4 per cent respondents were employed for more than 21 years. A large number of respondents were employed for the whole year round (70 per cent) whereas, 30 per cent respondents worked for 10 months in a year because institutions such as schools and 'Balwadis' close for winter vacations for 2 months.

Data further showed that majority of respondents worked for 6 hrs. or more (34 per cent) followed by 4-6 hrs. (33 per cent) and 2-4 hrs. (28 per cent) per day. Only 5 per cent respondents worked 2 hrs. per day.

Table 15 : Occupational Profile of the Employed Respondents

Occupational Profile	Employed (N=100) %
Type of Occupation	
Labourer	5.00
Clerk	3.00
Teacher	23.00
Nurse	10.00
Anganwadi teacher	9.00
Part-time workers	50.00
Years of Employment	
0-5	40.00
6-10	37.00
11-15	14.00
16-20	5.00
21 and above	4.00
Number of Hours of Work per Day	
Upto 2 hours	5.00
2-4 hours	28.00
4-6 hours	33.00
6 and above.	34.00

The monthly income earned by respondents through various occupations ranged between Rs. 200 to Rs. 3052 (Table 16). It was found that one-third of respondents were part time employees with an average monthly income of Rs. 345. It was followed by an equal number of respondents engaged in school teaching and helpers in Anganwadi (14 per cent each), and voluntary teachers (10 per cent), with an average monthly income of Rs. 3014, 200 and 510 respectively. It was found that 10 per cent respondents

Table 16 : Type of Occupation and Income Earned by Employed Respondents

Type of Occupation	Employed (N=100) %	Average Monthly Income earned (Rs.)
Labourer	5.00	820
Clerk	3.00	2600
Teacher	14.00	3014
Nurse	10.00	3052
'Anganwadi' teacher	9.00	362
Helpers	14.00	200
'Gram Sevikas'	1.00	2400
Craft teachers	1.00	1625
Voluntary Teachers	10.00	510
Part Time Workers	33.00	345

were nurses with an average monthly income of Rs. 3052. Least number of respondents were engaged in occupations such as Anganwadi teachers (9 per cent), clerks (3 per cent) Gram Sevikas and craft teachers (1 per cent each).

Table 17 : Source of Training for the Employment of the Respondents

Training Sources	Employed (N = 100) %
No Training	63.00
Parents and elders	2.00
Extension change agents	1.00
Training centres	34.00

Findings revealed that 63 per cent respondents did not undergo any special training whereas, 34 per cent respondents were trained for their professional employment such as nursing and teaching etc., (Table 17). It was observed that mass-media and extension change agents did not play any role as a source of training for employment.

Table 18 : Opinion of Respondents Regarding Employment

Opinions	Employed (N = 100) %
Increase in wages	79.00
More promotions	49.00
Household work should be shared	69.00
Satisfaction from paid work	94.00

It was observed that 79 per cent employed respondents considered it desirable that wages should be increased and 49 per cent respondents reported that there should be more promotions. Sixty nine per cent respondents opined that household work should be shared more by other family members. On the whole, a large percentage of (94 per cent) respondents opined their satisfaction from participation in paid employment.

Table 19 : Impact of Employment on Status as Perceived by the Respondents

Perception of Respondents	Employed (N = 100) %
Better status due to employment	83.00
Better Status Amongst	
Family	79.00
Friends	78.00
Community	72.00
No change in status	17.00

A large number of respondents (83 per cent) considered that they had better status because of their employment and remaining 17 per cent did not consider any change in their status due to employment (Table 19). Further analysis revealed that majority of respondents considered that they had better status due to their employment amongst family (79 per cent), friends (78 per cent) and community (72 per cent).

3. Role of Respondents in Household, Agricultural and Allied Activities

The findings related to responsibility of tasks, frequency of household task performance, source of help received in household tasks, participation in agricultural tasks and involvement in allied activities are presented in this section. The observation of sub-sample under study have been reported along with each task.

PLATE 7. WOMAN ENGAGED IN BATHING THE CHILD

PLATE 8. WOMEN ENGAGED IN MEAL PREPARATION

Household Tasks : Responsibility, Frequency and Help Received by the Respondents

3a. (i) Household Tasks

Child Care : Child care included tasks such as bathing, feeding and looking after studies of children (Table 20). Out of total number of households, 64 per cent of employed and 68 per cent of non-employed respondents had young children who needed care and attention and all respondents took care of children (Plate 7).

The respondents were invariably responsible for the task irrespective of employment status. Thirty four per cent employed and 28 per cent non-employed respondents received help from daughters and other family members. Only 2 per cent employed respondents received paid help.

Meal Preparation : The task of meal preparation included pre-preparation, preparation, serving, and post meal cleaning etc. (Plate 8, 9). It was observed that nearly all respondents were responsible for this task (95 per cent employed and 99 per cent non-employed) and performed the task daily (Table 20). Forty nine per cent employed and 45 per cent non-employed respondents received some help mainly from their daughters and sometimes from other family members. However, no one had paid help.

From observations of sub-sample it was found that the respondents received assistance from grown up daughters, sisters-in-law and other family members in meal preparation. The employed

PLATE 9. WOMAN WASHING UTENSILS

PLATE 10. WOMAN WASHING CLOTHES

Table 20 : Frequency, Responsibility and Help Received in Performing Household Tasks by Respondents

Household Work	Employed (N=100)								Non-employed (N=100)							
	Responsibility		Get Help		Who Helps		Frequency		Responsibility		Get Help		Who Helps		Frequency	
	S	O	Y	N	FM	PH	D	W	S	O	Y	N	FM	PH	D	W
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Household Tasks																
Childcare	61.00	3.00	34.00	30.00	32.00	2.00	64.00	-	66.00	2.00	28.00	40.00	28.00	-	68.00	-
Meal preparation	95.00	5.00	49.00	51.00	49.00	-	98.00	2.00	99.00	1.00	45.00	55.00	45.00	-	100.00	-
Care of clothes	67.00	33.00	36.00	64.00	33.00	3.00	67.00	33.00	88.00	12.00	39.00	61.00	39.00	-	88.00	12.00
Care of house	82.00	18.00	49.00	51.00	49.00	-	51.00	49.00	96.00	4.00	43.00	57.00	43.00	-	100.00	-
Fetching water	44.00	-	14.00	30.00	14.00	-	30.00	14.00	65.00	-	32.00	33.00	32.00	-	33.00	32.00
Fetching fuel	59.00	1.00	60.00	-	58.00	2.00	58.00	2.00	35.00	48.00	22.00	61.00	22.00	-	35.00	48.00
Shopping	64.00	36.00	73.00	27.00	73.00	-	-	64.00	39.00	12.00	18.00	33.00	18.00	-	39.00	12.00
Accounts	11.00	-	2.00	9.00	2.00	-	-	11.00	4.00	1.00	4.00	1.00	1.00	-	-	5.00
Care of others	65.00	35.00	36.00	64.00	36.00	-	64.00	36.00	78.00	-	35.00	43.00	35.00	-	60.00	18.00
Miscellaneous																
Religious activities	91.00	9.00	12.00	88.00	12.00	-	90.00	10.00	83.00	17.00	18.00	82.00	18.00	-	83.00	17.00
Social activities	94.00	6.00	30.00	70.00	30.00	-	79.00	21.00	95.00	5.00	46.00	54.00	46.00	-	83.00	17.00

Responsibility; S=Self, O=Other, Get Help; Y=Yes, N=No, Who Helps; FM = Family Member, P.H. = Paid Help, Frequency; D=Daily, W=Weekly.

respondents received some help from husbands in nuclear families with young children. Traditional 'Chullahs' were possessed by each household. It was observed that care of utensils was a daily task performed in the households. Daughters and other family members rendered help in this task. No paid help was received for this task.

Care of Clothes : The sub-tasks involved in care of clothes were washing, drying, mending and ironing of clothes (Plate 10). Majority of respondents i.e., 67 per cent of employed and 88 per cent of non-employed respondents were responsible for this task and performed the task daily (Table 20). Due to cold weather this

task was also performed weekly by 33 per cent employed and 12 per cent non-employed respondents. Thirty three per cent employed and 39 per cent non-employed respondents got help from other family members. Paid help was sought by only 3 per cent employed respondents. Help from sons and husbands in this task was nil.

It was observed that care of clothes was daily and weekly task in the sub sample. Mostly employed respondents performed this task before taking bath. In majority of cases washing of clothes was done in the forenoon. Piped water supply was observed to be scarce. Respondents had to carry their washloads to sources of water such as springs and 'Nallahs' about 300 - 900 meters away, consuming a lot of time and energy.

Ironing was least done by respondents in tribal areas. Majority of the respondents did not perform this task at all. An observation of sub sample also indicated that this task was rarely performed. However, it was done by some employed respondents, their grown up daughters and sons.

Care of House : This task included the sub-tasks such as sweeping, mopping, dusting and mud-plastering of houses. Sweeping was performed daily by almost all non-employed and 82 per cent of employed respondents (Table 20). As high as 82 per cent employed and 96 per cent non-employed respondents were responsible for this task. Only 49 per cent employed and 43 per cent non-employed respondents received help from other family members. Paid help was not received for this task. It was observed that sweeping was the first task performed by tribal women in the early morning. It was usually performed by female members of the family.

PLATE 11. WOMAN INVOLVED IN MUD-PLASTERING OF FLOOR

PLATE 12. WOMAN SWEEPING THE FLOOR

'Katcha' houses with mud floors were plastered fort-nightly, wooden floors were mopped twice a week, whereas, 'Pucca' floors were mopped daily. Involvement of male members was found to be nil. It was observed from sub sample that mopping of the kitchen after lunch and dinner was a regular task in the households. Dusting was a rarely performed task in the tribal households (Plate 11,12).

Fetching Water : Daily fetching of drinking water from springs or taps from a distance which varied between 10- 300 meters was performed by 44 per cent of employed and 65 per cent of non-employed households (Plate 13). Similar number of respondents were responsible for this task, out of which 14 per cent employed and 32 per cent non-employed respondents received help from family members. No paid help was received for this task. Water fetching from a distance was done once in the morning, once in the evening. It was done more often by respondents who had piped water supply inside or nearby their homes. The observations also confirmed that fetching of water was done several times a day.

Fetching Fuel : Fetching of fuel was an important task performed by tribal women. It was observed that 59 per cent employed and 35 per cent non-employed respondents were responsible for this task and performed it daily (Table 20). It was performed once or twice a week in the rest of the households. Out of the total sample three-fifths of employed and about one-fifths (22 per cent) of non-employed respondents got help from husbands, sons, other female members and paid help was sought by

PLATE 13. WOMAN FETCHING WATER

PLATE 14. WOMAN ENGAGED IN FUEL COLLECTION

2 per cent employed respondent households. It was seen that fuel wood was usually collected from nearby forests. It was stored for six months of extreme cold season when fetching becomes difficult due to snow all around (Plate 14). It was observed that employed respondents usually collected fuel while coming back from work and non-employed respondents, while grazing the livestock. Women were responsible for bringing fuel wood inside the kitchens before they cooked meals.

Shopping : Shopping was mainly a weekly task in majority of households. It was found that 64 per cent employed and 39 per cent non-employed respondents were personally responsible for carrying out this task (Table 20). Help was received by 73 per cent employed and 18 per cent non-employed respondents from husbands and sons. Distant market place, lack of conveyance and difficult terrain were the constraints faced by tribal women; therefore, a very high percentage of respondents occasionally did shopping.

Account Keeping : Only very small number of respondents were responsible for this task i.e., 11 per cent employed and 4 per cent non-employed. Out of these 2 per cent employed and all non-employed respondents being illiterate sought help mainly from children in writing the account. This task was performed whenever shopping was done.

Care of Others : This task included sub-tasks such as looking after old and sick family members and friends. Findings indicated that 65 per cent employed and 78 per cent non-employed

respondents were responsible for this task. Almost an equal number of employed (36 per cent) and non-employed (35 per cent) respondents were helped by other family members in carrying out this task. This task was performed frequently by majority of respondents.

3a. (ii) Miscellaneous Tasks

Religious Activities : 'Gaddis' are Hindus by religion and their main deity is Lord Shiva. They believe that Shiva blessings can remove mental illness, ailments, misfortunes, natural calamities and cast away ancestral punishment. Whenever their wish is fulfilled they arrange Shiva puja called 'Nawla' which is performed at night. A goat is sacrificed and its 'Prasad' is distributed. A 'Chela' (Priest) who is also invited goes into a trance as soon as sacrifices are offered to Shiva. He is said to be possessed of Lord Shiva himself. He answers questions put to him by members of household and other invitees.

Majority of respondents performed 'Puja' daily i.e., 90 per cent employed and 83 per cent non-employed respondents. Only 12 per cent employed and 18 per cent non-employed respondents shared this task with others.

Social Activities : 'Gaddis' have evolved social institution of interdependence to overcome the scarcity of paid labour which is called 'Bartan'. Newell (1967) has defined 'Bartan' as a system of traditionally sanctioned mutual obligation between individuals and families other than concerned with kinship relations. 'Bartan' included activities such as funerals,

marriages and house constructions which require participation of every household in a village irrespective of caste. Need of 'Gaddis' to depend on others is also reflected in another custom of entering 'Dharam Bhai' bond. A 'Dharam Bhai' is a person with whom one informally contracts such rights of mutual convenience and trust.

Social responsibilities also include activities such as meeting friends and visiting relations. Nearly all respondents (94.5 per cent) participated in social activities. Out of the total sample 30 per cent employed and 46 per cent non-employed respondents shared these activities with other family members. Some social activity was performed almost daily by majority of respondents.

3b. Role of Respondents in Agricultural Tasks

Like other areas of the country, agriculture is the mainstay of tribal people too. Tribal women occupy even a more important place than their men counterparts because of labour intensive farming and because of men being mostly away from home, involved in economic pursuits like service and pastoral duties.

Tribal women were found to be engaged in different tasks related to agriculture such as : transplanting, weeding, harvesting, threshing, winnowing, storage and processing etc. There are variations in the role played in different tasks related to pre-harvesting, harvesting and post-harvesting. Thirty four per cent employed and 77 per cent non-employed respondents were solely responsible for these operations. Nearly one-half (49

PLATE 15. WOMAN INVOLVED IN IRRIGATION OF FIELDS

PLATE 16. WOMAN ENGAGED IN LAND PREPARATION BY CLOD BREAKING

per cent) of non-employed and 34 per cent employed respondents got help from family members in carrying out these operations. None received paid help for these tasks. It was a daily task for 77 per cent and weekly activity for 18 per cent non-employed respondents. However, it was a weekly as well as seasonal activity for all employed respondents who participated in agricultural operations.

It was found that respondents were responsible for seed bed preparation whereas, ploughing and seed sowing were exclusively male's jobs. Transplanting and weeding were female dominated activities or shared tasks. Harvesting was the prime responsibility of majority of respondents irrespective of their employment status. Threshing, winnowing, transportation of grains

Table 21 : Frequency, Responsibility and Help Received in Performing Agricultural, Animal Care and Allied Activities by Respondents

Work Performed	Employed (N=100)									Non-employed (N=100)								
	Responsibility		Get Help		Who Helps		Frequency			Responsibility		Get Help		Who Helps		Frequency		
	S	O	Y	N	FM	PH	D	W	S	S	O	Y	N	FM	PH	D	W	S
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Agricultural work	34.00	17.00	34.00	14.00	34.00	-	-	34.00	17.00	77.00	18.00	49.00	29.00	49.00	-	77.00	18.00	-
Animal care	30.00	4.00	20.00	14.00	19.00	1.00	32.00	2.00	-	57.00	13.00	31.00	26.00	31.00	-	57.00	13.00	-
Fetching fodder	44.00	3.00	32.00	15.00	31.00	1.00	46.00	1.00	-	69.00	1.00	44.00	26.00	44.00	-	69.00	1.00	-
Allied Work																		
Weaving	45.00	-	27.00	18.00	27.00	73.00	12.00	-	33.00	75.00	-	54.00	21.00	27.00	73.00	14.00	-	61.00
Spinning	80.00	-	65.00	35.00	65.00	20.00	24.00	-	56.00	88.00	-	56.00	32.00	56.00	12.00	32.00	-	56.00
Tailoring	39.00	1.00	61.00	39.00	1.00	60.00	-	39.00	-	35.00	5.00	22.00	18.00	22.00	78.00	-	35.00	-
Kitchen garden	18.00	-	-	-	-	-	-	18.00	-	30.00	-	11.00	19.00	11.00	-	-	30.00	-

Responsibility; S=Self, O=Other, Get Help; Y=Yes, N=No, Who Helps; FM = Family Member, P.H. = Paid Help Frequency; D=Daily, W=Weekly, S=Seasonal.

PLATE 17. WOMEN INVOLVED IN HARVESTING OF CROP

PLATE 18. WOMEN ENGAGED IN THRESHING

PLATE 19. WOMEN ENGAGED IN WINNOWING

PLATE 20. DRYING OF GRAINS

from fields, drying of grains and storage were mainly carried out by respondents. Participation of respondents was low in irrigation and application of chemical fertiliser (Plates 15,16,17,18,19 and 20).

3c. Role of Respondents in Animal Husbandry

The tribal economy is agropastoral which is quite primitive in organisation. Livestock raising is an integral part of agriculture and supplements it to a major extent. It provides subsidiary means of livelihood to a 'Gaddi' family and both males and females are engaged in it. Sheep and goat raising is a mode of life and are reared for sale, meat and wool by tribal families.

It was found that in livestock care, roles of men and women were more specified (Table 21). Males were solely responsible for looking after their flock of sheep and goat whereas, women took care of cattle at home.

The sub-tasks involved in animal care included fetching of fodder, feeding of animals, cleaning of cow sheds and milking etc. Grazing of cattle was mostly performed by grown up children especially females (Plate 21). Thirty per cent employed and 57 per cent non-employed respondents were responsible for these tasks and paid daily attention to it, whereas it was a weekly task for 2 per cent employed and 13 per cent non-employed respondents.

PLATE 21. WOMAN ENGAGED IN GRAZING OF ANIMALS

PLATE 22. WOMEN INVOLVED IN FODDER COLLECTION

PLATE 23. DRYING OF GRASS FOR WINTER SEASON

PLATE 24. WOMAN ENGAGED IN FEEDING OF ANIMALS

PLATE 25. CARRYING FODDER

PLATE 26. STORAGE OF GRASS ON THE TOP OF A TREE

Fetching fodder was an integral part of livestock raising and 44 per cent employed and 69 per cent non-employed respondents were responsible for these tasks and performed them daily. Tribal women collected fodder from their farms and grass land area. The sub tasks included cutting, collecting, drying, carrying and storage of fodder (Plates 22, 23, 24, 25 and 26). Thirty two per cent employed and 44 per cent non-employed respondents received help from other family members. Only 1 per cent of employed respondents received paid help in performing these tasks..

3d. Role of Respondents in Allied Activities

Allied activities under study included spinning, weaving , kitchen gardening and tailoring (Table 21). Spinning and weaving of sheep wool were important supplementary occupations among 'Gaddis' and both men and women were engaged in it. These were commonly prevalent tasks in the sample households. Eighty per cent of employed and 88 per cent of non-employed respondents participated in spinning, whereas 45 per cent employed and 75 per cent non-employed respondents participated in weaving.

Shawl and 'Pattu' (single blanket), 'Gardu' (double blanket) and 'Patti' (cloth for coat) were the main products prepared by the tribals on their indigenous handlooms (Plates 27,28). Tribal women were entirely responsible for operations such as cleaning, carding, spinning of wool, knotting and finishing of products. Men were not at all associated with these operations. It was observed that men and women had equal contribution in operations such as, doubling, warping and weaving the various products. It

PLATE 27. WOMEN ENGAGED IN SPINNING OF SHEEP WOOL ON 'CHARKHA' AND 'TAKLI'

PLATE 28. WOMEN ENGAGED IN WEAVING

PLATE 29. WOMAN INVOLVED IN TAILORING

PLATE 30. WOMAN ENGAGED IN KITCHEN GARDENING

was confirmed that most of the respondents were engaged in these tasks for home consumption only. Thus it was evident that tribal women played significant role in handloom weaving and supplemented their family income.

Tailoring was a weekly task pursued by 39 per cent employed and 35 per cent non-employed respondents. A large number of employed (60 per cent) and non-employed respondents (78 per cent) received paid help for stitching of clothes. (Plate 29).

Kitchen gardening was a common allied task in majority of sample households (Table 21). The sub tasks involved in this activity were seed sowing, transplanting fertilizer application and weeding etc. It was found to be a common activity in which male, female and grown up children were involved. Almost equal percentage of (18 per cent) employed and (19 per cent) non-employed respondents performed these tasks independently without any help. Moreover, none received any paid help for performance of this task (Plate 30). The produce was mainly used for home consumption only. Only 2 per cent non-employed respondent households performed this task on a large scale commercial level.

4. Time Utilization Profile of Tribal Women

Rural and tribal women are an important segment of our society, both by their number and the hours they spend at work in homes and farms. Women share abundant responsibilities in running the family, maintaining the household, attending to farm

activities, tending to domestic animals and extending a helping hand in rural artisanship and handicrafts (Devadas 1983).

4a. Time Spent in Performance of Household Tasks

Time spent in performing various household tasks by the respondents in the study have been summarized (Table 22). The reported time was for normal days during slack agricultural season. The observed time of sub-sample has been reported for all household, agricultural and allied tasks.

Child Care

Child care included the time spent by respondents in feeding, bathing, getting children ready for school and supervising their studies. The average time spent in this task was 60.6 mins. per day. There was not much variation in average time spent on child care by employed and non-employed respondents. It was observed that young children who needed care and attention, received almost the same amount of time because all reported sub-tasks were essentially performed by respondents irrespective of their employment status. It was confirmed by 't' test which showed no significant differences in time spent on child care by employed and non-employed respondents. The grown up daughters and grand parents helped in looking after children while mothers were busy either in outside employment or household chores.

Table 22 : Mean Time Spent in Household Work by the Respondents (in mins./day)

Type of Household Work	Mean Time Spent in Minutes/Day: Employed (N=100) Mean Time	S.D.	Non-employed (N=100) Mean Time	S.D.	Total (N=200) Mean Time	S.D.	't' value
Child care	60.3	60.1	61.0	63.9	60.6	61.9	-.00798
Meal Preparation	191.9	49.6	205.3	58.4	198.6	54.5	-1.749
Care of house	32.7	20.7	52.4	27.1	42.5	26.0	-5.794**
Care of clothes	38.4	35.2	68.5	42.4	53.4	41.7	-5.46**
Fetching water	9.8	14.0	12.3	12.0	11.1	13.1	-1.388
Fetching fuel	11.7	38.8	70.4	104.9	41.1	84.2	-4.957
Shopping	22.0	26.2	27.3	43.9	24.6	36.1	-1.03
Account keeping	1.3	3.8	0.6	2.7	0.9	3.3	1.502
Care of others	11.2	25.6	7.6	22.0	9.4	23.6	1.090
Total	379.1	103.1	505.3	108.1	442.2	122.9	-8.452**

** Significant at 0.01 level.

Meal Preparation

Meal preparation included several tasks such as pre-preparation, cooking, serving, and post cleaning. All respondents spent maximum amount of time (198.6 mins. per day) in performing these tasks as compared to other household tasks. Non-employed respondents spent slightly more time (205.3 mins. per day) than employed respondents (191.9 mins. per day) in performing these tasks. However, differences in time spent were not found to be statistically significant (Table 22).

Care of House

Average time spent in performing tasks related to care of house was 42.5 mins. per day. Average time spent by employed respondents was 32.7 mins. per day and by non-employed respondents 52.4 mins. per day. Lack of time and more help from family members accounted for less time spent in performing these tasks by employed respondents. It was found that employed respondents spent significantly less time than non-employed respondents in tasks related to care of house ('t' value = -5.794 Sig. 0.01).

Care of Clothes

The average time spent in care of clothes and related tasks was 53.4 mins. per day. The employed respondents spent comparatively less time (38.4 mins.) than non-employed respondents (68.5 mins.). Significant 't' values confirmed this finding (Table 23). Observation of sub-sample proved that employed respondents spent more time in ironing of clothes than non-employed respondents.

Shopping and Account Keeping

Average time spent on shopping and account keeping was 24.6 mins. and 0.9 mins. per day respectively. All respondents did not participate in these tasks. Therefore, group mean did not represent group behaviour. Employed respondents spent less time on shopping (22.0 mins.) than non-employed respondents (27.3 mins.). However, employed as well as non-employed respondents

spent very little time on account keeping. 't' test did not reveal significant differences in time spent in both these tasks by employed and non-employed respondents.

Fetching Water

Average time spent on fetching drinking water was reported as 11.1 mins. Employed as well as non-employed respondents spent about 10 to 12 mins. per day for fetching water. No significant differences were found in time spent on this task by employed and non-employed respondents. It was confirmed through observations that water was stored only for drinking purposes.

Fetching Fuel

Tribal women collected firewood for fuel from nearby forests. All respondents did not participate in this activity; thus group mean denotes less time than the actual average time spent while performing this taks. The average time spent in fetching fuel was 41.1 mins. per day. Employed respondents spent comparatively much less time in performing this task (11.7 mins. per day) than non-employed respondents (70.4 mins. per day). The reason attributed to the fact was that a less number of employed respondents participated in this task and received more help from family members too. On the other hand, a large number of non-employed respondents performed this task themselves. ('t' value = -4.597 Sig. 0.01) confirmed that employed respondents spent significantly less time on fetching fuel than non-employed respondents.

Care of Others

This included tasks such as looking after old and sick family members and friends. The average time spent in these tasks was 9.4 mins. per day. The employed and non-employed respondents spent 11.2 mins. and 7.6 mins. per day respectively in carrying out these tasks. The difference in time spent in these tasks by employed and non-employed respondents was not statistically significant.

It can be concluded from the above analysis that tribal women spent a large proportion of their time in performance of household tasks. Overall mean time spent by respondents on household tasks was 442.2 mins. per day. However, a remarkable difference was seen in time spent by employed (379.1 mins. per day) and non-employed respondents (505.3 mins. per day). It was proved by 't' test that employed respondents spent significantly less time on all household tasks than non-employed respondents.

Tribal women spent considerable amount of time in agricultural tasks throughout the year and more so in the peak season. An attempt was made to assess time allocation of respondents in agricultural tasks during lean and peak season. The reference period used was current season for lean period tasks and immediate previous peak season.

During lean period, respondents were involved in agricultural tasks daily and/or thrice a week. On an average 20.4 mins. per

Table 23 : Mean Time Spent in Animal Care, Agriculture and Allied Work (in mins. per day)

Type of Work	Mean Time Spent in Mins./Day						
	Employed (N=100)		Non-employed (N=100)		Total (N=200)		
	Mean Time	S.D.	Mean Time	S.D.	Mean Time	S.D.	't' value
Animal care	58.2	78.6	124.2	94.8	91.2	93	-5.36**
Agriculture	12.6	18.0	28.8	19.2	20.4	18.6	-6.15**
Allied work	19.8	35.4	31.2	33.0	25.2	34.7	-2.375*

** Significant at 0.01 level.
* Significant at 0.05 level.

day were spent in performing these tasks. Employed respondents spent only 12.6 mins. per day whereas, non-employed respondents spent 28.8 mins. per day in these tasks in lean season ('t' value = -6.15 Sig. 0.01) showing that employed respondents spent significantly less time on agricultural tasks than non-employed respondents during lean season.

During peak season,mean time spent in agricultural tasks was considerably high i.e. 237.6 mins. per day. Variation was observed in mean time spent by employed (198.50 mins. per day) and non-employed respondents (250.40 mins. per day). The duration of peak season ranges between 7 - 40 days according to size of land holding and number of workers in a home. It was observed from sub-sample that respondents performed all agricultural tasks pertaining to lean season.

4c. Time Spent in Animal Care

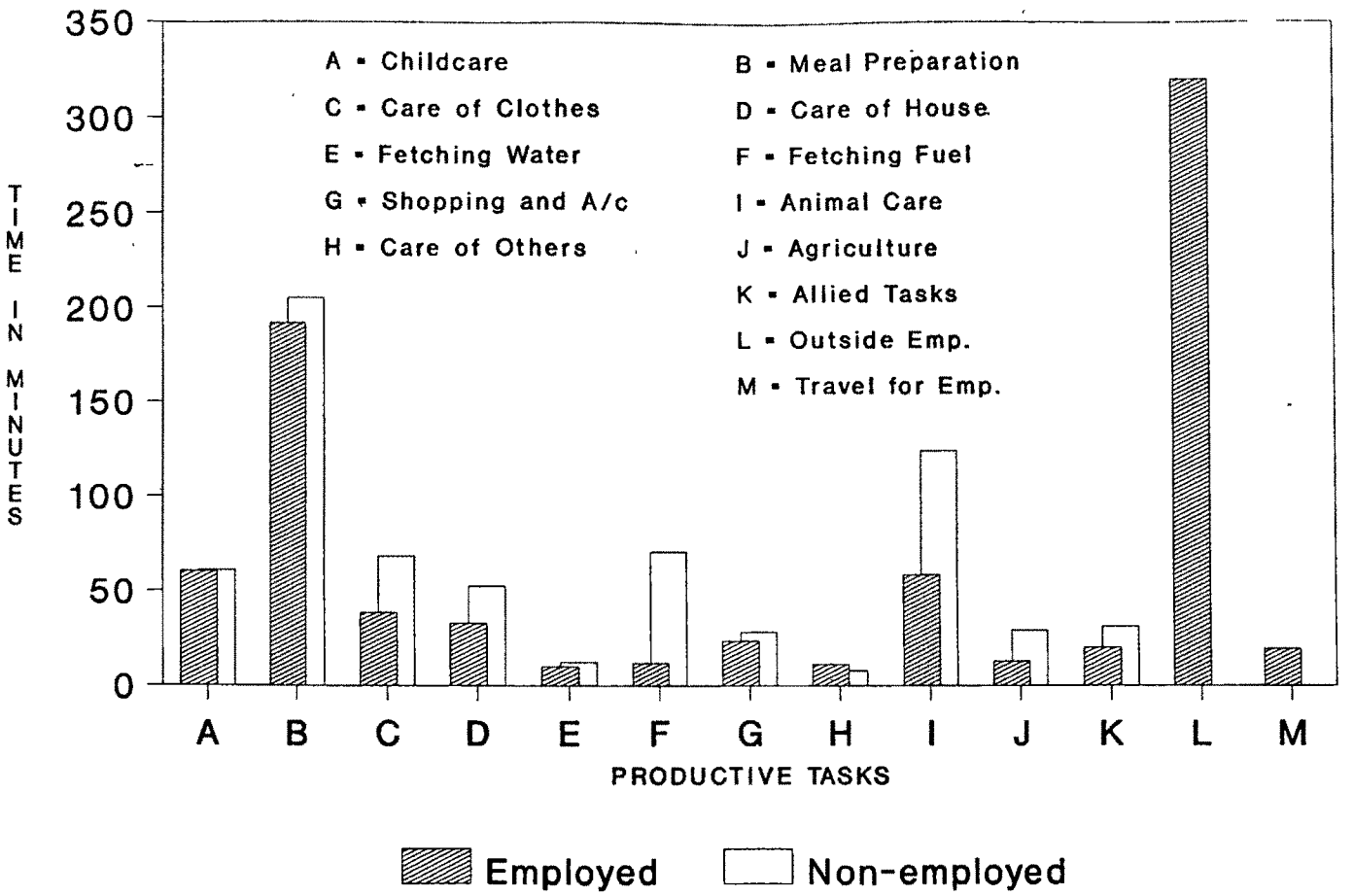
On an average 91.2 mins. were spent by respondents in these tasks (Table 23). Non-employed respondents spent almost double the time i.e. 124.2 mins. than employed respondents i.e. 58.2 mins. per day. Significant 't' values confirmed this result. Observations of sub-sample revealed that tribal respondents spent considerable time on animal care related tasks.

4d. Time Spent in Allied Tasks

Commonly pursued allied tasks by respondents included spinning, weaving, kitchen gardening and tailoring. Spinning and weaving were carried out intermittently throughout the day during winter season. In summers they were carried out as and when time permitted. It was found that labour used for particular product did not vary on account of type of product to be made but the variation was because of quantity of wool to be used for the particular product. It was seen that on an average,preparation of 'Shawl, 'Gardu' (blanket) and 'Patti' (double blanket) usually took 6.12, 12.00 and 24 days respectively.

Respondents from sample household,on an average spent 25.2 mins. per day on all allied activities including kitchen gardening and tailoring. Employed respondents spent 19.8 mins. per day, whereas non-employed respondents spent 31.2 mins. per day in allied tasks. Significant differences were found in time spent on allied tasks between employed and non-employed respondents under study.

FIGURE 4 - TIME SPENT (IN MINUTES) IN VARIOUS PRODUCTIVE TASKS BY RESPONDENTS



4e. Time Spent on Productive and Non-Productive Tasks

The total time utilized was categorized according to time spent on each productive and non-productive task per day by

Table 24 't' Values Showing Differences in Mean Time Spent on Productive Work and Non-Productive Tasks between Employed and Non-Employed Respondents

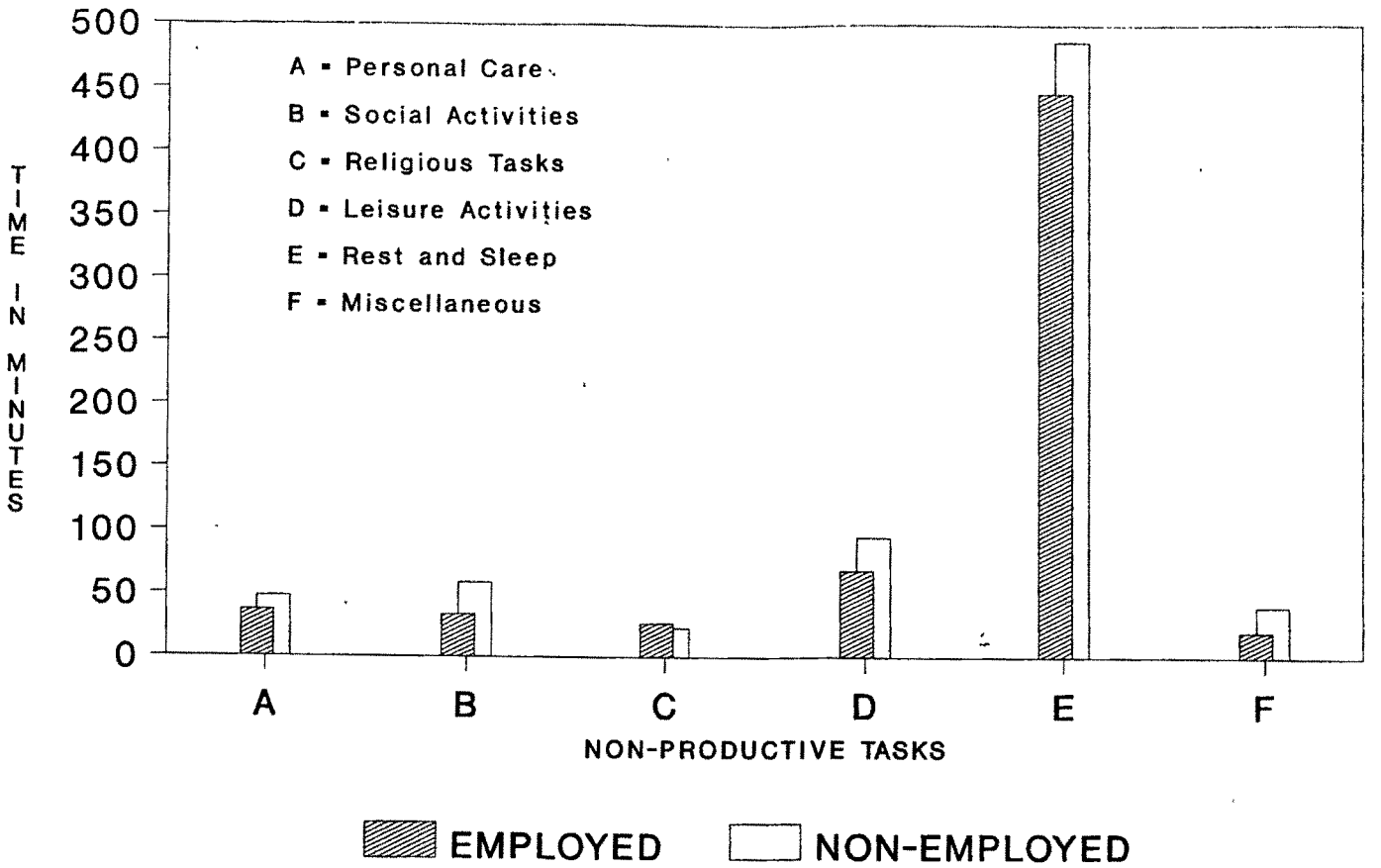
Productive Work and Non-Productive Tasks	Mean Time Spent Minutes/Day Employed (Mean Time)	Non-employed (Mean Time)	't' value
Productive work time	809.30 (78.44)	689.30 (90.33)	10.03**
Non-productive Work			
Leisure time	67.95 (32.08)	94.80 (45.27)	-4.84**
Rest and sleep time	446.70 (36.15)	487.40 (42.25)	-7.32** (df=193.38)
Personal care	36.60 (13.00)	47.40 (24.60)	-3.88**
Unreported time	19.8 (17.40)	39.6 (24.60)	-6.571**
Social activities	33.00 (19.20)	58.2 (34.20)	-6.425**
Religious activities	26.4 (24.60)	22.8 (19.80)	1.142

** Significant at 0.01 level.

Note : Figures in brackets indicate standard deviation.

employed and non-employed respondents (Table 24). 't' - test was computed to find out the significant differences of time spent on productive work and non-productive tasks by employed and non-employed respondents. 't' values revealed significant differences between time spent on total productive work and almost all non-

FIGURE 5 - TIME SPENT (IN MINUTES) IN VARIOUS NON-PRODUCTIVE TASKS BY RESPONDENTS

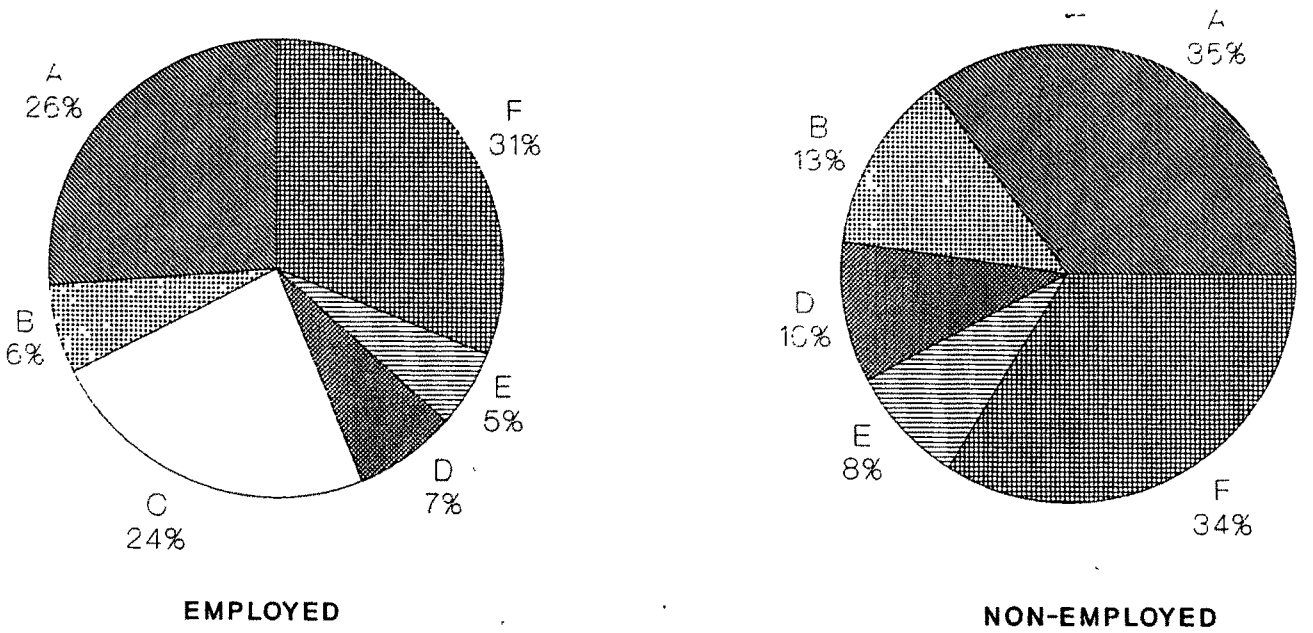


productive tasks except religious activities. It was further observed that mean time spent in all non-productive tasks i.e. leisure time, rest and sleep, personal care, miscellaneous/ unproductive time, social activities except for religious activities was significantly higher in case of non-employed respondents. The miscellaneous time accounts for unreported time by the respondents which did not add upto 24 hrs.. Such underreporting is typical of time use collection data (Khan, et al., 1990, Borah, 1991). The rest of time was hence counted as unreported time. However, employed respondents spent more time in productive work (809.30 mins. per day which included time spent on employment and travel time also) than non-employed respondents (689.30 mins. per day). Hence it can be concluded that there was significant variation in time spent on productive work time and almost all non-productive tasks between employed and non-employed respondents.

Time utilisation pattern of respondents has been presented in Figure 6. The data showed variation in time spending pattern on various tasks by employed and non-employed respondents. Employed respondents spent maximum time on rest and sleep (31.02 per cent) followed by household work (26.33 per cent). On the other hand, non-employed respondents spent maximum time on household tasks i.e. 35.08 per cent followed by rest and sleep (33.83 per cent).

Outside employment consumed large amount of time (22.25 per cent) and employed respondents also spent 1.33 per cent of time on an average in travelling to reach their place of work.

FIGURE 6 - PERCENTAGE DISTRIBUTION OF TOTAL TIME (24 HOURS) OF RESPONDENTS



A = Household Work
B = Agri. Animal Care, Allied Tasks
C = Outside Emp., Travel Time
D = Personal & Leisure
E = Social, Religious & Misc.
F = Rest & Sleep

Employed respondents spent 6.29 per cent of time on agricultural, animal care and allied activities whereas, non-employed respondents spent more time on these activities i.e. 12.79 per cent.

It was interesting to note that non-employed respondents spent comparatively more time on personal care and leisure (9.87 per cent) than employed respondents (7.29 per cent). Data indicated that employed respondents consumed 5.50 per cent of time on social, religious and miscellaneous activities whereas, non-employed respondents spent almost double the time (8.37 per cent) in performing the same task

It was concluded that employed respondents participated in all activities as non-employed respondents did. However, employed respondents spent comparatively less-time in almost all activities than their non-employed counterparts because they had to devote more time for outside employment.

5. Monetary Valuation of Non-Market Work and Economic Role Performed by Tribal Women

Most of the tribal women are unpaid workers on family farms and carry out household work, allied tasks and are also engaged in paid work. The dual responsibility they assume add to their hours of work but their participation is accepted as normal and not much social or economic value is placed on their work. Methods of measuring non-market work need to be standardized to justify women's tremendous economic role.

5a. Monetary Valuation of Non-Market Work and Economic Role By Various Methodologies

This section includes findings related to monetary valuation of household, agricultural and allied tasks and overall economic role performed by respondents under study by various methodologies. Therefore, the ultimate choice of methodology to be finally adopted for ascertaining economic role of women should fulfil the objectives of investigation. Valuation of non-market productive work was carried out by two methods : (i) Market Alternative Individual Function Cost (ii) Opportunity Cost. These methods have been described in detail in the Chapter III pp.129-136

Table 25 : Mean Monthly Valuation of Non-Market Work and Economic Role Performed by Employed and Non-Employed Respondents by Opportunity Cost Method Based on Earning Function

Employment Status (N=200)	Valuation of Economic Role: Non-Market Work (Rs.)	Market Work (Rs.)	Economic Contribution (Rs.)
Employed (N=100)	620.12	1380.76	2000.88
Non-Employed (N=100)	910.45	--	910.45

The findings revealed that mean monthly monetary valuation of non-market work based on earning function was estimated to be Rs. 620.12 for employed and Rs. 910.45 for non-employed respondents (Table 25). The actual mean monthly

income of employed respondents from market work was calculated to be Rs. 1380.76. The economic contribution of respondents through participation in market and non-market work was estimated to be Rs. 2000.88 for employed and Rs. 910.45 for non-employed respondents.

The monetary value of non-market work according to Market Alternative Individual Function Cost Method was computed by multiplying the total time spent on each of the productive tasks per day and per month with the corresponding wage rates for each type of task (Table 26). In order to put the monetary value of these tasks wage rates fixed by the government for workers who performed similar services were obtained from labour office Simla, Himachal Pradesh.

Findings revealed that the mean monetary value of time utilization on various tasks performed by employed and non-employed respondents was Rs. 20.07, Rs. 29.87 per day Rs. 602.10, Rs. 896.10 per month respectively. Further analysis was done to assess the variation in monetary value of time spent on all the tasks. It was found to be highest for meal preparation both for employed (Rs. 251.40) and non-employed respondents (Rs. 269.10). It was followed by animal care i.e., Rs. 80.10 for employed and Rs. 178.80 for non-employed respondents. Child care depicted same trend of Rs. 67.80 and Rs. 68.70 for employed and non-employed respondents respectively.

Table 26 The Monetary Value Estimation of Productive Tasks According to Market Alternative Individual Function Cost Method

Productive Tasks	Valuation of Productive Tasks: Employed — Average Time Used (hrs. per day)	Employed — Average Money Value (Rs.per day)	Employed — Time Used (hrs.per month)	Employed — Average Money Value (Rs. per month)	Non-employed — Average Time Used (hrs. per day)	Non-employed — Average Money Value (Rs.per day)	Non-employed — Time Used (hrs. per month)	Non-employed — Average Money Value (Rs. per month)
Child care	1.00 (1.00)	2.26 (2.25)	30	67.80	1.02 (1.07)	2.29 (2.40)	30.6	68.70
Meal preparation	3.20 (6.83)	8.38 (2.17)	96	251.40	3.42 (0.97)	8.97 (2.55)	102.6	269.10
Care of house	0.54 (0.34)	1.22 (0.77)	16.2	36.60	0.87 (0.45)	1.97 (1.02)	26.1	59.10
Care of clothes	0.64 (0.59)	1.68 (1.54)	19.2	50.40	1.14 (0.71)	2.99 (1.85)	34.2	89.70
Shopping	0.37 (0.44)	0.96 (1.14)	11.1	28.80	0.46 (0.73)	1.19 (1.92)	13.8	35.70
Account keeping	0.02 (0.06)	0.06 (0.17)	0.6	1.80	0.01 (0.05)	0.02 (0.12)	0.3	0.60
Fetching water	0.16 (0.23)	0.37 (0.52)	4.8	11.10	0.20 (0.20)	0.46 (0.45)	6.0	13.80
Fetching fuel	0.20 (0.65)	0.54 (1.78)	6	16.20	1.17 (1.75)	3.22 (4.80)	35.1	96.60
Animal care	0.97 (1.31)	2.67 (3.59)	29.1	80.10	2.07 (1.58)	5.69 (4.33)	62.1	178.80
Agriculture work	0.21 (0.30)	0.58 (0.84)	6.3	17.40	0.48 (0.32)	1.31 (0.87)	14.4	39.30
Allied time	0.33 (0.59)	0.93 (1.68)	9.9	27.90	0.52 (0.55)	1.47 (1.55)	15.6	44.10
Care of others	0.19 (2.08)	0.42 (0.96)	5.7	12.60	0.16 (0.40)	0.28 (0.83)	4.8	8.40
Total	7.83 (2.08)	20.07 (5.52)	234.9	602.10	11.49 (1.51)	29.87 (4.10)	344.7	896.10

* Figures in brackets denote standard deviation.

Mean monthly monetary value of care of house of non-employed respondents was higher (Rs. 59.10) than that of employed respondents (Rs. 36.60). Shopping and allied activities accounted for Rs. 28.80 and Rs. 27.90 respectively for employed and Rs. 35.70 and Rs. 44.10 for non-employed respondents respectively.

Agriculatural tasks (Rs. 17.40), fetching fuel (Rs. 16.20), care of others (Rs. 12.60) and fetching water (Rs. 11.10) showed a close range of monetary valuation for employed respondents. Fetching water (Rs. 13.80) and care of others (Rs. 8.40) were observed to follow the similar pattern for non-employed respondents. However, fetching fuel (Rs. 96.60) and agriculture work (Rs. 39.30) showed higher contribution. Account keeping depicted least monetary valuation for respondents under study.

On the whole, it can be concluded that monetary value of various non-market tasks was more for non-employed than employed respondents.

Table 27 : Mean Monthly Valuation of Non-Market Work and Economic Role Performed by Employed and Non-Employed Respondents by Market Alternative Individual Function Cost Method

	Valuation of Economic Role		
Employment Status (N=200)	Non-Market Work (Rs.)	Market Work (Rs.)	Economic Contribution (Rs.)
Employed (N=100)	602.10	1380.76	1982.86
Non-Employed (N=100)	896.10	--	896.10

The findings revealed that mean monthly monetary valuation of non-market work (based on MA-IFC method) was estimated to be Rs. 602.10 for employed and Rs. 896.10 for non-employed respondents. The actual mean monthly income of employed respondents from market work was calculated to be Rs. 1380.76. The economic contribution of respondents through participation in market and non-market work was estimated to be Rs. 1982.86 for employed and Rs. 896.10 for non-employed respondents.

Table 28 :Comparison of Mean Monthly Value Estimation of Work of Employed and Non-Employed Respondents by Various Methods.

Employment Status	Monthly Value Estimation of Non-Market Work: Market Alternative Individual Function Cost Method (Rs.)	Opportunity Cost Method (Rs.)
Employed (N=100)	602.10	620.12
Non-Employed (N=100)	896.10	910.45

The monetary value estimation of non-market work according to two methods have been compared in Table 28. Data revealed that minimum monthly value of non-market work for employed respondents was estimated by MA-IFC (Rs. 602.10) followed by Opportunity Cost (Rs. 620.12) as employed respondents spent less time in non-market work than non-employed respondents.

The comparative results revealed that Market Alternative Method yielded lower value of time of respondents placed on non-market work followed by Opportunity Cost Method. The nature of household activities is determined by nature of economic activity prevailing in that area. These tribal households were generally poor. Therefore, nature of household activities undertaken was also simple. Thus, market alternative valuation reflected the earnings of unskilled/semi-skilled workers in that area. On the whole, Market Alternative and Opportunity Cost Method did not show much difference in estimating values of time spent in non-market work. This might be due to the fact that majority of employees were illiterate in the sample. In Market Alternative Individual Function Cost Method the wages of unskilled/semi-skilled workers were applied to impute for value of non-market work.

Thus, after exhaustive review of literature and careful deliberation with the experts in this field it was considered appropriate to use Market Alternative Individual Function Cost Method in the entire analysis of data. The overall economic role will be reflected in money value for both employed and non-employed respondents. Further, theoretical details of Market Alternative Method are contained in Chapter II pp. 53-58 which describe the relevance for selection of this particular method.

5b. Economic Role Performed by Tribal Women

Findings pertinent to percentage economic contribution of respondents to family income through market and non-market work

and level of economic role performance have been presented in this section.

Significant fraction of economic activity is carried out by tribal women in performing non-market work. Economic contribution of respondents through non-market work to their family income was estimated and presented in Table 29.

Table 29 :Economic Contribution of Respondents Through Non-Market Work to Family Income

Employment Status	*Mean Monthly Family Income (Rs.)	Average Value of Work/Month (Rs.)	Percentage Contribution to Family Income (Rs.)
Employed	3698.00	602.10	16.28
Non-employed	3561.30	896.10	25.16

* Includes income of respondents from market and non-market work.

Mean monthly family income (including market and non-market work) of employed and non-employed respondents was Rs. 3698 and Rs. 3561.30 respectively (Table 29). Average value of non-market work per month estimated by Market Alternative Individual Function Cost Method was found to be Rs. 602.10 for employed and Rs. 896.10 for non-employed respondents. Further analysis indicated that economic contribution through non-market work by employed respondents to total average family income was 16.28 per cent whereas, it was found to be 25.16 per cent in the case of non-employed respondents under study. It can be concluded that economic contribution of non-employed respondenets through non-market work was more than that of the employed respondents.

Table 30 :Economic Contribution of Respondents Through Market Work to Family Income

Employment Status	*Mean Monthly Family Income (Rs.)	Mean Monthly Contribution Through Market Work (Rs.)	Percentage Contribution to Family In (Rs.)
Employed	3698.00	1380.76	37.33

* Includes income of respondents from market and non-market work.

Analysis of data disclosed that mean monthly family income of employed households was Rs. 3698 (Table 30) of which contribution of respondents through market work was found to be Rs. 1380.76 which was to the tune of 37.32 per cent of family income. Thus, substantial contribution of tribal respondents through market work signifies their crucial role in supplementing their total family income.

The share of employed respondents to enhance their family income was tremendous. Findings disclosed that majority of respondents (39 per cent) engaged in market work belonged to minimum family income group of Rs. 1500 per month followed by 28 per cent respondents who belonged to maximum family income group of Rs. 4501 and above (Table 31). Their contribution was observed to be 55.90 per cent and 41.40 per cent to the total family income respectively. Due to less family income, maximum number of females from lowest family income group came forward to support their family income through labour force participation.

Table 31 :Economic Contribution of Respondents Through Market Work To Different Family Income Groups

*Family Income Categories (Rs.)	Percentage Contribution of Income (N=100) %	Mean Monthly % Contribution
Upto 1500	39.00	55.90 (35.2)
1501 - 3000	23.00	56.70 (33.5)
3001 - 4500	10.00	40.80 (28.8)
4501 and above	28.00	41.40 (15.6)
Total	100.00	50.00 (30.3)

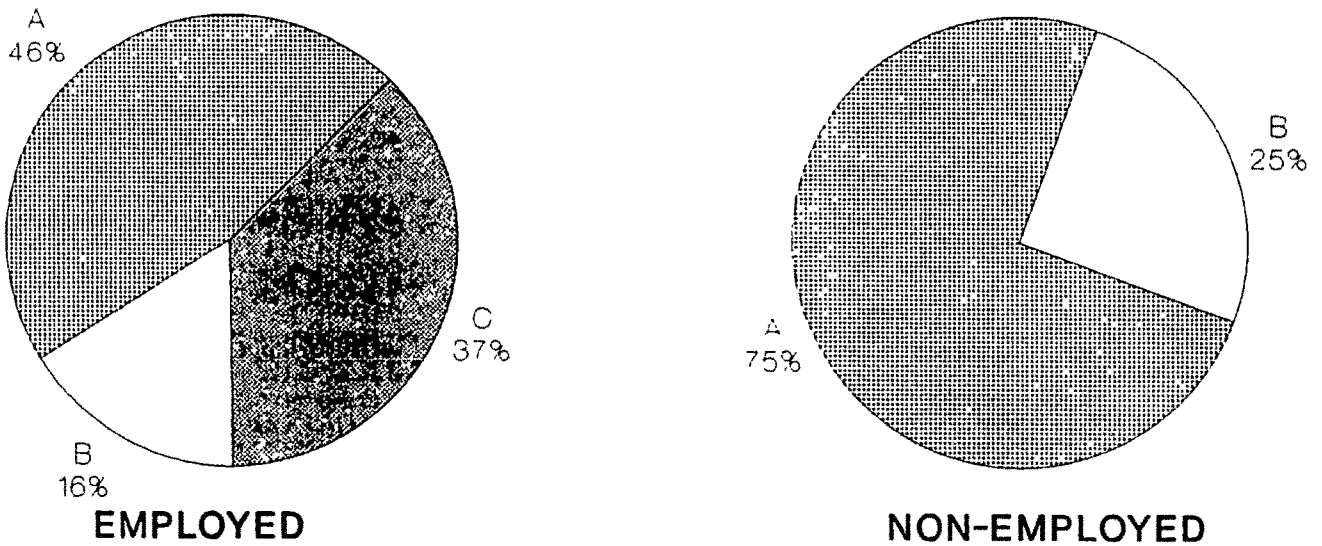
Figures in bracket denote standard deviation.
* Excluding income of respondents from non-market work

On the other hand, majority of respondents from highest family income group too participated in paid work to supplement their family income for better standard of living and household development.

Table 32 :Percentage Monthly Economic Contribution of Respondents to Family Income

Employment Status	Percentage Monthly Economic Contribution: Mean Monthly Family Income (Rs.)	Mean Value of Female Contribution (Rs.)	Percentage of Family Income (Rs.)
Employed	3698.00	1982.86	53.60
Non-employed	3561.30	896.10	25.10

FIGURE 7-PERCENTAGE DISTRIBUTION OF ECONOMIC CONTRIBUTION OF RESPONDENTS THROUGH MARKET AND NON-MARKET WORK TO TOTAL FAMILY INCOME



A • Family Income

B • Income from Non-market Work

C • Income from Market Work

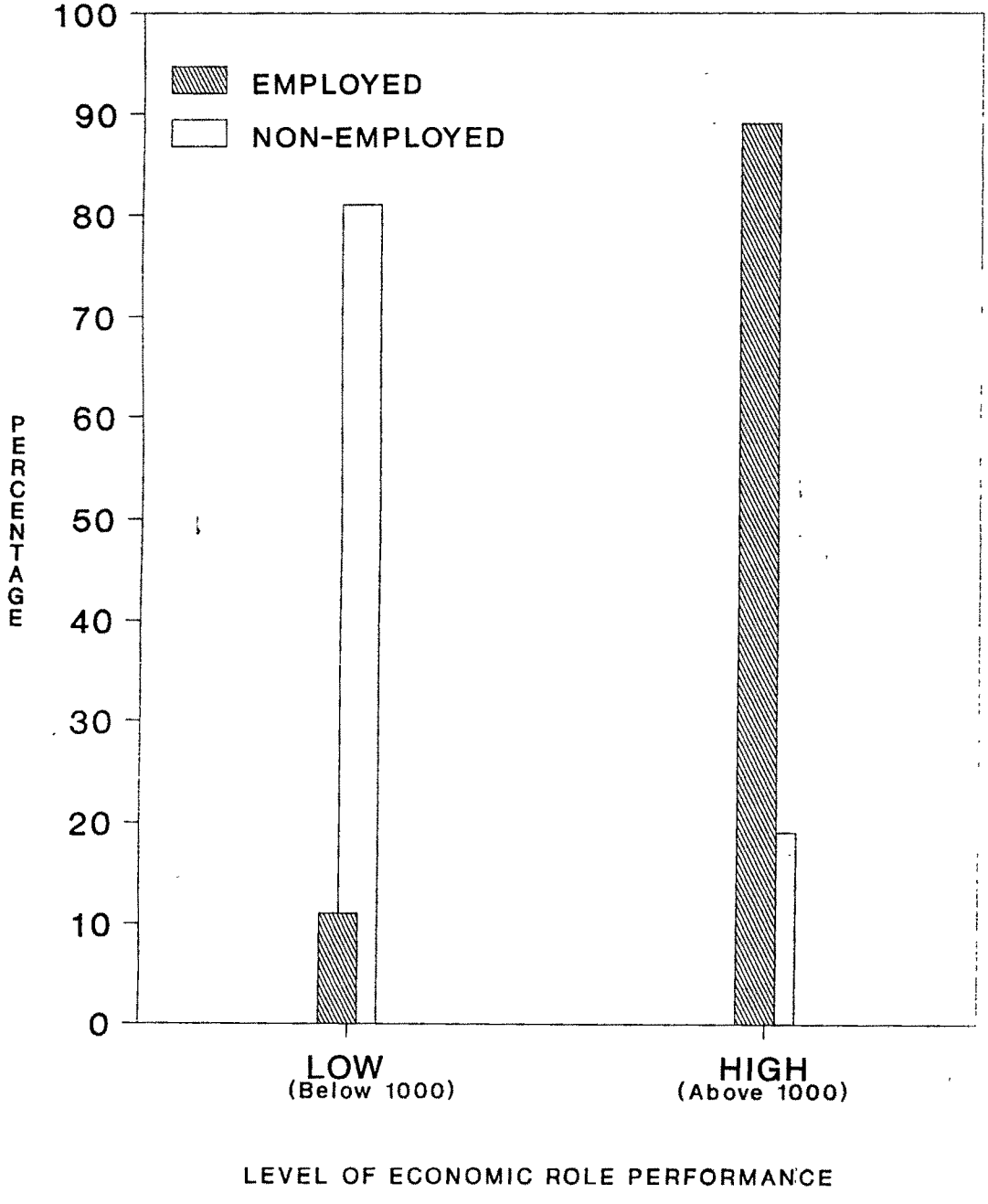
Economic contribution of tribal respondents through market and non-market work to total family income was computed (Table 32). It was observed from the data that mean monthly family income of employed respondents was Rs. 3698 and that of non-employed respondents Rs. 3561.30. Analysis of data indicated that mean monthly value of female contribution of employed respondents was found to be Rs. 1982.86 and of non-employed respondents to be Rs. 896.10. The employed respondents contributed a large percentage (53.60) to their family income. Non-employed respondents were also observed to contribute 25.16 per cent towards total family income through participation in non-market work.

Table 33 : Level of Economic Role Performance of Respondents

Level of Economic Role Performance (Rs. per month)	Employed (N=100)		Non-employed (N=100)		Total (N=200)	
	f	%	f	%	f	%
Below 1000	11	11.00	81	81.00	92	46.00
Above 1000	89	89.00	19	19.00	108	54.00
Total	100	100.00	100	100.00	200	100.00

The economic role performance signifies the total contribution of respondents through market and non-market work. The total contribution has been categorized as below Rs. 1000 and above Rs. 1000 per month. The findings indicated that 46 per cent respondents contributed less than Rs. 1000 per month and 54 per cent respondents contributed more than Rs. 1000 per month to their family income.

FIGURE 8 - PERCENTAGE DISTRIBUTION OF RESPONDENTS ACCORDING TO LEVEL OF ECONOMIC ROLE PERFORMANCE



Further scrutiny of data indicated that 11 per cent employed and 81 per cent non-employed respondents contributed less than Rs. 1000 per month to their family income. However, a vast majority of employed respondents i.e., 89 per cent and only 19 per cent non-employed respondents contributed more than Rs. 1000 per month towards their family income.

Hence, it may be concluded that tribal women play a crucial economic role in terms of market and non-market productive task performance. It may be further pointed out that economic contribution of employed respondents was substantially higher than that of non-employed respondents.

6. Status of Tribal Women

Status of respondents was assessed with reference to selected indicators of status such as age at marriage, leisure time availability, freedom and control over use of money, independence and authority as perceived by respondents etc. Decision making pattern of respondents was considered as an important indicator of status which included personal decisions such as choice of bridegroom, career and social participation. Family decisions related to health care, education, income and expenditure and farm related decisions about expenditure on tools and equipment, freedom of decision on farm matters. Reasons of non-participation in decision making and level of status of tribal women were the various aspects dealt in this section.

6a. General Indicators of Status of Women

Most of the respondents had arranged marriage i.e., 90.50 per cent and 9.50 per cent respondents were married by exchange

Table 34 : Marriage Profile of Respondents

Marriage Profile	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	Total (N=200) %
Marriage Type				
Normal marriage	88.00	93.00	181	90.50
By exchange	12.00	7.00	19	9.50
Age at Marriage (Yrs.)				
Upto 15	25.00	29.00	54	27.00
16-20	52.00	62.00	114	57.00
21-25	20.00	7.00	27	13.50
Above 25	03.00	2.00	5	2.50

(Table 34). In marriage by exchange or 'Batta Satta' a brother and sister in the family may marry a sister and brother belonging to another family.

Majority of respondents (84 per cent) were married by the age of 20 years out of which 27 per cent respondets were married as early as 15 years of age. More number among employed respondents (20 per cent) were married between the age of 21-25 years than non-employed respondents i.e. 7 per cent only.

Opinion of respondents was sought regarding size of family and health care practices followed by them. Almost all respondents visited doctors in case of serious illness. Majority

Table 35 :Opinion of Respondents Regarding Family Size and Health Care Practices

Opinions and Practices	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	%
Believe in family planning	98.00	94.00	192	96.00
Adopt family planning methods	92.00	73.00	165	82.50
More children more income	0.00	10.00	10	5.00
More children good education	100.00	97.00	197	98.50
Small family is economically sound	95.00	82.00	177	88.50
Due to small family size health of mother and children remains good	99.00	85.00	184	92.00
Visit to the doctor in case of serious illness only	100.00	99.00	199	99.50
No time to visit doctor	94.00	86.00	180	90.00
Visit 'Chela' (priest) first then doctor	17.00	28.00	45	22.50
Visit 'Witch Priest'	45.00	65.00	110	55.00

of respondents (90 per cent) expressed lack of time to visit doctor except when seriously ill. More number of respondents from non-employed category (28 per cent) visited 'Chela' first and doctor in case of serious illness only than employed respondents (17 per cent). On the whole, a large percentage of respondents

visited 'Witch Priest' too (55 per cent). Data revealed that more number of non-employed (65 per cent) than employed respondents (45 per cent) visited 'Witch Priest' for cure of diseases.

On the other hand it was encouraging to note that almost all respondents believed in small family size and use of family planning methods (96 per cent). More of employed (92 per cent) than non-employed (73 per cent) respondents adopted family planning methods. None among employed but 10 per cent of non-employed respondents expressed that more children can bring more income to the family. However, a vast majority of respondents from entire sample agreed that better education can be provided to less number of children. The notion of small family being economically sound found favour with more number of employed (95 per cent) than non-employed respondents i.e., 82 per cent. Similarly 99 per cent employed and 85 per cent non-employed respondents agreed that small family size enabled the mother and children to enjoy good health conditions.

Table 36 : Leisure Time Available to the Respondents

Leisure Time (in mins.)	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	Total (N=200) %
00-30	26.00	9.00	35	17.5
31-60	39.00	32.00	71	35.5
61-90	19.00	18.00	37	18.5
91-120	15.00	27.00	42	21.0
121 and above	1.00	14.00	15	7.5
Mean	67.95	94.80	81.37	

The perusal of data showed that the range of leisure time of respondents varied between half an hour to two hours and more (Table 36). The mean leisure time available to respondents was 81.37 mins. Mean leisure time of employed respondents was comparatively less (67.95 mins. per day) than that of non-employed respondents i.e., 94.80 mins. per day. Data further showed that maximum 2 hrs. or more of leisure time was available to only 1 per cent of employed and 14 per cent of non-employed respondents, whereas minimum amount of leisure time of less than half an hour was available to 26 per cent employed and 9 per cent non-employed respondents.

Table 37 :Pattern of Utilization of Leisure Time by the Respondents

Leisure Time Activities	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	%
Knitting	87.00	86.00	173	86.50
Spinning	80.00	88.00	107	84.00
Visiting friends	62.00	68.00	130	65.00
Listening to radio	79.00	75.00	154	77.00
Watching television	69.00	57.00	126	63.00

An attempt was made to ascertain the leisure time pursuits of the tribal respondents. As all of them lived in cold region, knitting (86.50 per cent) and spinning (84.00 per cent) were most popular leisure time activities. The other common leisure time activities were listening to radio (77 per cent), visiting

friends (65 per cent) and watching television (63 per cent). The trend of leisure time pursuits was similar as above in employed as well as non-employed respondents. However, employed respondents spent less time on them than non-employed respondents. Only 7 per cent employed and 1 per cent non-employed respondents participated in other personal hobbies.

Table 38 :Freedom and Control Over Use of Money by Respondents

Freedom and Control Over Money	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	Total (N=200) %
Freedom to spend	98.00	87.00	185	92.50
Reason of Not Spending				
Don't earn it	-	8.00	8	4.00
Only husband spends	-	5.00	5	2.50
In-laws take wages	2.00	-	2	1.00
Family savings	84.00	55.00	139	69.50
Mode of Saving and Investment				
At home	12.00	45.00	57	28.50
L.I.C.	30.00	3.00	33	16.50
Make ornaments	22.00	8.00	30	15.00
In post office	44.00	25.00	69	34.50
In bank	46.00	32.00	78	39.00
Maintain separate account	17.00	2.00	19	9.50
Do not maintain separate account	83.00	98.00	181	90.50

Freedom and control over use of money by respondents revealed that as high as 92.50 per cent of respondents from entire sample were free to spend money according to their will irrespective of their employment status. Data indicated that few non-employed respondents were not able to spend money according

to their will. Various reasons were attributed for the same. Eight per cent non-employed respondents expressed that they can not spend money because they don't earn it, followed by 5 per cent respondents, where only husbands could spend money. In case of 2 per cent employed respondents in-laws take away wages.

About 70 per cent respondents in the entire sample had some saving in their names. However, it was more in case of employed (84 per cent) respondents than non employed ones (55 per cent). Almost three-fourth respondents deposit their saving in the bank or post office savings account of the family. About one third of respondents from entire sample did not save at all. Nearly one-third of employed respondents had Life Insurance Policies and one-fifth of them invested in ornaments. Forty four per cent of employed respondents saved money through post office and 46 per cent through banks. Least percentage of respondents saved money at home or had no knowledge of any mode of saving (1 per cent each).

About one-third of non-employed respondents saved through banks followed by one-fourth of respondents who used post-offices for saving money. Only 8 per cent of them saved money by investing in ornaments and 3 per cent had Life Insurance Policies.

As high as 90.50 per cent of respondents from entire sample did not have any separate account. However, 17 per cent employed and 2 per cent non employed respondents had maintained their separate saving account.

On the whole, it can be concluded that most of tribal women enjoyed freedom in use of money. However, employed respondents had not only more freedom to spend but also more control over use of money than non-employed respondents. It indicated that employment of women was helpful in according better status for them.

Table 39 : Independence and Authority as Enjoyed by the Respondents

Practices	Level of Participation in Practices								
	Employed (N=100)			Non-employed (N=100)			Total (N=200)		
	Always	Some-times	Rarely	Always	Some-times	Rarely	Always	Some-times	Rarely
	%	%	%	%	%	%	f	f	f
Observation of customs and traditions	10.00	58.00	32.00	46.00	38.00	16.00	56 (28.00)	96 (48.00)	48 (24.00)
Distribution and supervision of work	56.00	27.00	17.00	33.00	34.00	33.00	89 (44.50)	61 (30.50)	50 (25.00)

Note : Figures in brackets indicate percentages

Findings indicated that nearly half of the sample respondents (48 per cent) observed age old customs and traditions 'sometimes' (Table 39). It was found that more number of non-employed respondents (46 per cent) 'always' followed these customs than employed respondents (10 per cent). More than half of employed respondents (56 per cent) had the authority to distribute and supervise the work at home and only 17 per cent of respondents did not opine so. On the other hand non-employed respondents were found to be equally distributed in their opinion

of distribution and supervision of work i.e. 'always', 'sometimes' and 'never' (one-third each).

Hence, it may be inferred from the findings that employed respondents observed less customs and traditions and had more authority in distribution and supervision of work than non-employed respondents.

6b. Decision Making

Decision making was an important indicator to determine the status of tribal women. Decision making pattern of respondents was observed in three crucial spheres :

6b. (i) Participation in Personal Decisions

Personal Matters : These included decisions such as when to marry, choice of bridegroom and size of family (Table 40). Respondents were found to have no say in personal matters like marriage and choice of bridegroom. Family size was determined jointly by husband and wife by 94 per cent households. Employment status did not show any variation in these decisions.

Career : It included the decisions such as whether respondents can take up employment, choose type of work and place of work. More than 60 per cent employed respondents had taken these decisions independently. On the other hand more than 70 per cent respondents from non-employed category opined that decisions

Table 40 : Decision Making Practices of Respondents in Personal Matters

Personal Matters	Decision Making Practices											
	Employed (N=100)			Non-employed(N=100)			Total (N=200)					
	I	J	O	I	J	O	I		J		O	
	%	%	%	%	%	%	f	%	f	%	f	%
Marriage												
When to marry	4.00	3.00	93.00	-	-	100.00	4	2.00	3	1.50	193	96.50
Number of children	5.00	90.00	5.00	-	98.00	2.00	5	2.50	188	94.00	7	3.50
Choice of bridegroom	5.00	5.00	90.00	1.00	2.00	97.00	6	3.00	7	3.50	187	93.50
Career												
To take up employment	62.00	29.00	9.00	17.00	71.00	12.00	79	39.50	100	50.00	21	10.50
Choice of work	61.00	29.00	10.00	15.00	72.00	13.00	16	38.00	101	50.50	23	11.50
Place of work	62.00	29.00	9.00	14.00	70.00	16.00	76	38.00	99	49.50	25	12.50
Socializing												
Marriage and birthday	60.00	34.00	6.00	30.00	50.00	20.00	90	45.00	84	42.00	26	13.00
Religious function	60.00	34.00	6.00	35.00	45.00	20.00	95	47.50	79	39.50	26	13.00
Festivals and fairs	62.00	32.00	6.00	35.00	40.00	25.00	97	48.50	72	36.00	31	15.50
Funerals	55.00	34.00	11.00	32.00	47.00	21.00	87	43.50	81	40.50	32	16.00
Participation in community and development programmes	63.00	28.00	9.00	33.00	47.00	20.00	96	48.00	75	37.50	29	14.50

I = Independent, J = Joint, O = Others

regarding career would be taken jointly if there was a chance to take up employment.

Socializing : Involvement of respondents in social affairs included their participation in marriage, birthday celebrations, religious functions, festivals, fairs and funerals. Frequency of the independent decisions ranged between 55 to 62 per cent for employed respondents followed by 32 to 34 per cent respondents who took joint decisions. However, majority of non-employed respondents ranged between 40 to 50 per cent who took joint

decisions followed by 30 to 35 per cent who took independent decisions in these matters. Decisions taken by others in this regard ranged between 6 to 11 per cent for employed and 20 to 25 per cent for non-employed respondents.

Participation in Community and Development Programmes : Majority of employed respondents (63 per cent) took independent decisions in participation in community and development programmes, whereas most of non-employed respondents (47 per cent) took joint decisions in this matter.

6b. (ii) Participation in Family Decisions

These included the decisions on various aspects such as health care, education, income and expenditure on household goods and durable items (Table 41).

Health Care : It included the decisions taken by respondents in case of illness of family members and immunisation of children. It was encouraging to note that a majority of sample respondents i.e., 68 per cent took independent decisions followed by 26 per cent respondents who took joint decisions in health care related matters. Data further indicated that more number of employed respondents (79 per cent) took independent decisions as compared to non-employed respondents (57 per cent). Decisions were taken by others in case of only 1 per cent of employed and 11 per cent of non-employed respondents in these matters.

Table 41 : Decision Making Practices of Respondents in Family Matters

Family Matters	Decision Making Pattern											
	Employed (N=100)			Non-employed (N=100)			Total					
	I	J	O	I	J	O	I		J		O	
	%	%	%	%	%	%	f	%	f	%	f	%
Health Care												
In case of illness	79.00	20.00	1.00	57.00	32.00	11.00	136	68.00	52	26.00	12	6.00
In case of immunisation	79.00	20.00	1.00	57.00	32.00	11.00	136	68.00	52	26.00	12	6.00
Education of Children												
Admission in school	51.00	41.00	8.00	13.00	62.00	25.00	64	32.00	103	51.50	33	16.50
Expenditure on education	55.00	42.00	3.00	11.00	63.00	26.00	66	33.00	105	52.50	29	14.50
Level of education	52.00	41.00	7.00	10.00	64.00	26.00	62	31.00	105	52.50	33	16.50
Income and Expenditure												
Control over cash	66.00	19.00	15.00	29.00	39.00	32.00	95	47.50	58	29.00	47	23.50
Repayment of credit	63.00	22.00	15.00	24.00	47.00	29.00	87	43.50	69	34.50	44	22.00
Amount to be saved	57.00	28.00	15.00	20.00	49.00	31.00	77	38.50	77	38.50	46	23.00
Expenditure on food	57.00	26.00	17.00	20.00	47.00	33.00	77	38.50	73	36.50	50	25.00
Expenditure on clothing	55.00	28.00	17.00	21.00	46.00	33.00	76	38.00	74	37.00	50	25.00
House repairs	51.00	32.00	17.00	16.00	38.00	46.00	67	33.50	70	35.00	63	31.50
Fuel	60.00	24.00	16.00	21.00	52.00	27.00	81	40.50	76	38.00	43	21.50
Transportation	52.00	33.00	15.00	17.00	55.00	28.00	69	34.50	88	44.00	43	21.50
Ceremonies	51.00	33.00	16.00	17.00	55.00	28.00	68	34.00	88	44.00	44	22.00
Health care	57.00	29.00	14.00	23.00	48.00	29.00	80	40.00	77	38.50	43	21.50
Expenditure on Durable Items												
Utensil	64.00	26.00	10.00	25.00	44.00	31.00	89	44.50	70	35.00	41	20.50
Radio, T.V.	41.00	47.00	12.00	6.00	61.00	33.00	47	23.50	108	54.00	45	22.50
Ornaments	42.00	48.00	10.00	8.00	59.00	33.00	50	25.00	107	53.50	43	21.50

I = Independent, J = Joint, O = Others

Education : Decisions regarding education included aspects such as education of children, expenditure on education and level of children's education. In case of employed respondents more than 50 per cent took independent decisions followed by more than 40 per cent respondents who took joint decisions. Decisions taken by others in this regard were found in least number of employed respondents.

On the contrary, It was found that in case of non-employed respondents almost two-thirds took joint decisions regarding educational matters. Least number of non-employed respondents took independent decisions regarding admission in school (13 per cent), expenditure on education (11 per cent) and level of children's education (10 per cent). In case of one-fourth of non-employed respondents others took these decisions.

Income and Expenditure : Varied aspects of income and expenditure undertaken in the study included : Control over cash, repayment of credit, amount to be saved, expenditure on food, clothing, housing, transportation, health, fuel and ceremonies.

Clear variation was observed in decision making pattern on these aspects between employed and non-employed respondents. More than half of employed respondents took independent decisions in all aspects related to income and expenditure. It was followed by joint decisions and decisions taken by others.

On the other hand, it was seen that least number of non-employed respondents took independent decisions followed by decisions taken by others in all these aspects. It was observed that maximum percentage of non-employed respondents took joint decisions in this regard. Similar trend of decision making was found in case of expenditure pattern on durable goods by both employed and non-employed respondents (Table 41).

6b. (iii) Participation in Farm Decisions

These decisions included various features such as expenditure related to farm operations, tools, equipment and freedom to decide about various aspects of farm matter (Table 42). Among employed respondents it was observed that the decisions related to all farm matters were jointly taken ranging between 36-47 per cent and among non-employed respondents ranging between 44-53 per cent. Independent decision making by employed respondents related to farm matters ranged between 25-32 per cent, whereas among non-employed respondents range was only between 3-7 per cent.

Farm Related Expenditure : Decisions related to purchase of land, animals, agricultural tools and equipment, repayment of credit etc. by employed respondents were found to be taken jointly (range between 36-47 per cent) followed by almost equal number of respondents who took these decisions independently (range between 25-31 per cent). Others took these decisions for them in the range of 22-31 per cent. Joint decisions were taken in the range of 44-52 per cent by non-employed respondents. Others were found to take these decisions in the range of 42-52 per cent for them. Least number of non-employed respondents took these decisions independently.

Crop Related Matters : Freedom of decisions regarding crop related matters included aspects such as variety of crops to be sown, use of plant protection measure, storage of produce and

Table 42 : Decision Making Pattern of Respondents in Farm Matters

Farm Matters	Decision Making Pattern											
	Employed (N=100)			Non-employed (N=100)			Total (N=200)					
	I	J	O	I	J	O	I		J		O	
	%	%	%	%	%	%	f	%	f	%	f	%
Decisions on Farm Related Expenditure												
Purchase of land	25.00	47.00	28.00	4.00	52.00	44.00	29	14.50	99	49.50	72	36.00
Purchase of animals	31.00	47.00	22.00	6.00	52.00	42.00	37	18.50	99	49.50	64	32.00
On land implements	31.00	36.00	33.00	6.00	48.00	46.00	37	18.50	84	42.00	79	39.50
Sale of agricultural products	30.00	41.00	29.00	3.00	51.00	46.00	33	16.50	92	46.00	75	37.50
Repayment of farm credit	28.00	41.00	31.00	3.00	53.00	44.00	31	15.50	94	47.00	75	37.50
Expenditure on Tools and Equipment												
Purchase of tools	28.00	42.00	30.00	6.00	44.00	50.00	34	17.00	86	43.00	80	40.00
Purchase of equipment	30.00	40.00	30.00	3.00	45.00	52.00	33	16.50	85	42.50	82	41.00
Freedom to Decide												
Variety to be sown	26.00	44.00	30.00	5.00	46.00	49.00	31	15.50	90	45.00	79	39.50
Use of plant protection measures	29.00	42.00	29.00	5.00	47.00	48.00	34	17.00	89	44.50	77	38.50
Use of chemical fertilizer	27.00	44.00	29.00	5.00	47.00	48.00	32	16.00	91	45.50	77	38.50
Storage of agriculture products	32.00	39.00	29.00	7.00	46.00	47.00	39	19.50	85	42.50	76	38.00
Marketing of products	29.00	39.00	32.00	5.00	47.00	48.00	34	17.00	86	43.00	80	40.00

I = Independent, J = Joint, O = Others

marketing. The employed respondents revealed a trend of joint decision making ranging between 39-44 per cent. An equal number of them took independent decisions (range between 26-32 per cent) or others took decisions for them (range between 29-32 per cent). However, least number of non-employed respondents took independent decisions (range between 5-7 per cent) in these matters followed by almost equal number of respondents who took decisions jointly (range between 46-47 per cent) or others took decisions for them (range between 47-49 per cent).

The findings regarding decisions related to all crucial aspects depicted a clear trend among employed and non-employed respondents. More number of employed respondents were observed to take independent decisions in personal and family matters and joint decisions in farm matters. On the contrary, more number of non-employed respondents took joint decisions in personal, family and farm matters. However, employment status did not influence decision making pattern in case of decisions related to marriage.

Table 43 :Perception of Respondents Regarding Non-Participation in Decision Making

Perception	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	%
I am a woman only	34.00	58.00	92	46.0
It is male's role	26.00	45.00	71	35.5
Husband knows best	20.00	43.00	63	31.5
I am illiterate	23.00	52.00	75	37.5
My duty is to do what my husband says	11.00	47.00	58	29.0

Irrespective of employment status respondents were asked as to how they perceived their participation in decision making (Table 43). Majority of sample respondents i.e., 46 per cent agreed that 'it did not matter whether they made decisions or not'. It was opined so by more number of non-employed respondents (58 per cent) than employed respondents (34 per cent). Illiteracy was another important cause of their non participation in

decision making as perceived by about one-half of non employed and nearly one-fourth of employed respondents. Decision making was considered as a 'male's role' only by less number of employed (26 per cent) than non-employed (45 per cent) respondents. Similarly 20 per cent of employed and 43 per cent of non-employed respondents considered that their 'husbands knew better than them', therefore, they were better decision makers. About one-tenth of employed and nearly one-half of non-employed respondents believed that it was 'their duty to do what their husbands said'.

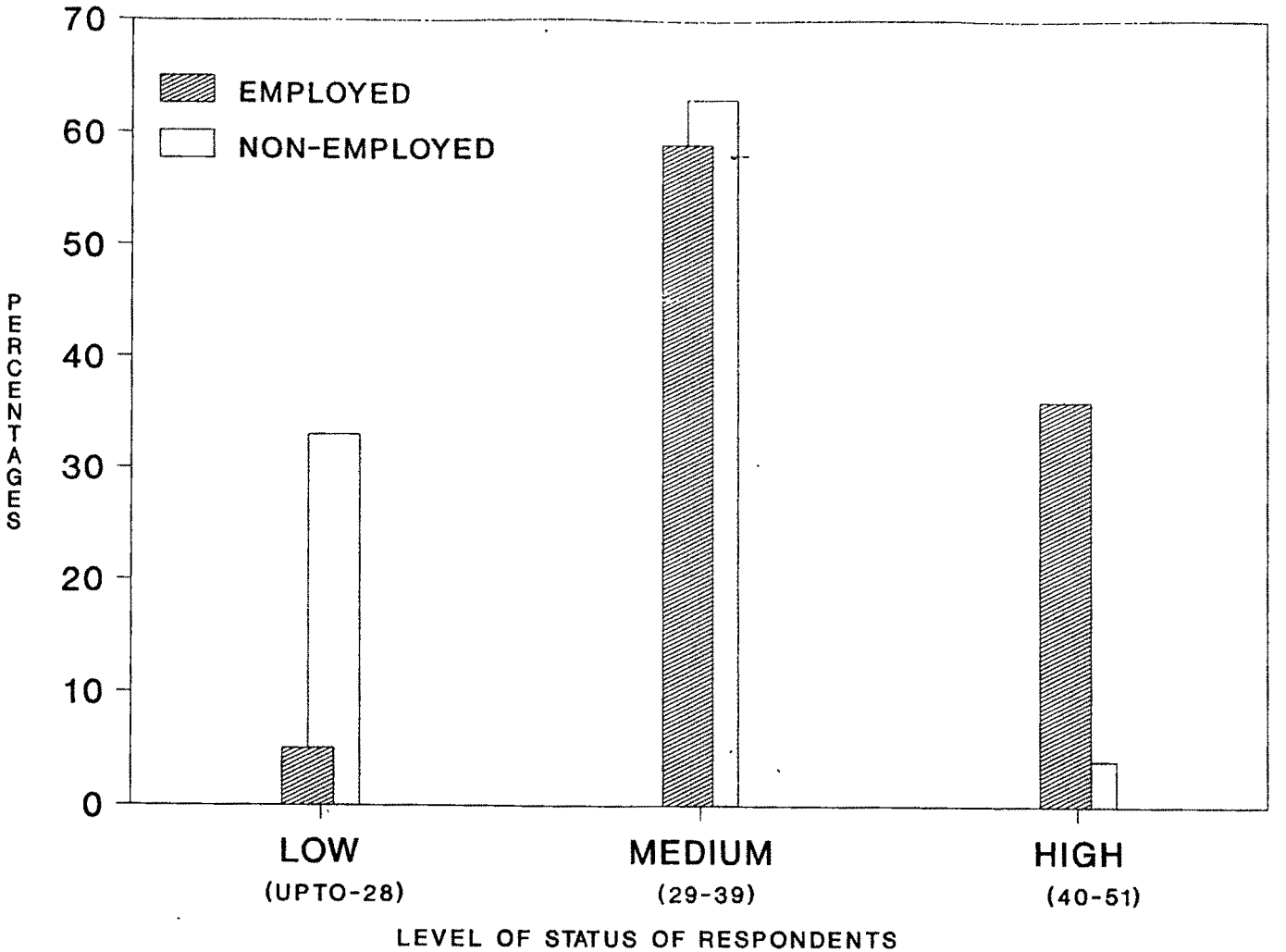
It may be inferred from the findings that employed respondents perceived less hinderances in their decision making role than non-employed respondents.

Table 44 : Level of Present Status of Respondents

Status Scores	Level of Status: Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	%
Low (upto 28)	5.00	33.00	38	19.0
Medium (29-39)	59.00	63.00	122	61.0
High (40-51)	36.00	4.00	40	20.0

On the basis of all the indicators of status, status of respondents were scored and different levels of status were arrived at. About three-fifths of respondents belonged to medium status category. Similar trend was found among employed (59 per cent) and non-employed (63 per cent) respondents. However, more

FIGURE 9 - PERCENTAGE DISTRIBUTION OF RESPONDENTS ACCORDING TO LEVEL OF STATUS



number of employed respondents were found to be in high level of status category (36 per cent) than non-employed respondents (4 per cent). On the other hand more number of non-employed respondents belonged to low level of status category (33 per cent) than employed respondents (5 per cent).

It may be concluded that on the whole, tribal women had medium level of status. However, findings of the study revealed that employed women have attained higher status than non-employed respondents under study.

The difference in levels of status of respondents led to further probe into data as to what the various factors which contribute to different levels of status among sample respondents are. Chi-square test was applied to find out significant association between status of respondents and selected variables.

Age of respondents and their level of status depicted a positive trend (Table 45). Most of the young home makers had low status level. Most of the middle age home makers had medium level of status and most of the old homemakers had high level of status (Chi-square value = 24.526, Sig. 0.01).

A significant association was found between education and status of women. (Chi-square value = 14.351 Sig. 0.05). Most of the respondents with high school and above education were observed to have medium to high level of status whereas, majority of illiterate respondents belonged to medium and low level of status category.

Table 45 :Chi-square Values Showing the Association Between Status Scores and Selected Variables

Selected Variables	Chi-Square Value for Status of Women
Age of respondents	24.526** (df=4)
Education level of respondents	14.351* (df=6)
Employment status of respondents	46.362** (df=2)
Marital status of respondents	42.973** (df=4)
Economic role of respondents	47.234** (df=4)
Family type	15.400** (df=2)
Family size	15.873** (df=4)
Family income	5.982 (df=6)
Main family occupation	23.250** (df=8)
Caste	2.131 (df=2)
Land-holding size	5.394 (df=6)
Participation in development programmes	6.934* (df=2)

** Significant at 0.01 level
* Significant at 0.05 level

It was observed in case of variable employment status that majority of gainfully employed respondents had medium and high status level. On the other hand most of the non-employed respondents had low and medium level of status (Chi-square value = 46.36 Sig. 0.01).

Marital status of respondents affected their level of status (Chi-square value = 42.973 Sig. 0.01). Majority of widow respondents had high status. Most of the married respondents had medium status.

The Chi-square values 47.23 Sig. 0.01 showed that a significant association existed between economic role and status of women. Most of the respondents with high economic contribution attained medium and high level of status. On the other hand most of the respondents with less economic contribution to family attained medium and low level of status.

Family type influenced the status of respondents (Chi-square value = 15.40 Sig. 0.01). It was found that majority of respondents who belonged to nuclear family type had medium status followed by high level of status. Most of the respondents who belonged to joint family type had medium status followed by low level of status.

Main occupation of family influenced the status of respondents (Chi-square value = 23.25 Sig. 0.01). Higher level of status of respondents was observed in families with service as main occupation. Most of the respondents who belonged to families with main occupation as farming, shop, labour and goat and sheep rearing generally had medium and low status. However, it was noteworthy that those respondents who belonged to families with large sheep and goat rearing as main occupation had high status.

A significant association was observed between participation in development programmes and status of women (Chi-square value =

6.93 Sig. 0.05). No association was found to exist between caste, size of land holding, family income and status of respondents (Appendix B, Table No. 82 to 89).

Thus, it can be inferred from these findings that age, education, employment status, marital status, economic role of respondents, family type, main family occupation and participation in development programmes influenced status of women.

7. Household Development

This section included findings pertaining to household development and impact of tribal women's economic contribution towards it. The indicators assumed for household development comprised of primary and secondary indicators. Primary indicators included housing conditions, health status, food adequacy, consumption expenditure, savings and material possessions of sample households. Leisure time availability was selected as a secondary indicator which has already been dealt in this chapter pp.217-218.

7a. Primary Indicators

7a. (i) Housing Conditions

Housing conditions refer to the type of house owned, its maintenance, availability of drinking water and provision of electricity in the respondent households. Majority of the sample owned 'Katcha' houses (72 per cent) whereas, 22 per cent owned 'Semi-Pucca' houses. Among the non-employed respondents 87 per

cent owned 'Katcha' houses. On the other hand 57 per cent employed respondents owned 'Katcha' houses, 33 per cent owned 'Semi-Pucca' houses and 10 per cent owned 'Pacca' houses. Quality of houses was ascertained on the basis of its maintenance. It was noted that a vast majority of respondents (69.5 per cent) maintained their houses well. Majority of households in employed category (72 per cent) had drinking water facility in side and/or near their houses whereas, only 46 per cent non-employed respondents had this facility. It was noticed that nearly all houses under study (except 2 per cent non-employed houses) were electrified as electricity supply was made available by the government in the whole of the tribal area.

Table 46 : Housing Conditions of Respondents

Housing Conditions	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	Total (N=200) %
Type of House				
'Katcha'	57.00	87.00	144	72.00
'Semi-Pucca'	33.00	11.00	44	22.00
'Pucca'	10.00	2.00	12	6.00
Maintenance				
Good	72.00	66.00	138	69.50
Poor	28.00	34.00	62	31.00
Drinking Water				
Available at/near home	76.00	46.00	122	61.00
Far Away from home	24.00	54.00	78	39.00
Electrification				
Electrified	100.00	98.00	198	99.00
Not electrified	-	2.00	2	1.00

7a. (ii) Family Health Status

Table 47 : Health Status of Family Members as Reported by Respondents

Health Status	Employed (N=100) f	%	Non-employed (N=100) f	%	Total (N=200) f	%
General Health						
Self						
Good	76	76.00	66	66.00	142	71.00
Fair	17	17.00	24	24.00	41	20.50
Poor	7	7.00	10	10.00	17	8.50
Husband	(N=70)		(N=95)		(N=165)	
Good	58	82.85	72	75.78	130	78.78
Fair	7	10.00	18	18.94	25	15.15
Poor	5	7.14	5	5.26	10	6.06
Children	(N=93)		(N=95)		(N=188)	
Good	84	90.32	73	76.84	157	83.50
Fair	6	6.45	15	15.78	21	11.10
Poor	3	3.22	7	7.36	10	5.30
Frequency of Illness						
Self	(N=100)		(N=100)		(N=200)	
Frequently	8	8.00	10	10.00	18	9.00
Sometimes	13	13.00	21	21.00	34	17.00
Rarely	79	79.00	69	69.00	148	74.00
Husband	(N=70)		(N=95)		(N=165)	
Frequently	5	7.14	4	4.21	9	5.45
Sometimes	11	15.71	17	17.89	28	16.96
Rarely	54	77.14	74	77.89	128	77.57
Children	(N=93)		(N=95)		(N=188)	
Frequently	3	3.22	7	7.36	10	5.31
Sometimes	8	8.60	17	17.89	25	13.29
Rarely	82	88.17	71	74.73	153	81.38
Immunisation						
Complete	76	81.72	54	56.84	130	69.14
Incomplete	10	10.75	27	28.42	37	19.68
Nil	7	7.52	14	14.73	21	11.17

General Health : Health status of respondents and their family members was observed as well as inquired upon from the respondents (Table 47). The information revealed an encouraging picture as more than 70 per cent respondents had good health followed by 20.50 per cent respondents who had fair health and a low percentage of 8.5 per cent respondents who had poor health conditions. Maximum number of employed (76 per cent) and 66 per cent of non-employed respondents had good health conditions as they did not suffer from any chronic illness except minor ailments. Least number of employed (7 per cent) and (10 per cent) non-employed respondents suffered from poor health conditions. The respondents with poor health conditions suffered from body aches, gastric trouble, asthma and hysteria. The respondents from entire sample reported their husband's and children's health as good, followed by fair and the least number having poor health conditions.

Frequency of Illness : Frequency of illness suffered by the respondents and their family members was enquired upon during the year preceding data collection which would indicate the general health of family. Incidence of illness was 'rare' in the sample in case of 74 per cent respondents, whereas in case of 17 per cent respondents illness occured 'sometimes' only. Least percentage of respondents reported 'frequent' incidence of illness like body aches and hysteria. Similar trend of frequency of illness was reported by employed and non-employed respondents for themselves as well as for other family members.

Immunization : Sixty nine per cent respondents reported that their children were immunized with complete essential doses, whereas 19 per cent respondents reported that their children were not immunized with all essential doses. Nearly 11 per cent respondents expressed lack of awareness, therefore, their children were not immunised at all. On the whole, it can be concluded from the above findings that the health status of respondents and their family members as observed and reported revealed an encouraging picture.

7a. (iii) Food Adequacy

Table 48 : Food Consumption Pattern of Respondents

Food Items	Frequency of Consumption													
	Employed (N=100)							Non-employed (N=100)						
	Always	Frequently	Sometimes	Rarely	Seasonal	Never	Total	Always	Frequently	Sometimes	Rarely	Seasonal	Never	Total
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Cereals	100.00	-	-	-	-	-	100.00	100.00	-	-	-	-	-	100.00
Pulses	87.00	4.00	9.00	-	-	-	100.00	75.00	22.00	3.00	-	-	-	100.00
Green vegetables	19.00	22.00	30.00	16.00	13.00	-	100.00	8.00	14.00	31.00	27.00	20.00	-	100.00
Other vegetables	11.00	25.00	41.00	13.00	10.00	-	100.00	4.00	14.00	55.00	27.00	-	-	100.00
Fats and oils	100.00	-	-	-	-	-	100.00	100.00	-	-	-	-	-	100.00
Milk and its products	12.00	14.00	15.00	10.00	49.00	-	100.00	8.00	10.00	11.00	9.00	62.00	-	100.00
Meat	-	6.00	62.00	8.00	-	24.00	100.00	-	10.00	56.00	6.00	-	28.00	100.00
Eggs	13.00	6.00	5.00	15.00	61.00	-	100.00	3.00	4.00	3.00	13.00	77.00	-	100.00
Sugar	100.00	-	-	-	-	-	100.00	100.00	-	-	-	-	-	100.00
Fruits	11.00	5.00	8.00	-	76.00	-	100.00	2.00	4.00	2.00	2.00	90.00	-	100.00

Food Consumption Pattern : Quality of food intake plays a significant role in maintenance of health and well being. An attempt was made to evaluate the quality of food intake of sample households under study on the basis of adequacy of calorie requirement. The food consumption pattern has been presented in Table 48.

Maize was staple cereal in the surveyed area and was consumed 'daily' by cent per cent respondent households. Mixture of wheat and barley in the ratio of 1:1 was found to be consumed during summer season. Rice output was observed to be low, therefore, it was consumed 'sometimes' in a week. Locally grown pulses such as black gram, red gram, green gram and lentil were part of their 'daily' diet. Potatoes were grown with maize crop and were found to be consumed by respondent households almost 'daily'. Vegetables and fruits were consumed depending upon its seasonal availability. Locally grown seasonal and green leafy vegetables were popular among the sample households. More number of employed households reported the purchase of vegetables and fruits from market during off season.

Mustard oil was used 'daily' and 'Ghee' was used 'sometimes' in the households. Majority of the sample households were non-vegetarians. For the families from goat and sheep rearing occupation, mutton was a home product and thus consumed 'frequently' by them. However, data further showed that for the entire sample households, mutton was the most common item among animal foods included in the diet while consumption of eggs was found to be more during winter season especially for employed

households. Milk was used daily for prepation of tea only. Due to low availability of milk through out the year, it was consumed only by children when available as a home product. Buttermilk was used 'frequently' in the form of curry prepared from it. Sugar and jaggery were consumed daily by cent per cent households.

On the whole, tribal households under study consumed a cereal based meal with sparing use of other food groups. Variation in food consumption pattern was seen among employed and non-employed respondent households. It can be inferred from the findings that more number of employed respondent households consumed those items more which were purchased from the maket during off season such as vegetables, pulses, eggs and fruits than non-employed respondent households.

Table 49 :Percent Total Calories Derived from Different Sources of Food

Sources of Food	Calories Derived	
	Employed (N=100) %	Non-employed (N=100) %
Cereals	60.00	66.00
Pulses	10.00	9.00
Fat	7.00	6.00
Milk	3.00	2.00
Roots and vegetables	4.00	3.00
Sugar	7.00	7.00
Fish, meat and eggs	9.00	7.00

Sources of Calorie Intake : The quality of food intake was evaluated on the basis of adequacy of calories in the diet (Table 49). The calorie intake was calculated from daily dietary composition (Appendix B, Table 73). Calorie intake being important indicator of health conditions of all members of sample households was taken into consideration. Calorie intake derived from various sources did not show much variation among employed and non-employed respondents.

Food Adequacy per Consumption Unit for Calorie Requirement : Further, calorie intake was compared with recommended dietary allowances of I.C.M.R. 1993 (Table 50). It was calculated per consumption unit for each and every sample household. The findings showed an encouraging picture that majority of households (89 per cent) had met recommended standards of dietary allowances for calorie intake. Data further indicated that more number of employed respondent households (92 per cent) had adequate calorie intake and better quality of food than non-employed category (86 per cent). It may be attributed to the economic contribution of employed respondents.

Table 50 :Food Adequacy Per Consumption Unit for Caloric Requirement

Food Adequacy (per consumption unit)	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	Total (N=200) %
Adequate	92.00	86.00	178	89.00
Inadequate	8.00	14.00	22	11.00

7a. (iv) Consumption Expenditure and Saving

Expenditure Pattern : An attempt was made to ascertain the consumption expenditure pattern of the households because it is one of the important indicators of level of living and hence, household development (Table 51). In the present context consumption expenditure pattern was determined for per consumption unit of sample households in order to bring the entire sample at par to observe the similarities and differences in the data more realistically. Per consumption unit expenditure incurred by the tribal households in the present study was calculated for the following items : (i) Food (ii) Housing (maintenance) (iii) Clothing and footwear (iv) Fuel and electricity (v) Education (vi) Health (vii) Intoxicants (viii) Entertainment (ix) Transportation (x) Celebrations.

Different reference periods were used for various items of expenditure depending upon income of the sample households. Expenditure on clothing and housing was inquired for preceding six months to one year whichever was applicable to family. Expenditure on food, education, health, intoxicants, recreation. was related to the month preceding the date of inquiry. The whole data were subsequently converted to a common period of one month. The average expenditure per month gives only the partial picture of the total outflow of money from the family.

There was substantial variation in mean monthly income per consumption unit of employed (Rs. 806.57) and non-employed (Rs. 537.09) respondent households. It was observed that per unit

Table 51 :Mean Monthly Expenditure Pattern Per Consumption Unit in Tribal Households

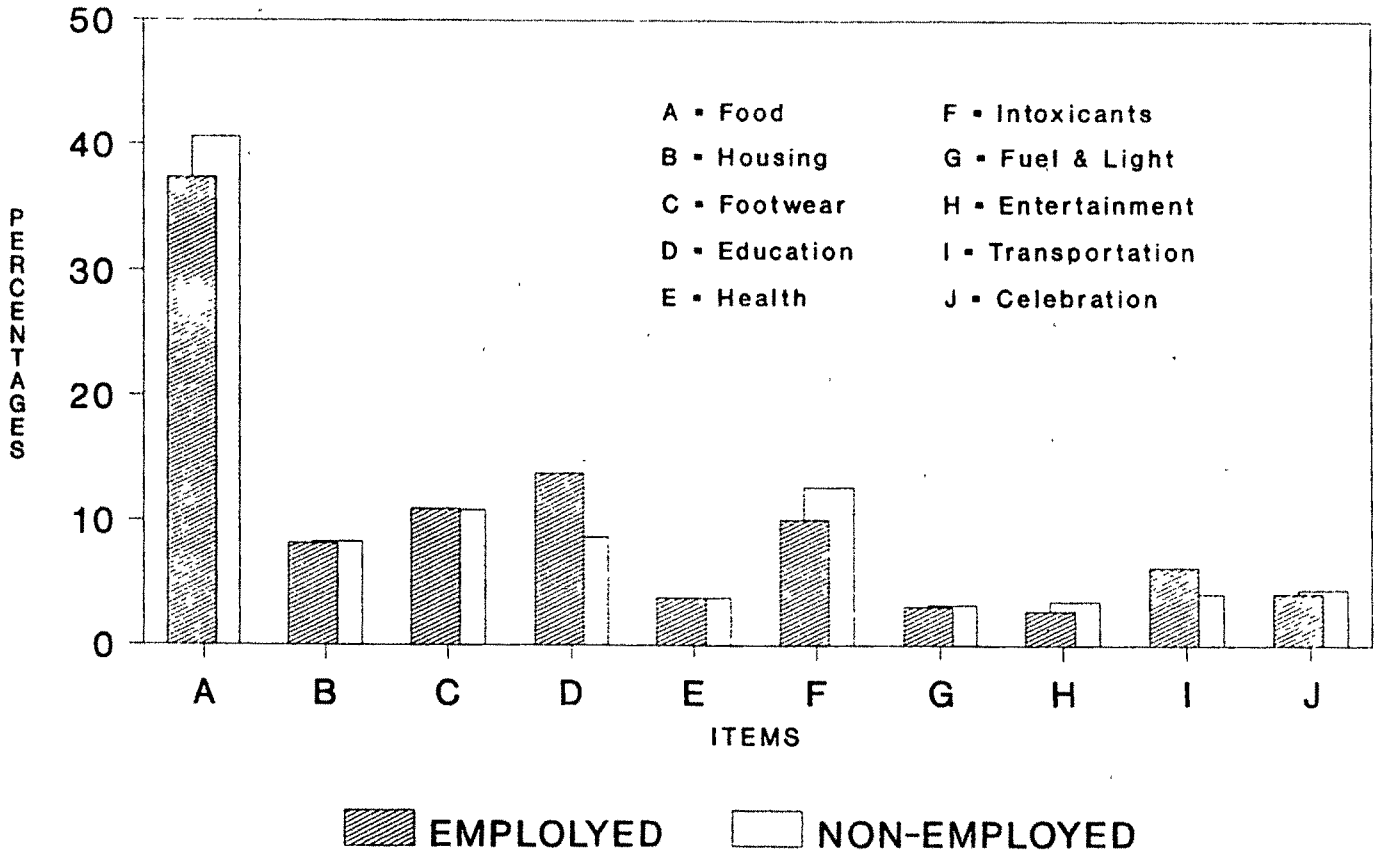
Items	Expenditure per Consumption Unit (Rs.) Employed (Mean)	(S.D.)	Non-employed (Mean)	(S.D.)	Total Mean
Food	225.81	124.89	206.98	131.20	216.39
Housing	49.12	45.44	42.18	46.57	45.65
Clothing	65.78	51.87	55.08	34.25	60.43
Education	82.96	141.30	44.03	62.03	63.49
Health	23.06	22.98	19.38	22.44	21.22
Intoxicants	60.56	58.34	64.34	53.18	62.45
Fuel	18.57	20.17	16.50	19.82	35.07
Entertainment	16.60	15.61	17.82	25.01	17.21
Transportation	37.61	51.43	20.99	22.25	29.30
Celebrations	24.90	26.44	22.74	17.52	23.82

expenditure on food items was more for employed (Rs. 225.81) than for non-employed (Rs. 206.98) respondent households. It was found that cereals, pulses, vegetables and fruits were grown in the fields for consumption purposes. In majority of the households less cash expenditure was incurred on these items for a few months in a year. Due to small land holding these items were not sufficient to last for the whole year, hence, cereals and pulses were also purchased from market or government ration depots. Some employed respondent households reported that they purchased cereals and pulses from market only for the whole year, being away from their native lands.

Most of the families kept milch animals, thus milk was invariably a home product in these sample households. As the animals were local bred, yield of milk was found to be low and insufficient for the whole year. Some of the families purchased small quantity of milk or milk powder for use in tea preparation. Majority of families had kitchen gardens in their homes for fresh green vegetables. Natives were found to consume usually the home grown vegetables and seasonal fruits only. Due to snow bound conditions and poor road links during winter season, vegetables and fruits from market become expensive and only a few employed families reported regular purchase of these items during off season.

In case of non-food items the expenditure was higher for employed than non-employed respondent households. An item wise analysis revealed that per unit expenditure on housing, clothing, health, fuel, transport and celebrations was higher in employed households than in non-employed households. It was Rs. 49.12 for housing, Rs. 65.78 for clothing, Rs. 23.06 for health, Rs. 18.57 for fuel, Rs. 37.61 for transport and Rs. 24.90 for celebrations in employed households, whereas it was Rs. 42.18 for housing, Rs. 55.08 for clothing, Rs. 19.38 for health, Rs. 16.50 for fuel, Rs. 20.99 for transport and Rs. 22.74 for celebration in non-employed households. It was remarkable that sample households from employed category spent almost double the amount on education of their children i.e., Rs. 82.96 than non-employed category i.e., Rs. 44.03. The expenditure incurred on fuel was also more in case of employed (Rs. 18.57) than non employed (Rs. 16.50) households

FIGURE 10 - PERCENTAGE DISTRIBUTION OF EXPENDITURE ON FOOD & NON-FOOD ITEMS PER CONSUMPTION UNIT BY TRIBAL HOUSEHOLDS



because employed respondents reported more use of kerosene oil and a few of them used cooking gas too. More use of electricity was found in case of employed households because they possessed more number of electric equipment, hence, an additional expenditure on electricity was incurred by them.

Per unit expenditure on transportation was much more in case of employed (Rs. 37.61) than non-employed respondent households because usually both husband and wife spent money to reach their place of work. Data showed that money was also spent on purchase of liquor and entertainment by both employed (Rs. 60.56, Rs. 16.60) and non-employed respondent households (Rs. 64.34, Rs. 17.82) respectively.

More expenditure was incurred by employed households in celebrations such as marriages, 'Mundans' etc. (Rs. 24.90) than non-employed respondent households (Rs. 22.74). Similarly expenditure on health care facilities was found to be more (Rs. 23.06) in case of employed than non-employed (Rs. 19.38) respondent households. It can be inferred from the above findings that employed households had more income and spent more than non employed households both on food and non food items. The percentage distribution on food and non food items according to employment status have been presented in Figure 10.

Saving : Adequacy of saving by sample households was considered as an indicator of household development which was

Table 52 :Adequacy of Savings as Perceived by Respondents

Adequacy of Saving	Employed (N=100) %	Non-employed (N=100) %	f	Total (N=200) %
No saving	16.00	33.00	49	24.50
Inadequate	39.00	40.00	79	39.50
Adequate	45.00	27.00	72	36.00

measured at three levels (Table 52). The analysis showed that on the whole 36 per cent sample households had adequate saving. About two-fifths of the sample households indicated inadequate saving and nearly one-fourth of sample under study did not save at all. Data further indicated that more number of employed (45 per cent) than non-employed (27 per cent) households had adequate saving. Nearly one-third households from non-employed category had no saving at all. It may be inferred from the findings that larger number of employed households saved more than non-employed household category which may be because of the additional earnings due to employment of respondents.

Material Possessions : Information was sought about the material possessions owned by the respondents (Table 53). A wide range of items were owned by respondents. Less variation was observed in commonly used essential material possessions among employed and non-employed sample households such as watches (78, 79 per cent); radio (70, 69 per cent); sewing machine (78, 75 per

Table 53 : Material Possessions of Respondent Households

Items	Employed (N=100) Possessions in the House Before Employment %	Possessions Due to Women's Contribution After Employment %	Total %	Non-employed (N=100) Possessions in the House %
Camera	4.00	5.00	9.00	5.00
Watch	60.00	18.00	78.00	79.00
Almirah	50.00	11.00	61.00	51.00
Diwan	35.00	10.00	45.00	11.00
Radio	49.00	21.00	70.00	69.00
Table and chair	51.00	16.00	67.00	71.00
Sewing machine	56.00	22.00	78.00	75.00
Stove	59.00	14.00	73.00	73.00
Bullocks	19.00	3.00	22.00	33.00
Improved agricultural implements	12.00	2.00	14.00	18.00
Television	32.00	11.00	43.00	31.00
Cooker	68.00	16.00	84.00	86.00
Gas	9.00	5.00	14.00	6.00
Sofa	14.00	7.00	21.00	12.00

cent); table chairs (67, 71 per cent); stoves (73 per cent each); cooker (84, 86 per cent) and improved agricultural implements (14, 18 per cent).

However, it was noticed that some expensive items were possessed by a larger percentage of employed respondent

households than non-employed category, such as camera (9, 5 per cent); almirah (61, 51 per cent); diwan (45, 11 per cent); television (43, 31 per cent); cooking gas (14, 6 per cent) and sofa set (21, 12 per cent) respectively. Thus, the above data regarding more material possessions indicates contribution of employed respondents towards household development.

Table 54 :Percentage Distribution of Respondents According to Level of Household Development

Level of Household Development (Scores)	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	%
Low (upto - 15)	8.00	8.00	16	8.00
Medium (16-21)	57.00	72.00	129	64.50
High (22-27)	35.00	20.00	55	27.50

Level of household development of respondents was assessed by assigning scores on the basis of all indicators of household development (Table 54). The findings showed that on the whole, most of the respondents (64.5 per cent) belonged to medium level of household development. Data further indicated that 57 per cent employed and 72 per cent non-employed respondent households belonged to medium level of household development. More number of employed respondents belonged to high level of household development (35 per cent) than non-employed respondent households (20 per cent). It may be attributed to the contribution of employed respondents.

FIGURE 11 - PERCENTAGE DISTRIBUTION OF RESPONDENTS ACCORDING TO LEVEL OF HOUSEHOLD DEVELOPMENT

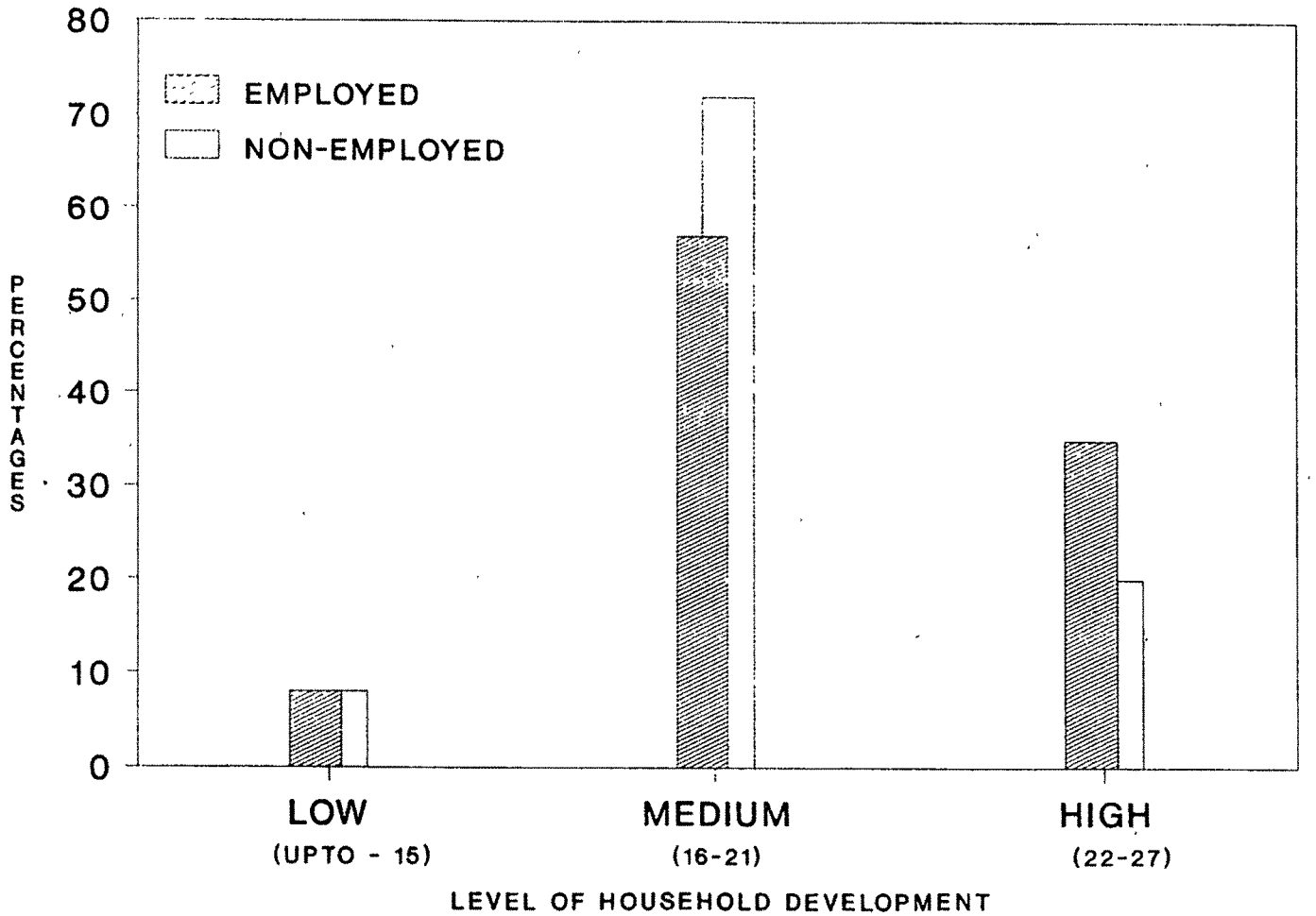


Table 55 :Perception of Respondents Regarding their Role in Household Development

Perceptions	Employed (N=100) %	Non-employed (N=100) %	Total (N=200) f	%
Food to eat	93.00	74.00	167	83.50
Clothes to wear	94.00	68.00	162	81.00
House to live	85.00	55.00	140	70.00
Education	81.00	28.00	109	54.50
Health	79.00	31.00	110	55.00
Consumer durables	78.00	33.00	111	55.50
Standard of living	76.00	42.00	118	59.00
Escape migration	64.00	46.00	110	55.00

The data were analysed to ascertain the perception of respondents about their role in household development (Table 55). Findings showed that most of the respondents perceived that their role in household development comprised of preparing, providing and maintaining basic necessities such as food (83.50 per cent), clothing (81.00 per cent) and shelter (70.00 per cent). More than half of sample respondents perceived their contribution towards education of children (54.50 per cent), maintaining health of all family members (55.00 per cent), attaining consumer durables (55.50 per cent) and maintaining better standard of living 59.00 per cent. A larger percentage of employed respondents opined about their role in household development than non-employed respondents i.e. food to eat (93.00, 74.00 per cent); clothes to

wear (94.00, 68 per cent); house to live (85.00, 55.00 per cent); education (81.00, 28.00 per cent); health (79.00, 31.00 per cent); more consumer durables (78.00, 33.00 per cent) and standard of living (76.00, 42.00 per cent) respectively.

Table 56 :Chi-square Values Showing the Association between Household Development Scores and Selected Variables

Selected Variables	Chi-square Values for Household Development
Age of respondents	9.590* (df=4)
Education level of respondents	53.082** (df=6)
Employment status of respondents	5.835 (df=2)
Economic role of respondents	49.971** (df=4)
Family type	15.183** (df=2)
Family size	8.219 (df=4)
Main family occupation	30.392** (df=8)
Family income	93.245** (df=6)
Caste	1.399 (df=2)
Land holding size	1.875 (df=6)
Mass-media exposure	6.611* (df=2)
Participation in development programmes	1.152 (df=2)

** Significant at 0.01 level
* Significant at 0.05 level

The difference in levels of household development of respondents led to further inquiry into data as to what the various factors influencing the levels of household development are. Chi-square test was applied to find out significant association between household development score of respondents and selected variables (Table 56).

Age of the homemakers influenced the household development (Chi-square value = 9.590 Sig. 0.05). Medium development in the households was found in most of old respondents. However, high household development was indicated in middle and young age group respondents.

Education level of respondents was associated with their level of household development (Chi-square value = 53.082 Sig. 0.01). Most of the illiterate and primary level educated respondents had medium scores of household development. On the other hand, most of the respondents having middle, high school and above level of education had high level of household development scores.

Economic role of women was associated with the level of their household development (Chi-square value = 49.971 Sig. 0.01). Majority of respondents with a range of economic role performance of Rs. 0 - 1000 per month had medium level of development, whereas most of the respondents from high economic role performance (Rs. 1000 and above) category belonged to highly developed households.

Family type influenced the household development level (Chi-square value = 15.183 Sig. 0.01). It was observed that majority of respondents both in nuclear and joint family type had medium level of household development. However, more number of respondents from nuclear family type were found to have high household development than joint family type.

Family income emerged as significant determinant of household development (Chi-square value = 93.245 Sig. 0.01). It was observed that most of the low income group respondents had medium and low household development, whereas most of the high income group respondents had medium to high household development. Main family occupation was associated with household development (Chi-square value = 30.392 Sig. 0.01). Data showed that high household development was found mostly in service as main occupation followed by medium level of household development in all other occupations.

Exposure to mass-media by respondents affected their household development level (Chi-square value = 6.611 Sig. 0.05) (Appendix B, Table 95). No association was observed between employment status of respondents, family size, caste, land holding size, participation in development programmes and level of household development.

Hence, it can be concluded that age, education, economic role of respondents, family type, family income, main family occupation and exposure to mass-media were significantly associated with household development.

8. Testing of Hypotheses

Hypotheses have been satistically tested by applying Chi-squares, Z-test, Correlations, and Multivariate Analysis of Significance. Whenever significant 'F' values were found, Scheffe's procedure of post-hoc comparisons was applied to find out differences between groups. Scheffe's procedure is applicable only in a situation where a preliminary overall Multivariate analysis shows significance. Scheffe's value was compared at 0.05 level of significance.

Multiple regression was carried out to determine the impact of independent variables on dependent variables. For the purpose of testing the hypotheses, null hypotheses with sub-hypotheses were formulated.

Ho_1 There is no significant difference in time spending pattern on household, agricultural and allied work due to :

Personal Variables

i. Age of the respondents
ii. Education level of the respondents
iii. Employment status of the respondents

Family Variables

iv. Family type
v. Family size
vi. Family income
vii. Family occupation

Situational Variable

viii. Participation in community and development programmes.

Multivariate test of significance was used to test the significance of differences in time spending pattern between various groups of selected attributes of respondents. Subsequent analysis required Univariate 'F' -test to find out significance of differences of time spent on individual activity i.e., household, agriculture and allied. Further Scheffe's test was computed on significant 'F'values to find out differences between groups.

Personal Variables

Age of the Respondents : The findings revealed that time spending pattern on various activities differed significantly amongst different age groups of respondents (Pillais 'F' value = 3.02080, Hotellings 'F' value = 3.09723 and Wilks 'F' value = 3.05927 Sig. 0.01) Table 57.

The differences in time spent by different age groups of respondents on each activity showed that the three age groups differ significantly in respect of time spent on household activities, whereas, the time spent on agricultural and other allied activities by the respondents of different age groups did not differ significantly.

Table 57 :Differences in Time Spending Pattern on Household Agriculture and Allied Work Due to Age of the Respondents

A. Multivariate Test of Significance

Test Name	Value	Approx.F	D.F.	Error D.F.	Sig.
Pillais	0.08839	3.02080	6	392.00	S**
Hotellings	0.09579	3.09723	6	388.00	S**
Wilks	0.91212	3.05927	6	390.00	S**

B. Time Spent on Various Activities According to Age Groups

Variables	Mean Time Spent in Work (minutes per day)		
Age	Household	Agriculture	Allied
Young	485.137	112.671	24.862
Middle	426.935	106.290	24.516
Old	391.617	126.176	29.117
'F' ratio	8.6760	0.4677	0.2323
(2,198)			
Significance between variables	S**	NS	NS

C. Differences Between Mean Time Spent on Household Work with Age : (Scheffe's test)

1 and 3*
1 and 2*

Note : Figures in parentheses indicate df

** Significant at 0.01 level
* Significant at 0.05 level

Young respondents spent maximum time (485.14 mins. per day) on household work which was significantly more than what was spent by middle (426.93 mins.) and old age (391.61 mins.) group.

Old age respondents spent minimum time on household activities, whereas, it was otherwise in case of agricultural and allied activities (Table 57). It proves that agricultural and allied activities were the domain of old aged respondents and household activities were of young respondents in tribal area. Middle aged respondents spent minimum time on agriculture and allied activities. Irrespective of age groups, respondents spent much more time on household activities than agriculture and allied work.

Table 58 : Differences in Time Spending Pattern on Household, Agriculture and Allied Work by Employment Status of Respondents

A. Multivariate Test of Significance

Test Name	Value	Approx.F	D.F.	Error D.F.	Sig.
Pillais	0.50670	67.10878	3	196	S**
Hotellings	1.02718	67.10878	3	196	S**
Wilks	0.49330	67.10878	3	196	S**

B. Time Spent on Various Activities According to Employment Status

Variable Employment Status	Mean Time Spent in Work (minutes per day) Household	Agriculture	Allied
Employed	379.10	71.15	19.65
Non-employed	505.25	152.85	31.20
'F' ratio	71.3160	37.7208	5.672
(1,198)			
Significance between variables	S**	S**	S**

Note : Figures in parentheses indicate df
** Significant at 0.01 level

Employment Status : Findings revealed that time spending pattern on various activities by employed and non-employed respondents differed significantly (Pillais, Hotellings, Wilks 'F' value = 67.1087 Sig. 0.01).

Further analysis by Univariate 'F' test indicated that non-employed respondents spent significantly more time on all activities viz., household, agriculture and allied as compared to employed respondents.

Table 59 :Differences in Time Spending Pattern on Household, Agriculture and Allied Work Due to Education of Respondents

A. Multivariate Test of Significance

Test Name	Value	Approx.F	D.F.	Error D.F.	Sig.
Pillais	0.15970	3.67338	9	588.00	S**
Hotellings	0.17885	3.82874	9	578.00	S**
Wilks	0.84463	3.77011	9	472.30	S**

B. Time Spent on Various Activities According to Education

Variable	Mean Time Sepnt in Work (minutes per day)		
Education	Household	Agriculture	Allied
Illiterate	442.7559	131.0236	25.1575
Upto Primary	481.0345	104.1379	27.9310
Upto Middle	409.3750	146.2500	45.0000
High and above	416.1111	43.6111	20.0000
'F' ratio	1.7159	7.9208	1.1091
(3,196)			
Significance Between Variables	NS	S**	NS

C. Differences Between Mean Time Spent on Agricultural Work with Education (Scheffe's test)

	1and4*

Note : Figures in parentheses indicate df
** Significant at 0.01 level

Educational Level of Respondents : From Multivariate test of significance it can be concluded that time spending pattern of the respondents on various activities differed significantly amongst respondents with different levels of education. (Pillais 'F' value = 3.67338; Hotellings 'F' value = 3.82874; Wilks = 3.77011 Sig. 0.01) Table 59.

Detailed inquiry of data by Univariate 'F' test revealed that differences in time spent on agriculture work by the respondents of different, educational background were significant, whereas the differences were not statistically significant on other two types of activities.

Illiterate respondents spent significantly more time in agriculture work (131.02 mins. per day) than those having highest education level upto high school and above (43.61 mins. per day). It is inferred that highly educated group of respondents spent least amount of time in doing agriculture work as compared to women belonging to other education groups.

Family Variables

Family Type : The time spending pattern on various activities by the respondents belonging to nuclear and joint family type differed significantly (Pillais, Hotellings, Wilks 'F' value = 3.05609 Sig. 0.01 per cent) Table 60.

The data on time spent on each activity by respondents belonging to different family type showed that respondents

Table 60 :Differences in Time Spending Pattern on Household, Agriculture and Allied Work due to Family Type of Respondents

A. Multivariate Test of Significance

Test Name	Value	Approx.F	D.F.	Error D.F.	Sig.
Pillais	0.04469	3.05609	3	196	S**
Hotellings	0.04678	3.05609	3	196	S**
Wilks	0.95531	3.05609	3	196	S**

B. Time Spent on Various Activities According to Family Type

Variable	Mean Time Spent in Work (minutes per day)		
Family Type	Household	Agriculture	Allied
Nuclear	446.6532	95.4435	26.6129
Joint	434.8684	139.0132	23.4863
'F' ratio	0.4322	8.8725	0.3814
(1,198)			
Significance between variables	NS	S**	NS

Note : Figures in parentheses indicate df
** Significant at 0.01 level

from joint families spent significantly more time (139.01 mins. per day) in agriculture work than those from nuclear families (95.44 mins.). On the other hand, respondents from nuclear families spent more time on household and allied activities than those who hailed from joint families.

Family Size : The differences in time spending pattern by respondents of small, medium and large family size were found to

Table 61 :Differences in Time Spending Pattern on Household, Agriculture and Allied Work According to Family Size of Respondents

A. Multivariate Test of Significance

Test Name	Value	Approx.F	D.F.	Error D.F.	Sig.
Pillais	0.12684	4.42403	6	392.00	S**
Hotellings	0.13675	4.42156	6	388.00	S**
Wilks	0.87664	4.42290	6	390.00	S**

B. Time Spent on Various Activities According to Family Size

Variable Family Size	Mean Time Spent in Work (minutes per day) Household	Agriculture	Allied
1-4 members (small)	403.9516	85.6452	23.7097
5-7 members (medium)	468.7619	111.3810	25.5714
8 and more member (large)	429.3939	163.4848	28.1818
'F' ratio (2,197)	5.9141	6.5789	0.1794
Significance between variables	S**	S**	NS

C. Differences Between Mean Time Spent on Household and Agriculture Work With Family Size (Scheffe's test)

	1and2*	1and3*
		2and3*

Note : Figures in parentheses indicate df
** Significant at 0.01 level
* Significant at 0.05 level

be significant. (Pillais 'F' value = 4.42403, Hotellings 'F' value = 4.42156, and Wilks 'F' value = 4.42290 Sig. 0.01) Table 61.

The Univariate 'F' test indicated significant differences in time spent on household and agriculture activities of women due to family size. But the time spent on allied activities did not differ significantly. Maximum average time of 468.76 mins. per day was spent on household work by respondents from medium size families which was significantly more than that spent by small family size respondents i.e., 403.95 mins. per day.

It was observed that respondents belonging to large family size spent maximum time (163.48 mins. per day) on agriculture work which was significantly more than that spent by women belonging to small family size (85.64 mins. per day). Similarly respondents from large family size spent significantly more time (163.48 mins. per day) on agricultural work than those belonging to medium family size (111.38 mins. per day). Time spent in allied activities did not differ significantly due to family size.

Family Income : The time spending pattern on various activities by respondents from different income groups differed significantly (Pillais 'F' value = 3.24207; Hotellings 'F' value = 3.29904; Wilks 'F' value = 3.28487 Sig. 0.01) Table 62.

Further analysis suggested that there were significant differences between different family income groups in time spent on agricultural activities, time spent on household and allied activities by respondents from different family income groups did not differ significantly.

Table 62 :Differences in Time Spending Pattern on Household Agriculture and Allied Work According to Family Income of Respondents

A. Multivariate Test of Significance

Test Name	Value	Approx.F	D.F.	Error D.F.	Sig.
Pillais	0.14183	3.24207	9	588.00	S**
Hotellings	0.15411	3.29904	9	578.00	S**
Wilks	0.86263	3.28487	9	472.30	S**

B. Time Spent on Various Activities According to Family Income

Variable	Mean Time Spent in Work (minutes per day)		
Family Income	Household	Agriculture	Allied
Upto 1500	438.2895	141.5132	24.6711
1501-3000	468.7500	117.5000	23.0357
3001-4500	441.8000	94.200	39.6000
4501 and above	414.6512	63.0233	21.6279
'F' ratio	1.6330	6.1322	1.6806
(3,196)			
Significance between variables	NS	S**	NS

C. Differences Between Mean Time Spent on Agriculture Work with Family Income (Scheffe's test)

1and4*

Note : Figures in parentheses indicate df
** Significant at 0.01 level
* Significant at 0.05 level

Maximum average time of 141.51 mins. per day was spent on agricultural activities by respondents who belonged to minimum family income group which was significantly more than what was spent (63.02 mins. per day) by respondents who belonged to highest family income group.

Table 63 :Differences in Time Spending Pattern On Household, Agriculture and Allied Work According to Family Occupation

A. Multivariate Test of Significance

Test Name	Value	Approx.F	D.F.	Error D.F.	Sig.
Pillais	0.19355	3.36214	12	585.00	S**
Hotellings	0.23083	3.68684	12	575.00	S**
Wilks	0.80977	3.53470	12	510.92	S**

B. Time Spent on Various Activities According to Family Occupation

Variables Family Occupation	Mean Time Spent in Work (minutes per day) Household	Agriculture	Allied
Farming	426.7857	132.8571	19.2857
Goat and sheep rearing	468.5000	162.0000	30.0000
Casual/Agriculture labour	453.7736	161.6038	28.8679
Shop/Business/Industry	492.1429	121.4286	27.1429
Service	425.3922	76.5196	23.6765
'F' ratio	1.6529	7.9293	0.3566
(4,195)			
Significance between variables	NS	S**	NS

C. Differences Between Mean Time Spent on Agriculture Work with Family Occupation (Scheffe's test)

3and5*

Note : Figures in parentheses indicate df
** Significant at 0.01 level
* Significant at 0.05 level

Family Occupation : The family occupation was found to be a determinant which influenced significantly the time spending pattern by respondents in performing various activities. (Pillais, 'F' Value = 3.36214, Hotellings 'F' value = 3.68684, Wilks 'F' value = 3.53470 Sig. 0.01) Table 63.

Subsequent analysis of the differences in time spent by respondents in each activity inferred that amongst different occupational categories, there were significant differences in time spent on agriculture work, whereas, the difference in time spent on household and allied activities by women from different family occupation was not found statistically significant.

It was observed that considerably long time (161.60 mins. per day) was spent on agricultural activities by the respondents hailing from family occupation of casual and agricultural labour which was significantly higher than that spent by respondents belonging to government service as main family occupation (76.51 mins. per day).

Note : Maximum time (162.00 mins. per day) was spent on agricultural tasks by the respondents whose main family occupation was goat and sheep rearing. But their number was comparatively much less than respondents from labourer households. Thus multivariate test showed significant differences between respondents from main occupation of labour and service.

Situational Variable

Participation in Community and Development Programmes : The differences in time spending pattern on various activities by respondents according to participation in community and development programmes were found to be significant (Pillais, Hotellings, Wilks 'F' value = 3.80224 Sig. 0.01) Table 64.

Table 64 :Differences in Time Spending Pattern on Household, Agriculture and Allied Work Due to Participation in Development Programmes by Respondents

A. Multivariate Test of Significance

Test Name	Value	Approx.F	D.F.	Error D.F.	Sig.
Pillais	0.05500	3.80224	3	196.00	S**
Hotellings	0.05820	3.80224	3	196.00	S**
Wilks	0.94500	3.80224	3	196.00	S**

B. Time Spent on Various Activities Due to Participation in Development Programmes

Variable Participation in Development Programmes	Mean Time Spent in Work (minutes per day) Household	Agriculture	Allied
High	448.3824	143.6029	27.1324
Low	438.9773	95.7197	24.5455
'F' ratio (1.198)	0.2619	10.2761	0.2486
Significance between variables	NS	S**	NS

Note : Figures in parentheses indicate df
** Significant at 0.01 level

Further analysis on differences in time spent in each activity due to participation in development programmes revealed that respondents with high participation spent significantly more time in agriculture work (143.6029 mins. per day) as compared to those respondents who participated less in these programmes (95.71 mins. per day). However, time spent on household work and allied activities did not differ significantly due to participation of respondents in development programmes.

Hence, null hypothesis was rejected for all selected personal, family and situational variables. It may be inferred from these findings that age, education, employment status of respondents, family type, family size, family income, family occupation and participation in development programmes cause significant variation in time spending pattern of respondents on various activities.

Ho_2 There is no significant association between economic role performance and the selected variables.

Table 65 :Chi-square Values Showing the Association Between Economic Role Performance and Selected Variables

Selected Variables	Economic Role Performance Chi-square Values	Z-values
Age of respondents	0.8206 (df=1)	
Education of respondents	7.055** (df=1)	-2.52850**
Marital status	11.53** (df=1)	-3.39785**
Family type	0.6518 (df=1)	
Family size	5.001* (df=1)	2.418688**
Family income	0.1701 (df=1)	
Family occupation	5.05* (df=1)	-2.25171**
Caste	4.522* (df=1)	2.12706*
Land holding size	2.08 (df=1)	
Participation in development programmes	4.0506* (df=1)	2.0126*

** Significant at 0.01 level
* Significant at 0.05 level

Personal Variables : (i) Age of the respondents (ii) Education level of respondents (iii) Marital status of respondents.

Family Variables : (iv) Family type (v) Family size (vi) Family income (vii) Family occupation (viii) Caste (ix) Land holding size.

Situational Variables : (x) Participation in development programmes.

Chi-square test was applied to find out significant association between economic role and selected variables. Further Z test was computed on significant variables to test the level of significance of association of variables (Table 65).

Education level of respondents affected the economic role performed by the respondents (Chi-square value = 7.055 Sig. 0.01). Further Z test (Value = -2.52850 Sig. 0.01) confirmed that illiterate respondents performed significantly less economic role than literate respondents (Appendix B, Table 76).

Marital status influenced economic role performance of respondents (Chi-square value = 11.53 Sig. 0.01; Z value = -3.3978 Sig. 0.01) indicated that widows performed significantly high economic role than married respondents.

Family size affected the economic role performed by the respondents (Chi-square value = 5.001 Sig. 0.01; Z value = 2.4186 Sig. 0.01). Majority of respondents who belonged to small family

size performed high economic role. On the other hand, most of the respondents from large family size performed low economic role.

The main family occupation was categorized into two groups (i) agricultural and allied (ii) service and business. Most of the respondents from main family occupation group (ii) performed high economic role. Least number of respondents amongst occupation group (i) performed high economic role (Chi-square value = 5.05 Sig. 0.05; Z value = -2.25171 Sig. 0.01).

Caste influenced economic role performance of respondents (Chi-square value = 4.522 Sig. 0.05; Z value = 2.12706 Sig. 0.05). It was observed that most of the respondents who belonged to low caste families performed high economic role (Appendix B, Table 79).

Participation in community and development programmes influenced the economic role performed by respondents. (Chi-square value = 4.0506 Sig. 0.05; Z value = 2.0126 Sig. 0.05). It was found that most of the respondents with low participation rate in community and development programmes performed high economic role.

Hence, null hypothesis was rejected for education of respondents, marital status of respondents, caste, family size, main family occupation and participation in community and development programmes and accepted for age of respondents, family type, family income and land holding size.

Ho_{3a} There is no significant impact of various selected determinants on women's status :

Linear multiple regression analysis was carried out to study the impact of different determinants on status of women. In the earlier analysis 10 outliers (unrepresentative observations) were detected and excluded from further analysis. The regression analysis carried out on the remaining 190 observation gave the following results.

Table 66 :Linear Multiple Regression Showing Impact of Various Determinants on Status of Respondents

Model Fitted : Linear

Multiple R	R Square	Adjusted R-square	Standard error
0.76786	0.58961	0.57616	3.56285

Analysis of variance :

	DF	Sum of squares	Mean Square	F
Regression	6	3337.46793	556.24465	43.81976
Residual	183	2322.98765	12.69392	

The Regression Model

$$Y = 0.421880 + \underset{(4.197)^{**}}{2.770745\ X_1} + \underset{(6.469)^{**}}{16.345017 \log X_2}$$

$$+ \underset{(3.388)^{**}}{0.001282\ X_3} + \underset{(5.510)^{**}}{3.092335\ X_4} + \underset{(3.323)^{**}}{1.808423\ X_5}$$

$$+ \underset{(2.444)^{**}}{0.193768\ X_6}$$

Where Y =	Status score		
X_1 =	Employment status of respondents	(Non-employed = 0 employed = 1)	
X_2 =	Age of respondents	(Actual number of years)	
X_3 =	Economic role of women.	(Actual monthly contribution in Rs.)	
X_4 =	Marital status of respondents	(Widow = 1 Married = 0)	
X_5 =	Family type of respondents	(Nuclear = 1 Joint = 0)	
X_6 =	Education of respondents.	(Actual number of years of education)	

The 'F' ratio was found to be 43.81926 with 6 and 183 d f This value was statistically signficant at 1 per cent level. (P value is almost zero).

The co-efficient of determination of this model was 58.961 per cent. All explanatory variables turned out to be statistically significant at 0.01 level ('t' values in parantheses). When employment status of women, age of respondents, economic role of respondents, marital status of respondents, family type and education of respondents were considered as determinants of status of tribal women the linear effect of determination was found to be 58.961 percentage.

The step-wise regression (forward selection method) was carried out with P in = 0.05. The order in which variables (determinants of status) entered in the model is as follows :

Step	Variable	R^2
1.	Employment status of women	0.28549
2.	Age of respondents	0.44163
3.	Economic role of respondents	0.49446
4.	Marital status of respondents	0.55201
5.	Family type of respondents	0.57621
6.	Education of respondents	0.58961

The variable family occupation did not enter the regression model. Hence, null hypothesis was rejected for remaining variables except for family occupation. It can be inferred that employment status, age, economic role, marital status, family type and education of respondents emerged as key determinants of status of women.

Ho_{3b} There is no significant impact of various selected determinants on household development of respondents

Linear Multiple Regression Analysis was carried out to study the impact of different determinants on household development. In the early analysis 10 outliers (unrepresentative observations) were detected and excluded from further analysis. The regression analysis carried out on the remaining 190 observations gave the following results.

Table 67 :Linear Multiple Regression Showing Impact of Various Determinants on Household Development

Model Fitted : Linear

Multiple R	R Square	Adjusted R-square	Standard error
0.73623	0.54203	0.53213	1.95065

Analysis of variance :

	DF	Sum of squares	Mean Square	F
Regression	4	833.13502	208.28376	54.73926
Residual	185	703.92797	3.80502	

The Regression Model

$$Y = 15.592036 + \underset{(6.958)}{0.001194}\ X_1 + \underset{(6.258)}{0.000461}\ X_2 + \underset{(4.973)}{1.470878}\ X_3 + \underset{(3.499)}{0.143858}\ X_4$$

Y = Development score

X_1 = Economic role of women (Actual monthly contribution)

X_2 = Rest of family income (Actual family income -women's contribution)

X_3 = Family type (Nuclear = 1 Joint = 0)

X_4 = Education of respondents (Actual number of years of education)

The 'F' ratio was found to be 54.73926 with 4 and 185 d f This value was statistically significant at 1 per cent level. (P value is almost zero).

The coefficient of determination of this model was 54.203. All explanatory variables turned out to be statistically significant at 0.01 level ('t' values in parantheses). When economic role of women, rest of family income, family type and education of respondents were considered as determinants of household development of women the linear effect of determination was found to be 54.203 percentage.

The step wise regression (forward selection method) was carried out with P in = 0.05. The order in which variables (determinants of household development) entered in the model is as follows :

Step	Variables	R^2
1.	Economic role of respondents	0.34540
2.	Rest of family income	0.45376
3.	Family type	0.51172
4.	Education of respondents	0.54203

The variables age of respondents and main family occupation did not enter the regression model. Hence, null hypothesis was accepted for these two variables and rejected for remaining variables. Therefore, it may be concluded that economic role of respondents, rest of family income, family type and education of respondents emerged as key determinants of household development of respondents.

Ho_4 There is no significant relationship between economic role performed by respondents with their household development and status.

Corrrelation co-efficient was computed to test this hypothesis (Table 68). A significant positive correlation resulted between economic role of respondents and status ('r' =

Table 68 :Correlation Coefficient Values Showing Relationship of Economic Role With Household Development and Status of Respondents

Variable	Status ('r'-value)	df	Household Development ('r'-value)	df
Economic role of respondents	0.4988**	198	0.5244**	198

** Significnat at 0.01 level.

0.4988 Sig. 0.01); economic role and household development ('r' = 0.5244 Sig. 0.01). The null hypothesis was rejected in view of the 'r' values. Thus, it can be concluded that impact of economic contribution of respondents was more towards household development than towards status as indicated by 'r' values stated above.

Ho_{5a} There is no significant differences in the status between employed and non-employed respondents.

Table 69 :'t' Value Showing Difference in Status Between Employed and Non-Employed Respondents

Employment Status (N=200)	Mean Status Scores	S.D.	't' value
Employed (N=100)	36.6	(5.2)	
Non-employed (N=100)	30.8	(5.00)	8.044** (df=198)

** Significant at 0.01 level.

't' test was applied to test the significant differences in mean status scores between employed and non-employed respondents (Table 69). 't' value = 8.044 Sig. at 0.01 level revealed significant differences between status of employed and non-employed respondents. Thus, null hypothesis was rejected. Hence, it can be concluded that employed respondents had significantly higher status than non-employed respondents.

Ho_7 There is no significant difference in household development between employed and non-employed respondents.

Table 70 :'t' Value Showing Difference in Household Development Between Employed and Non-Employed Respondents

Employment Status (N=200)	Mean Household Development Scores	S.D.	't' value
Employed (N=100)	20.31	(3.25)	
Non-employed (N=100)	18.72	(3.01)	3.5972** (df=198)

** Significant at 0.01 level.

't'-test was carried out to test the significant differences in mean household development scores between employed and non-employed respondents (Table 70). 't' value = 3.5972 Sig. at 0.01 level depicted significant differences between household development of employed and non-employed respondents. Thus, null hypothesis was rejected. Hence, it can be concluded that employed respondents had significantly higher developed households than non-employed respondents.

9. Discussion of Findings

The findings of the study in relation to the employed and non-employed groups pertaining to economic role, status and household development are discussed below:-

9a. Economic Role

9a. (i) Occupational Profile

About one half of the employed respondents were working on part time basis as 'Anganwadi' workers, helpers, sweepers, peons and others as labourers, teachers, clerks and nurses. Scheduled caste and tribal women account for nearly half of all female agricultural labourers, although they make up a quarter of India's rural female population (Bennette, 1991). Most of the respondents did not undergo any special training for their occupation. It may be perhaps, due to lack of education and availability of training facility in the tribal area. Extension change agents did not play any role as a source of training for employment. Similar observations were made by Dandekar (1983). A vast majority of respondents expressed their satisfaction from paid jobs similar to the findings reported by Singal (1989). This may be because of additional income to their families as well as to escape tough, semi-nomadic migratory life. Most of the employed respondents perceived to have better status than non-employed respondents. This result is in congruence with the findings of studies conducted by Sultana (1984) and Singal (1989) that employed women expressed satisfaction with their jobs due to greater say in the family and more respect from husbands.

9a. (ii) Role of Respondents in Household, Agricultural and Allied Activities

Household Tasks : Respondents were invariably responsible for all household tasks irrespective of employment status. Perlmutter and Wampler (1985) reported that the wife was the major performer of all household tasks irrespective of employment status.

Task-wise analysis revealed that help of female family members was received in tasks like childcare, care of house, fetching water, fuel etc. Similar findings were reported by Kaur and Punia (1986), Rao (1990), Verma (1990) and Borah (1991).

Findings of the present study showed that help of husbands was received in tasks like childcare, fetching fuel, shopping and sometimes in meal preparation. Similar findings were observed by Kaur and Punia (1986) and Rao (1990). Involvement of male members was found to be nil in case of mopping, mud-plastering and care of clothes. This finding is supported by studies of Singal (1989) and Borah (1991). Help of husbands was received more by employed respondents than non-employed category. This finding is consistent with the findings of Ahuja (1980), Soni (1982) and Sultana (1984) where husbands of employed women were found to participate more in household tasks than the husbands of non-employed women. Paid help was received by few employed respondents in tasks of childcare, care of clothes and fetching fuel.

Agricultural Tasks : Majority of respondents were responsible for various agricultural tasks. This finding is supported by Chakarvarti (1975), Kaur (1986), Singal (1989), Sangwan et al. (1990), Sharma (1991). Tribal women outperformed men in agricultural tasks because land holding being small, men were engaged in other vocations like pastoralism and paid jobs to augument family income.

Task-wise analysis revealed that although none of the operations were found to be gender specific, ploughing was exclusively men's job. This finding was supported by several research studies (Chakarvarti, 1975; Kumar and Singh, 1983; Singh and Sharma 1988; Singal, 1989; and Chauhan and Oberoi 1990). Participation of respondents was low in seed sowing as it was a common belief that if women sowed the crop would not germinate. Less participation was observed in irrigation and fertiliser application as was reported by studies conducted by Munjal (1984) and Singh and Sharma (1988). All the remaining farm operations as stated above were mainly carried out by women.

Animal Care : The agro-pastoral economy of the area is such that mechanisation of agricultural operations is not possible; thus, cattle were kept not only for providing milk but also for ploughing and for producing manure essential for agriculture. Sheep and goats were reared for sale, meat and wool.

In livestock care, role of males and females were specified. Sheep and goat rearing was male dominated area and women had

almost no role in it. Due to large size of flock and harsh climatic environment they were reared at pastures for which seasonal migration takes place. On the other hand, women were mainly responsible for care of cattle at home, which included subtasks such as cutting and fetching fodder, cleaning of sheds, feeding, grazing of animals, milking,etc.

Kaur (1982), Munjal (1984), Singal (1989) reported similar findings that all livestock work was predominantly women centered and mostly performed by farm women.

Allied Tasks : Spinning and weaving was done in most of the households under study. This was an important occupation among the 'Gaddis' and both men and women re engaged in it. These findings were supported by research studies conducted by Saikia (1984), Singh and Gandhi (1987), Singh et al. (1987). Findings of Oberoi et al. (1989), Mehra (1992), Sud (1992) reported that spinning and weaving were common allied activities carried out by 'Gaddi' tribal women in the area. Kitchen gardening was a common allied activity in which females dominated and men and children also contributed towards it.

9a. (iii) Time Spent in Household, Agricultural and Allied Activities

Activities that had high demand on homemaker's time in tribal area were meal preparation and childcare. Majority of respondents prepared three meals in a day,hence time utilization on food-related tasks was more. Most of the respondents had young children who needed more care from their mothers and thus

demanded more time of respondents. These findings were similar to the results of the studies conducted by Kamalamma (1981), Chauhan (1981), Saxena and Bhatnagar (1985), Singal (1989), Sharma (1991), Kulkarni (1991).

Significant differences were not found in time spent on childcare, meal preparation, fetching of water, shopping, account keeping and care of others by employed and non-employed respondents because all these tasks were usually performed by respondents irrespective of their employment status. Tribal women fetched only drinking water as all other tasks related to water were performed near the source of water. Hence, time spent in this task was comparatively less than the time reported in other researches which ranged from 35.42 mins. to 5 hrs. (Kaur, 1986; Singh and Gandhi, 1987).

Employed respondents spent significantly less time on care of house ('t' value = -5.794 Sig. 0.01), care of clothes ('t' value = -5.46 Sig. 0.01) and fetching fuel ('t' value = -4.957 Sig. 0.01). Lack of time, more help from family members and paid help accounted for less time spent in performing these tasks by employed respondents. In India's rural areas, firewood accounts for 68 percent of total household energy use. Of this, around 13 percent is purchased, 64 percent is collected and 23 percent is homegrown. N.S.S. data showed that amount of time women spent in collection of fuel and fodder is inversely related to the size of land holding. It holds true for hilly tribal area with small land holding where majority of respondents spent large amount of time in fetching firewood fuel from nearby forests. They had to

gather, dry and store large amount of firewood for cooking as well as keeping the house warm in winter season. Trips to collect fuel were often more frequent before the winter snows thus requiring more time as reported by Kamalamma (1981) and Srivastva (1985) (0.58 hrs.. to 5 hrs.). Employed women spent less-time on animal care ('t' = -5.36 Sig. 0.01), agricultural ('t' value = -6.15 Sig. 0.01) and allied activities ('t' value = -2.375 Sig. 0.01) than non-employed respondents.

On the whole, employed respondents spent significantly less time on non-market work than non-employed respondents ('t' value = -8.452 Sig. 0.01). This result was substantiated by studies conducted by Chauhan (1981), Kaur (1982), Devi and Ravindran (1985) and Verghese (1986).

Findings showing influence of variables were examined.

The results indicated significant differences in time spending pattern on household tasks and no variation in agricultural and allied activities due to age of respondents ('F' value = 3.02080 Sig. 0.01). This may be perhaps due to the fact that older homemakers spent less time on household tasks as daughters-in-law or grown up daughters took up main responsibility of these tasks. It was supported through observations of sub-sample that young homemakers participated more in household tasks as they had young children to look after. This is in congruence with the findings reported by Sandhu (1985), Kaur (1986), Singal (1989), Borah (1991), Mehra (1992). However, middle aged and old aged homemakers continued their

participation in agricultural and allied activities. Singh and Singh (1981) found that middle aged women participated more in agricultural activities as compared to young and old homemakers. However, these findings are in contrast to the results reported by Kaur (1982) and Kaur (1990) that time spent in agricultural tasks was negatively related with age of homemakers.

Education of respondents depicted significant differences in time spent by respondents on agricultural tasks ('F' value = 3.67338 Sig. 0.01). Multivariate test revealed that illiterate respondents spent significantly more time in agricultural tasks (442.755 min. per day) than those having highest education level in tribal area i.e. upto high school and above (416.11 min. per day). This may be because respondents from high education category were mainly occupied in paid work and thus spent less time in agricultural tasks than illiterate women. This finding is supported by studies conducted by Kaur (1982), Devi (1980) and Borah (1991). Education as a variable did not influence time spent on household and allied tasks. Similar findings were reported by Kaur (1982).

Findings revealed significant differences in time spending pattern of respondents on household, agricultural and allied tasks on account of employment status of respondents. This may be because employed respondents had less time at their disposal than non-employed respondents ('F' value = 67.10878 Sig. 0.01). No other personal, family and situational variable showed significant differences on time spent by respondents in allied activities.

Family size depicted significant differences in time spending pattern of respondents ('F' value = 4.42403 Sig. 0.01). Respondents from medium family size spent significantly more time (468.7619 min. per day) on household work than those from small family size (403.9516 min. per day) due to additional work of all family members. However, respondents from large family size spent comparatively less time than from medium family size due to more help from other family members. Similar findings were reported by Kamalamma (1981), Sandhu (1985), Singal (1989) and Borah (1991). No other family variable influenced time spending pattern of respondents on household tasks. Family income, occupation, land holding size and caste make up the socio-economic background of respondent households. As findings revealed earlier that more paid help was not used due to high income, occupation, size of land holding and caste of respondents and only respondents themselves performed household tasks hence no influence of these variables was observed.

Time spent by respondents on agricultural tasks depicted significant variation due to family type, size, income and main family occupation. Finding revealed that respondents from joint family type and large family size spent significantly more time in agricultural tasks than those from nuclear families. It may be because in joint families (large family size) the land holding was comparatively more which required more work from female members as men were found to be mostly away with flocks of sheep and goats or engaged in paid jobs in cities. Therefore, main responsibility of agricultural work fell on the shoulders of

women who had to feed large number of family members in joint households. These findings are contrary to the studies by Sithalakshmi (1975), Munjal (1984), Jain (1986), where the extent of participation of women in agriculture was inversely correlated to the size of family. These differences in the findings may be due to the fact that these studies pertain to non-tribal and plain areas of the country where role of women in agriculture is different than that of tribal women as discussed above.

Time spent on agricultural tasks was found to be maximum in case of respondents who belonged to minimum family income group and vice-versa. Similarly, respondents from main family occupation of casual labour/agriculture labour spent considerably more time on agricultural work (161.6038 min. per day) than those belonging to service occupation (76.5196 min. per day). This may be because less family income become the compelling forces for respondents to work more on farms because sustenance of family is based on farm produce or income earned from cash crops.

These findings are supported by studies conducted by Sharma (1980), Kaur (1982), Devi (1983), Devi and Reddi (1984), Kaur (1986), Sen (1988), Regmi (1992), who pointed out that rural women from low economic households spent more time in agricultural related tasks than women from medium and high economic households. Borah (1991) reported similar findings that significant differences were found in time spent by households in labour and service as main family occupation.

Participation in development programmes influenced significantly the time spent by respondents on agricultural tasks ('F' value = 3.80244 Sig. 0.01). Respondents with higher level of participation in development programmes spent significantly more time on agricultural activities (143.6029 min. per day) than those who participated less in them (95.7197 min. per day). This result is consistent with the findings reported earlier that non-employed respondents participated more in development programmes as well as in agricultural activities on account of more time at their disposal than employed respondents. However, time spent on household work and allied tasks did not differ significantly.

On the whole, employed respondents were observed to participate in all productive as well as non-productive tasks but spent comparatively more time on productive tasks and less time on non-productive tasks than non-employed respondents ('t' value = 10.03 Sig. 0.01). These findings are supported by several research studies (Chauhan, 1981; Kaur, 1982; Devi and Ravinderan, 1985 and Verghese 1986) which concluded that non-employed respondents spend more time on household tasks than employed respondents. Findings of the present study revealed that non-employed respondents spent significantly more time on almost all non-productive tasks except religious activities. It can be inferred that non-employed respondents have sufficient time at their disposal which can be utilized in productive tasks.

9a. (iv) Monetary Valuation of Non-Market Work and Economic Role Performed by Tribal Women

Monetary Valuation : There seems to be a universal tendency to ignore the unpaid household labour of women and to devalue their role as household managers and producers and to ascribe greater work to 'exchange values' compared to 'use values'. Thus, a woman who specializes in the creation of 'use values' through household production, rather than 'exchange values' through paid employment is counted as not working or unemployed even though her household work, including production of subsistence crops, may occupy 16 hrs. of her day.

Review of studies have shown different systems of evaluation of household production. Evaluations may be expressed in either physical units, in which case they yield information on the volume of household production, or they may be expressed in monetary units yielding information on the value of household production. For the present investigation value of household production expressed in monetary units was used as it can more easily lend itself to comparison with other macro-economic measures. Further more, if data from household production is to be included in national accounts and income statistics, economic comparability is an important consideration. For the present investigation, the valuation of non-market work was carried out mainly by two methods i.e., Market Alternative - Individual Function Cost and Opportunity Cost Method.

The comparative results revealed that Market Alternative method yielded lower values of non-market work. Thus, on the

basis of these findings the Market Alternative method was finally selected to determine economic role in the entire analysis. Detailed discussions have already been mentioned in Chapter IV pp. 206-207

9a. (v) Contribution Through Economic Role Performance

Economic contribution through non-market work to total average family income was less in case of employed than non-employed women. As monetary value is dependent on the amount of time utilized on household, agricultural and allied productive work, monetary value of time spent in non-market work was found to be less for employed (Rs. 602.10 per month) than non-employed respondents (Rs. 896.10 per month). This result is supported strongly by the researches conducted by Bains (1975), Gage (1975), Malathy (1988).

Economic contribution through non-market work ranged between 16 to 25 per cent of total family income. The lower range depicted contribution of employed respondents and higher range of non-employed respondents. Malathy (1988) reported monetary value of household services to the range of 42 per cent. Joshi (1989) concluded that value of unpaid household work contributes 25 to 29 per cent of total national product in developing countries. Economic contribution of employed respondents through market work to total family income was 37.33 per cent. Employed women's economic contribution to family income was reported in the following range by Bhatti, 1981; (77-95 per cent), Rao and Hussain, 1983; (25 per cent), Verghese, 1986; (46 per cent).

Maximum number of respondents from minimum family income group were found to be engaged in market work. This finding revealed the fact that more women who belonged to lower family income group participated more in market work in order to fulfil the subsistence needs of their families. Similarly poor households studied by Sharma (1980), Kalapagam (1988) and Mies (1986) found that ultimate responsibility of running the household everyday, getting at least a minimum amount of food for all, of finding funds for emergencies and servicing debt, lies with the women. As the economic status of the household decreases, women have to combine their domestic work with other kinds of work.

Next majority of respondents who participated in market work belonged to high family income group. They were engaged in non-market work to enhance their family income for better standard of living and household development. Kulkarni and Harode (1990) reported that women take up employment to supplement their family income and raise their standard of living. These findings are consistent with the findings of Census of India (1981) which showed that work force participation rates are high at both ends of the education spectrum... among illiterate women on one hand and among those with high education on the other.

The percentage of economic contribution to family income by the respondents from low family income group was higher (55.90 per cent) than those who belonged to high income group (41.4 per cent). The result is supported by studies conducted by Bhatti (1981) and Rao (1983), who observed that as the family income

increases, percentage contribution of women to family income decreases.

Economic role was comprised of economic contribution of employed and non-employed respondents through market and non-market work. It was assessed at two levels - Low (below Rs. 1000) and high (above Rs. 1000). Maximum number of employed respondents performed high economic role with high contribution to family income than those who were non-employed. Overall monetary value of economic role was higher for employed respondents because they get wages from market work along with estimated monetary value of doing household and other productive tasks, whereas non-employed respondents performed only non-market work, thus the monetary value of economic role was less. This finding is supported by the studies conducted by Bains (1975), Rao et al. (1983), Verghese (1986), Malathy (1988).

Data on factors influencing the economic role performance were statistically analysed. Education of respondents influenced economic role performance (Chi-square value = 7.055 Sig. 0.01; Z value = - 2.52850 Sig. 0.01). As education increased, the economic contribution of respondents also increased. Due to improvement in educational level, respondents may be in a position to secure better paid jobs. This result was supported by the findings of a study conducted by Malathy (1988).

Economic contribution of widows was more towards family income than married respondents who had to shoulder the responsibility of family maintenance (Chi-square value = 11.53

Sig. 0.01; Z value = -3.39785 Sig. 0.01). According to Leela (1987) and Kumari (1989), level of economic contribution should form a critical factor in identifying women-headed households.

Most of the respondents who belonged to small family size performed high economic role as less help was available from other family members (Chi-square value = 5.001 Sig. 0.05; Z value = 2.418688 Sig. 0.01). Similar findings were reported by a study conducted by Bains (1975). Respondents from agriculture and allied family occupations performed low economic role, whereas respondents from wage employment and business family occupation performed high economic role (Chi-square value = 5.05 Sig. 0.05; Z value = -2.25171 Sig. 0.01).

Respondents from scheduled caste families contributed more towards their family income than those from higher caste. They were mostly employed because they belonged to low family income group (Chi-square value = 4.522 Sig. 0.05; Z value = 2.12706 Sig. 0.05). Rao (1983) observed that a large number of scheduled caste women are compelled to work because they generally belong to low income group. Bose (1985) concluded that female labour participation is influenced by caste factor i.e., it is higher among the lower caste and tribals than upper caste.

The study envisaged the influence of economic role performance of women on participation in community and development programmes. The results showed a dismal picture as most of the respondents with high economic role had less participation rate in these programmes (Chi-square value = 4.0506

Sig. 0.05; Z value = 2.0126 Sig. 0.05). Main reason of non-participation in development programmes was attributed to preoccupation of women in economic activity which consumed large chunk of their time. The perception of respondents about impact of development programmes gave a clear picture of reasons for their non-participation in them too. Respondents perceived that development programmes were not helpful to provide employment or imparted training or improve skills which prepare them for any income generation vocation.

Kaur (1982) reported that lowest percentage of respondents had high frequency of contact with development agents. Thomas and Khan (1990) found that rural women's exposure to development and participation is low. Impact of employment guarantee schemes (Dandekar, 1983) and impact of planned policies (Sharma, 1980; Dixon, 1982; Law, 1985) have also been investigated and it has been concluded that several improvements are needed in terms of content and implementation in these programmes so that greater participation of rural women in economic and income generating programmes is ensured. However, age of respondents, family type, family income, land holding size did not influence the economic role performance of tribal women.

9b. Status of Women

9b (i) General Indicators of Status of Women

The status of women in any society is the result of multiple factors and it can never be assessed in the background of a

single feature of action. Status of women in the tribal society is not a static phenomenon, but it oscillates according to the situational pattern.

'Gaddi' tribe is monogamous. Marriage is considered necessary and is usually arranged by parents or/and through exchange (Batta Satta). Early marriage was common and no variation in age of marriage was found due to employment status. This finding is supported by Mann (1987), Ramachandran (1978), Kuttikrishnan and Sucheta (1989) who pointed out that low age of marriage is the reason for lower status of women. Indian women have one of the lowest mean age of marriage (18.34 yrs.) in the world with lower averages obtaining in rural and tribal areas Bennett (1991).

Most of the respondents believed in black magic, 'Chela' (priest), evil spirits for cure of physical/mental illness and visited a doctor in case of serious illness only. Similar finding was reported by Mann (1987). More number of non-employed respondents visited witch priests than employed respondents. It was observed that although faith in magic world and spirits was deep rooted, tribal women were alert to current demands of small family size and adopted family planning methods too. More number of employed respondents adopted family planning methods than non-employed responds. This was supported by a study conducted by Sultana (1984).

Large percentage of respondents had freedom to spend and control over money because traditional life style is such that it

entails men's migration either to pasture lands or cities for paid employment. More number of employed respondents had more freedom to spend, had personal saving accounts and were free to choose modes of saving than non-employed respondnets. Evidence suggests that female wage earner may have a better position in the family because their contribution to family has more visibility and their independent earning capacity gives them more bargaining power (Rani, 1976; Baqai, 1986; Parthasarthy, 1988).

Authority of women in distribution and supervision of work at home is an important dimension of their status. More number of employed respondents perceived to have more authority in this sphere than non-employed respondents. Similar finding was reported by Sultana (1984) and Baqai (1986). Further results indicated that less number of employed respondents observed customs, traditions and rituals than non-employed respondents. This may be due to less time at their disposal and changed outlook due to education and employment. Sharon (1988) disclosed findings similar to this that to some extent there is a point of departure from traditional norms as found on modernity scale of status of women. In contrast to this, Aggarwal (1988) reported no change in traditional attitude of women.

Employed women had less leisure time than non-employed respondents as confirmed by a study conducted by Soni (1982).

9b. (ii) Decision Making Practices

Finding related to several aspects of decision-making were examined.

Personal Matters : Data pertaining to decisions related to personal matters of tribal women revealed a dismal picture. Respondents were found to have no say in marriage, choice of bridegroom and employment. All these matters were largely under the control of male domination. Similar observations were made by Bhasin (1988).

Family Matters : Decision-making pattern on family matters showed that respondents took independent decisions in social and community affairs such as participation in marriage, religious functions, festivals, fairs, funerals and development programmes. This may be because mostly tribal women have to handle all these matters in the absence of male members. Moreover, in contrast to other parts of non-tribal areas of the country where seclusion of women is common due to conservative influence of men, tribal women in this area were found to have social freedom which is remarkable in scope. Similar to this, findings reported by Samal (1993) and Sarkar (1994) on hill and tribal women reflected high degree of decisions in social participation.

Decisions related to child care, immunisation, illness of children and other family members were also taken independently by most of the respondents. This is in congruence with the results of studies conducted by Devi (1980), Bajwa (1984), Sethi (1988), Jahagirdar (1988;), Punia and Yadav (1990) and Kataria et al., (1992) that it is the women who are decision-makers in the areas related to motherhood and housework.

Extent of control in day to day expenditure at home is an indicator of the authority of women in domestic matters. On the whole, findings depicted a trend of independent decision by respondents related to various aspects dealing with income, expenditure control over cash etc. This result is supported by studies conducted by Licuanan and Gonzaliz (1976) and Awasthy (1982) who hold that independent decision - making is more common in expenditure pattern of household affairs. Findings reported by Singal and Goel (1986) and Kataria (1992) reported joint decisions on expenditure related to food, clothing, saving and investment. However, Bajwa (1984), Yadav and Gandhi (1988) indicated results in contrast to the present findings that rural women had no say in financial matters. It may be inferred from the above discussions that tribal women have more say in financial matters than rural women from other parts of India. Moreover, among tribal women, employed women have more control over these decisions. This is substantiated by studies conducted by Bardhan (1985), Bidinar (1986) and Parthasarthy (1988), Verma (1990). In contrast to this, Standing (1985) and Karlekar (1986) reported that women's earning ability led neither to economic independence, nor change in the male female relationship in decision-making in family.

Farm Matters : Although findings of present study depicted that the tribal women played a key role in agriculture and animal care, decisions concerning various aspects related to farm matters were mostly taken jointly. This is in congruence to the findings reported by Devi (1980), Jahagirdar (1988), Yadav (1988), Verma (1990), Punia and Yadav (1990).

Similar pattern of decision-making was found both in employed and non-employed respondents, however, more number of employed respondents took these decisions independently than non-employed respondents. This may be attributed to their earning ability which accords them higher say in overall decisions as discussed above.

Results of the study revealed active participation of tribal women in decision making but their perceptions were contrary to it as they agreed that it did not matter whether they make decisions or not. Similar findings were reported by Baqai (1976) that male superiority is endeared to such an extent that women themselves are convinced of their inferiority. More percentage of employed respondents perceived themselves as better decision makers than non employed respondent. This finding was substantiated by study of Baqai (1976), Sultana (1984).

Findings showing influence of variables on status of women were examined. Multiple Regression Analysis revealed that age, education, marital status, employment status, economic role of women and family type emerged as key determinants of women's status with coefficient of determination = 58.961 per cent.

With increase in age the status of women also increased. It may be due to the fact that middle and old age respondents were accorded higher status based on cultural norms and role expectations of mother and mother-in-law. This result is substantiated by studies conducted by Devi (1980), Zend and Harode (1991) and Harode et al. (1992).

Findings disclosed significant positive impact of education on status of women. Several research studies have supported the finding (Sultana, 1984; Bhan and Dak, 1986 and Verma, 1991).

Widows/separated had high status score than married women. Findings disclosed that cause of death of husbands/separation from husbands was mainly reported as excessive alcohol consumption. Thus, women had to take the responsibility of survival and maintenance of family members. These women were found to be mainly the sole earners in their families and head of households. Therefore, they took all decisions related to various aspects of family. Several scholars have pointed out that incidence of female headed household is growing particularly in developing countries (Visaria and Visaria, 1985; Leela, 1987; Kumari 1989).

Employment of women had an impact on their status. Employed and non-employed respondents varied significantly from each other in their level of status ('t' value = 8.044 Sig. 0.01). It may be inferred that cash income of employed women is more easily identified (and usually also a larger share of total family income) than the contribution to household income through unpaid family work whose labour and management skills are absorbed in the family's overall farm and household production efforts. This result is supported by the findings of several research studies (Rani, 1976; Madan, 1976; Sultana, 1984; Baqai, 1986; Bhan and Dak, 1986; Jahagirdar, 1988). On the contrary, findings of Standing (1985) and Karlekar (1986) revealed that employment of women does not bring any change in her status.

Significant relationship was found between economic role and status of women ('r' value = 0.4988 Sig. 0.01). Similar to this result, Bhasin (1988) and Mehra (1992) remarked that position of 'Gaddi' women in their society undobtedly reflect their indispensability to the system. Sarkar (1994) also pointed out that Santal tribal women enjoy high status because their contribution to their society is indispensable. Several research studies conducted in other parts of India have also confirmed that employed women's status is enhanced as a result of their increased earnings. (Grewal, 1985; Bidinagar, 1986; Bardhan 1985; Parthasarthy 1988).

Family type emerged as a key determinant of status of women. It may be because respondents of nuclear family type did not have many other family members to consult regarding all aspects of family living except husband who was found to be migratory in many a cases. In case of joint family type the existence of detterant against participating in female's work is clearly more marked when compared with nuclear family (Singh, 1975; Lal, 1979; Basu, 1992; Mehra, 1992 and Sarkar 1994).

Family size influenced the status of women (Chi-square value = 15.273 Sig. 0.01). But it was not a key determinant of their status. Shah and Thomas (1987) pointed out that family size influences status of women. Status of women was also influenced by main family occupation (Chi-square value = 23.250 Sig. 0.01). Mandal and Sahoo (1992) observed that status of women in tribal Bihar varies alongwith the differences in the level of socio-

economic status of families. However, family income did not show any association with status of women.

Development programmes should be an entry point of women empowerment and results of study disclosed that participation in them has significantly influenced the status of respondents (Chi-square value = 6.934 Sig. 0.05). But it was not a key determinant of status. Similarly, a study conducted by Thomas and Khan (1990) revealed that although association between participation in development and status of women was statistically non-significant yet women appear to be receptive to change and are better exposed to development programmes. Bhatt (1987) found a positive relationship between participation in development programmes and decision making in 'Chipko Andolan' of Himalaya. It may be inferred that more participation and improved programmes may positively affect the status of women in society.

Results of present investigation did not show significant association between caste and status of women. There are remarkably few cultural differences due to caste in tribal area and all castes display a certain flexibility in the absence of social and religious orthodoxy of plains. This may be the important reason of non-significant association in caste and status of women in this area. Similar findings were reported by Vlassoff (1982), Bhasin (1988) that relationship between caste and women's status was not predictable in tribal area.

Land holding size did not influence the status of tribal women as significant variation was not found in land holding size

among respondent households. Hence, it may be concluded from above discussion that status of women is determined by several variables. Similarly, results of several research studies favour to develop a composite status scale to determine the level of status of women because there is no coherent monolithic structure that can examine cross-culturally the various aspects of indicators of status of women as they are mostly unrelated factors (Population Crisis Committee, 1988; Oppong, 1985).

9c. Household Development and Contribution of Tribal Women

Household is a fundamental production unit in every type of economy. The ultimate purpose of production activities carried out at the household level is to meet the basic needs of household members. Economic role of women through non-market work and economic contribution through participation in market work leads to household development.

Most of the tribal respondents had good housing conditions in terms of maintenance and facilities available in their houses such as supply of electricity and availability of drinking water.

The women's health status affect their productivity. They need at least a certain level of health and nutritional input in order to be productive workers. The health of respondents and their family members was evaluated on the basis of selected indicators like frequency of illness, immunisation of children, thus overall health status was determined as good, fair and poor. Comparative assessment indicated that housing conditions, health status and quality of food was better in a large percentage of

employed respondent households than the non-employed category. Kumar (1978), Bidinagar et al. (1986) and Walker and Ryan (1988) have supported these findings as they pointed out that female labour participation had a statistically significant positive effect on energy intake of young children. There is considerable evidence from around the world that women's employment has the potential to benefit household nutrition through increasing household income. Gulati (1984) found that on days when both the male head of household and his wife were employed, their nutritional shortfalls in terms of calories were 11 per cent to 20 per cent while on days on which the woman was unemployed the short falls increased to 26 to 50 per cent.

Per unit consumption expenditure was calculated to assess the level of living of households. Findings disclosed that per unit income and expenditure of employed respondent households was more than non-employed households. As the employed respondent households had higher income on account of women's contribution, they were able to spend more than non-employed respondent households. This finding was supported by a study conducted by Rao (1983) who observed that without women's wages to support the family, 43.44 per cent families would live below poverty line.

Comparative assessment indicated that employed category spent more on items such as housing, clothing, health, fuel, transport, celebrations and electricity than non-employed category. Employed households spent almost double the amount on education of their children. This result is in congruence with

the findings reported by Kulkarni and Harode (1990) that maximum homemakers took up job to supplement their family income and educate their children. However, expenditure on liquor and entertainment was incurred more by non-employed respondent households than employed category. This result is substantiated by studies conducted by Mencher (1982), Dasgupta (1987), Mies (1986), which concluded that employed women excercise control of their income and use it for food and other basic needs (while men, apparently tend to spend portions of their income on liquor, cigarettes etc.) Most of the respondents had inadequate saving. On the whole, more number of material items were possessed due to women's economic contribution through wage employment. Similar findings were reported by a study conducted by Bhatty (1981).

Household development was assessed on the basis of selected indicators at three levels - low, medium and high. Most of the tribal respondents belonged to medium level of developed households. However, more number of employed respondents belonged to high level of household development than non-employed respondent households ('t' value = 3.5972 Sig. 0.01). It may be inferred that economic contribution of women through wage employment may be one of the influencing factors in determining higher household development.

Findings showing the influence of selected variables on household development were examined. On the whole, when strength of variables was tested, economic role of women, rest of family income, family type and education of women emerged as key

determinants of development of tribal households with coefficient of determination = 54.203 per cent.

Education of respondents showed a positive trend in determining their level of household development. Majority of illiterate and primary level educated respondents had medium level of household development and most of respondents having high education belonged to high level of household development. The result is substantiated by studies conducted by Parthasarthy (1988) and Nun (1990) who reported that education was an important indicator of development. Similarly, findings of studies conducted by Chakarvarti (1981), Adhikari (1981) and Jain (1986) observed that illiteracy is a constraint in development process.

Economic contribution of women showed significant positive impact on their level of household development. High economic role of women leads to higher economic contribution for better development of their households ('r' value = 0.5244 Sig. 0.01). Findings of studies conducted by Bhatty (1981), Rao (1983) and Jahagirdar (1988) concluded that women's role in economic productivity is the positive indicator which helps directly the development process.

Most of the respondents from nuclear family type were found to have higher level of household development than those from joint family type. It may be because in nuclear family type homemaker has more independence and freedom of decision. She has less of traditional outlook and social attitude of strucutured

roles to be performed which inhibit active participation in all spheres of household development. This result is consistent with the findings reported by Adhikari (1981) and Chakarvarti (1981).

Family income was significant contributor to household development. Majority of low income group respondents had medium to low household development whereas, most of the high income group had medium to high level of household development.

Household development was influenced by age of respondents (Chi-square value = 9.590 Sig. 0.05); main family occupation (Chi-square value = 30.392 Sig. 0.01) and exposure to mass-media (Chi-square value = 6.611 Sig. 0.05). However, these variables did not emerge as key determinants of household development in the tribal area. It may be inferred that several variables determine the level of household development. Parasarthy (1988), Nun (1990) and Sharma (1980) have also identified education, women employment and family income as influencing variables of development. However, no research study has reported the strength of these variables.

Thus, it can be observed how women's contribution through economic role plays an important role in enhancing the status of women and strengthening the household development.