DETERMINANTS OF SORW & FRD

CHAPTER V

DETERMINANTS OF STATUS OF RURAL WOMEN AND FAMILY RESOURCE
DEVELOPMENT

This Chapter concerns itself with identifying the
determinants of the dependent variables of the study viz;
Status of Rural Women and Family Resource Development. A
three-way statistical analysis presented below, was conducted
to realize the objectives of the study :

i. Pearson's product moment correlation coefficient was
    computed to identify the variables correlated with
    adoption level of HHFC technology, attitude of the
    respondents towards technology, respondent's perception
    towards technology and quality of consumption of the
    households.

ii. Analysis of Variance was computed to identify the
    explanatory variables accounting for differentials in
    human cost of work and extent of participation of women
    in decision making. For the significant F values,
    Scheffe's procedure for post hoc comparisons was
    applied to probe into differences between groups.
    Scheffe's value was compared at 0.05 level of
    significance.

iii. Multiple Regression Analysis, Step-wise, was computed
     to identify the determinants of SORW and FRD.

The schematic representation of the hypotheses postulated for the present study and the results of the hypotheses, obtained-through the above mentioned inferential tests, have been discussed and presented below :
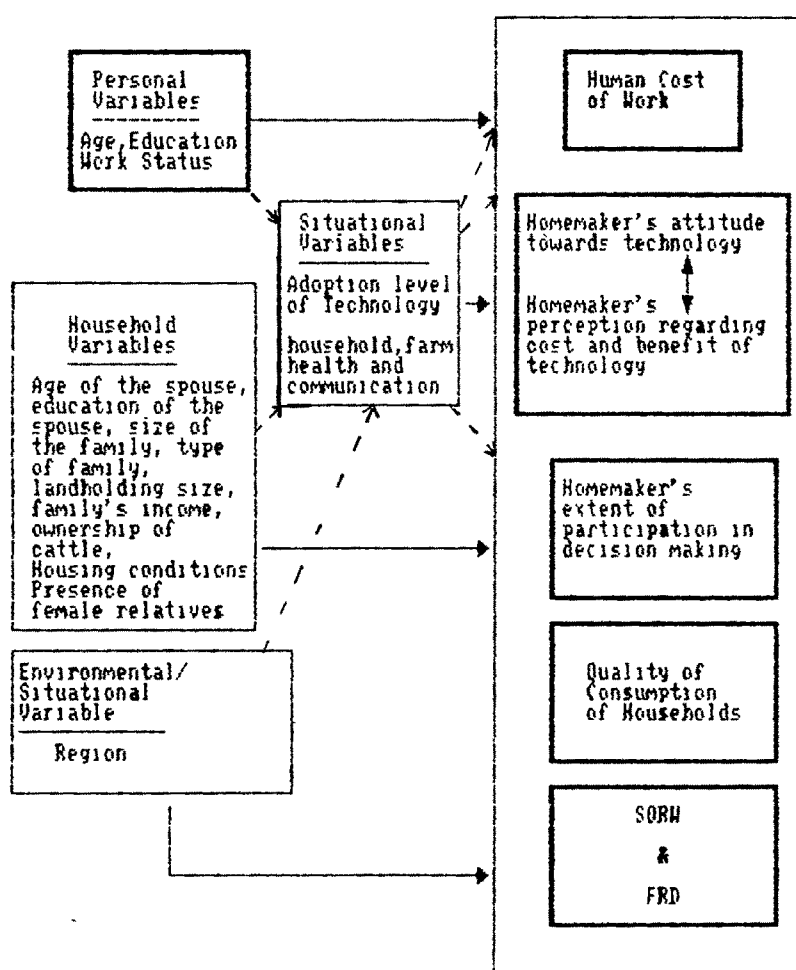

Fig. 5.1 : Schematic Representation of Hypotheses Formulated For The Study

H_o1 It is predicted that there is a significant relationship between adoption level of different technology viz., household, farm, health and communication and selected personal, household and situational variables.

H_o1a. There is a significant relationship between adoption level of household technology and selected personal, household and situational variables.

This hypothesis was tested by computing Pearson's product moment correlation coefficient. The 'r values (Table 5.1) indicated that a significant positive relationship existed between adoption level of household technology and work status of the homemaker, size of the landholding, family's income, region, adoption level of farm technology and adoption level of communication technology.

Table 5.1 :   Correlation coefficient values showing relationship between adoption level of househild technology and selected variables

Variables	Adoption level of Household Technology r' values	df
1	2	3
Personal Variables		
Age	-0.172^{**}	298
Education level	0.062	298
Work Status	0.417^{**}	298

1	2	3
Household Variables		
Age of the Spouse	-0.354**	298
Education Level of the spouse	0.050	298
Family Type	-0.137*	298
Size of the Landholding	0.523**	298
Family's Income	0.702**	298
Situational Variables		
Adoption Level of farm Technology	0.616**	298
Adoption level of communication Technology	0.652**	298
Region	0.321**	298

* Significant at 0.05 level
** Significant at 0.01 level

A negative significant relationship was found between adoption level of household technology and age of the respondents ($r=-0.172$, Sig. 0.01), age of spouse ($r=-0.354$, Sig. 0.01) and family type ($r=-0.137$, Sig. 0.05). There was no relationship found between adoption level of household technology and education level of the respondents and spouse.

The hypothesis was thus accepted for age and work status of the homemaker, age of the spouse, family type, size of the landholding, family income, region, adoption level of

farm technology and adoption level of communication technology and rejected for educational level of the respondent and spouse.

Thus it can be concluded that gainful employment of respondents and adoption level of household technology were positively correlated. Further, with increase in size of the landholding and family's income, adoption level of household technology also increased. With the advancement of the region adoption level of household technology also increased. Adoption level of household technology was also found to be significantly related to adoption level of farm technology. It can be inferred that more adoption of farm technology will lead to more adoption of household technology. It was also found to be significantly related to adoption level of communication technology. It can be inferred that households having more contact with channels of communication had high adoption level of household technology.

Age of the homemaker and age of the spouse were found to be negatively related with adoption level of household technology. It can be inferred that young homemakers and spouse had high adoption level of technology. It was also observed that adoption level of household technology was found to be negatively related with type of family. In other words it can be said that more number of nuclear families were having high adoption level of technology as compared to the joint families.

Education of the homemaker and spouse did not show any relationship with adoption level of household technology. This could be attributed to the fact that as there was not much variation in the literacy level of the respondents and spouse hence it failed to show any effect on their adoption level of household technology.

H_o1b. It is predicted that there is a significant relationship between adoption level of farm technology and selected personal, household and situational variables.

Table 5.2 :   Correlation coefficient values showing relationship between selected variables and adoption level of farm technology

Variables	Adoption level of Household Technology r' values	df
Personal Variables		
Age	-0.217**	298
Education level	0.046	298
Work Status	-0.538**	298
Household Variables		
Age of the Spouse	-0.319**	298
Education of the spouse	0.281**	298
Family Type	0.196**	298
Size of the Landholding	0.519**	298
Family Income	0.692**	298
Situational Variables		
Adoption level of communication Technology	0.573**	298
Region	0.429**	298

** Significant at 0.01 level

The 'r' values indicated (Table 5.2) that a significant positive relationship existed between adoption level of farm technology and education level of spouse (r=0.281, Sig. 0.01), family type (r=0.196, Sig.0.01), size of the landholding (r=0.519, Sig. 0.01), income of the family (r=0.692, Sig.0.01), region (r=0.429, Sig. 0.01) and adoption level of communication technology (R=0.573, Sig.0.01). A negative significant relationship was found between adoption level of farm technology and work status and age of the homemaker and age of the spouse. However, no relationship could be estalished betwee educational level of the homemaker and adoption level of farm technology.

The hypothesis was thus accepted for age and work status of the homemaker, age and education of the spouse, family type, size of the landholding, income of the family, region and adoption level of communication technology and rejected for education of the homemaker.

It can be concluded that higher the literacy level of the spouse the more will be the adoption of farm technology. More number of joint families will have high adoption level of farm technology. More the advancement of the region higher will be the adoption level of farm technology. Larger the size of the landholding and higher the income of the family higher will be the level of adoption of farm technology. More adoption of communication technology will lead to more adoption of farm technology. Further younger the homemaker and the spouse more will be adoption of farm

technology. However, the work status of the respondent and adoption level of farm technology were found to be negatively related.

No relationship could be established between the educational level of the homemakers and adoption level of farm technology. This could be attributed to the low literacy level of the respondents.

H_o1c There is a significant relationship between adoption level of health technology and selected personal, household and situational variables.

Table 5.3 : Correlation coefficient values showing relationship between selected variables and adoption level of health technology

Variables	Adoption level of Health Technology r' values	df
1	2	3
Personal Variables		
Age	-0.241**	298
Education	0.151**	298
Work status	0.127*	298
Household Variables		
Age of the spouse	-0.211**	298
Education level of the spouse	0.148**	298
Type of family	-0.304**	298
Caste	0.068	298
Size of the landholding	0.206**	298
Income of the family	0.245**	298

1	2	3
Situational Variables		
Region	0.194**	298
Adoption Level of Technology :		
Household	0.224**	298
Farm	0.197**	298
Communication	0.354**	298

** Significant at 0.05 level
* Significant at 0.01 level

Pearson's product moment correlation coefficient values presented in the Table (5.3) show significant positive correlationship between adoption level of health technology and education of the respondent (r = 0.151, Sig.0.01), her work status (r=0.127, Sig. 0.05), education of the spouse (r=0.148, Sig. 0.01), size of the landholding (r=0.206, Sig.0.01), income of the family (r=0.245, Sig. 0.01), region (r=0.194, Sig. 0.01), adoption level household technology (r=0.224, Sig.0.01), farm technology (r=0.197, Sig. 0.01) and communication technology (r=0.354, Sig.0.01). A significant negative relationship was found between adoption level of health technology and age of the respondent (r= -0.241, Sig.0.01), age of the spouse (r=-0.211, Sig.0.01) and type of family (r=-0.304, Sig.0.01). There was no relationship between adoption level of health technology and caste of the respondents.

The hypothesis was thus, partially accepted in view of the 'r' values.

Thus, it is concluded that with the increase of education of the respondents, level of adoption of health technology also increased. Work status of the homemaker was found to be positively correlated with adoption level of health technology indicating that employment outside home increased the adoption level of health technology, Education of the spouse, size of landholding, income of the familly and region also showed a positive relationship with adoption of health technology. With the increase of these variables, adoption level of health technology also increased. Adoption level of health technology was also significantly related to adoption level of household, farm and communication technology. It can be inferred that as there was an increase in adoption level of household, farm and communication technology there was an increase in adoption level of health technology also.

Age of the respondent and spouse had negative significant relationship with adoption level of health technology, which in other words indicate that younger the respondents and spouse more was the adoption of health technology. Similarly more number of nuclear families were adopting health technology than joint families because a negative relationship emerged between type of family and adoption level of health technology.

$H_o$ld There is a significant relationship between adoption level of communication technology and selected personal, household and situational variables and household variables.

Table 5.4 : Correlation coefficient values showing relationship between selected variables and adoption level of communication technology.

Variables	Adoption level of Household Technology r' values	df
Personal Variables		
Age	-0.128^*	298
Education	0.222^{**}	298
Work status	0.048	298
Household Variables		
Age of the spouse	-0.148^{**}	298
Education of the spouse	0.211^{**}	298
Family type	-0.154^{**}	298
Size of the landholding	0.532^{**}	298
Family income	0.693^{**}	298
Situational Variables		
Region	0.215^*	298

** Significant at 0.05 level
* Significant at 0.01 level

The 'r' values indicated (Table 5.4) a significant positive relationship between adoption level of communication technology and education of the homemaker (r=0.22, Sig.

0.01), education of the spouse (r=0.211, Sig.0.01), size of the landholding (r=0.532, Sig.0.01), family's income (r=0.693, Sig.0.01) and region (r=0.215, Sig. 0.01). A significant negative relationship was found between adoption level of communication and age of the homemaker (r=-0.128, Sig.0.05) and age of the spouse (r=-0.148, Sig.0.01). However, no relationship could be established between adoption level of communication technology and work status of the homemaker.

The hypothesis was thus accepted for age and education of the homemaker, age and education of the spouse, family type, size of the landholding, income of the family and region and rejected for work status of the homemaker.

It can be concluded that more the literacy level of the homemaker and spouse more will be the adoption of communication technology. More number of nuclear families had high adoption level of communication technology as compared to the joint families. Larger the size of the landholding and higher the family income, higher was the level of adoption of communication technology. More the advancement of the region, higher was the adoption level of communication technology. The negative relationship between adoption level of communication technology with age of the respondent and the spouse indicated that more number of young respondents were adopting communication technology as compared to the older respondents. However, work status of

the homemakers failed to show any relationship with adoption level of communication technology.

H_o2 : There is a significant difference in human cost of work (in terms of time and energy) according to adoption level of technology and selected personal and household variables.

Analysis of variance was computed to test the significant difference in human cost of work, measured in terms of time and energy expenditure.

Situational Variables

i.   Adoption Level of Technology : It accounted for significant differentials in time and energy expenditure of the respondents. As the adoption level of household technology increased, there was a decrease in time spent on household work (F value = 25.858, Sig.0.05), and farm work (F value= 23.569, Sig. 0.05). The time spent on leisure (F=29.670, Sig. 0.05), rest (F value = 25.931, Sig. 0.05), sleep (F value=28.917, Sig.0.05), and personal care (F value=24.136, Sig.0.05) increased with an increase in adoption level of household technology (Table 11, Appendix xviii). Moreover, with an increase in adoption level of household technology, the meàn energy spent by the respondents on work decreased. Hence, it can be concluded that increase in adoption level of household technology led to reduction in human cost of work.

Personal Variables

ii.   Age : The age of the respondent influenced the mean time spent on household work (F value=19.920, Sig.0.05), leisure time (F value = 28.411, Sig. 0.05), rest (F value = 20.89, Sig.0.05) and personal care (F value = 25.48, Sig. 0.05). However, no significant difference was found with regard to time spent by respondents on farm work and sleep. Scheffe's value computed to see the difference between the groups revealed that maximum time on household work was being spent by the young homemakers (Appendix xix). The older homemakeers were spending more time on leisure, rest and personal care as compared to the young and middle aged homemakers. These findings are in congruence with the findings of Sandhu (1985), Kaur (1986) and Singal (1989).

        Age of the respondents also accounted for differentials in the mean energy expended by them on work (F value =20.198, Sig.0.05, Scheffe's value significant at 0.05 level for young and middle aged and young and old groups).

iii.   Education : Education level of the respondents exerted significant influence on the household work (F value = 12.920, Sig. 0.05), farm work (F value = 10.156, Sig.0.05), and rest (F value=25.271, Sig.0.05). It was observed that literate homemakers of both the regions

were spending less time on household and farm work as compared to the illiterate respondents (Appendix xx). They also had more time for rest.

Literacy level of the respondents also accounted for differentials in their mean energy expenditure on work (F value=12.461, Sig. 0.05, Scheffe's value significant at 0.05 level for illiterate group of region A and literate group of region B and illiterate group of region A and illiterate group of region B.

iv. Work Status : Time spent on household work (F value = 23.776, Sig. 0.05), farm work (F value=94.44, Sig.0.05), rest (F value=40.116, Sig.0.05), Sleep (F value=25.513, Sig. 0.05) and personal care (F value = 20.690, Sig. 0.05) varied significantly according to the work status of the respondents. Paid workers were spending minimum time in all these activities except farm work, where they were spending maximum time (Appendix xxi). Because of the demand on time at their work place, they had to shorten their work time at home.

Paid workers were spending maximum energy in a day on work as compared to the unpaid workers and housewives. This could be due to the fact that because of their dual responsibility at home as well as at the place of work, they had to spend more energy.

Household Variables

v.   Family Size :   Among the household variables, family
        size resulted in significant variations in mean time
        spent on household work (F value = 24.891, Sig.0.05),
        leisure (F value=26.09, Sig.0.05), sleep (F value =
        23.32, Sig. 0.05) and personal care (F value = 24.04,
        Sig. 0.05) (Appendix xxiı). Respondents having small
        family size were spending less time on household work
        as compared to the respondents with medium or big
        family size. They were also spending more time on
        leisure, sleep and personal care as compared to others.
        The findings of the prsent study were also supported by
        Kamalamma (1981) and Singal (1989) who reported that
        family sıze influenced the time expenditure pattern of
        the rural women.

        However, family size did not show any significant
        variation in the mean energy expenditure of the
        respondents while carryıng out household and farm work.

vı.   Family's Income :   Income of the family accounted for
        significant differences in the mean time spent by the
        respondents on household work (F value = 23.28,
        Sig.0.05) and farm work (F value=24.35, Sig.
        0.05),leisure (F value =23.44, Sig. 0.05), rest (F
        value=26.72, Sig.0.05) and sleep (F value=23.29, Sıg.
        0.05). These findings are supported by Kamalamma
        (1981), Sandhu (1985) and Singal (1989) who observed

that family's income influenced the time expenditure pattern of the rural women. Respondents belonging to high income group were spending less energy on work as compared to those belonging to medium and low income groups. This is attributed to the fact that due to economic prosperity, high income group respondents could afford modern household technology, which resulted in reduction in human cost of work (Appendix xxiii).

vii. Size of the Landholding :   Size of the landholding accounted for differentials in human cost of work as it showed significant variations in the mean time spent by the respondents on household work (F value=24.18, Sig. 0.05), farm work (F value=25.28, Sig. 0.05), leisure (F value=23.55, Sig. 0.05), rest (F value = 25.72, Sig. 0.05) and sleep (F value = 23.92, Sig.0.05). Respondents belonging to large farming groups were spending less time on household and farm work, and were spending more time on leisure, rest and sleep as compared to those belonging to medium and small farming groups (Appendix xxiv).

Size of the landholding further revealed significant differentials in mean energy expenditure on work. Respondents belonging to small farming households were spending maximum human energy on work whereas those belonging to large farming households were putting in minimum effort. This is due to the

fact that large farming households were high adopters of household technology (58 per cent) whose usage had led to reduction in human cost of work.

viii. Housing Conditions : These conditions also resulted in significant variations in mean time spent by the respondents on household (F value=26.458, Sig.0.05), and farm work (F value=28.141, Sig. 0.05), leisure (F value = 24.559, Sig. 0.05), rest (F value=51.928, Sig.0.01), sleep (F value=26.794, Sig.0.05) and personal care (F value=26.983, Sig. 0.05). Respondents with good housing conditions were spending less time on household and farm work as compared to those having average or poor housing conditions (Appendix xxv). Moreover, they were spending more time on leisure time activities, rest, sleep and personal care. Further, good housing conditions also led to conservation of human energy as respondents having them were spending less energy while performing work.

ix. Presence of Other Female Members : Presence of other female members in the household also led to the significant difference in household work (F value=8.388, Sig.0.05), farm work (F value= 9.070, Sig. 0.05), leisure (F value = 14.999, Sig. 0.05), rest (F value=39.444, Sig.0.01), sleep (F value=12.168, Sig.0.01). In both the regions, respondents belonging to these households who had other female members like mother-in-law, daughter-in-law, sister-in-law or

daughter (above ten years of age) were spending less time on household and farm related activities and were spending more time on leisure activities, rest, sleep and personal care (Appendix xxvi). The mean energy spent by these respondents on work was also less as compared to those in whose households other female members were not present.

The hypothesis was thus partially accepted for variables viz., age, education and work status of the respondents, size of the family, income of the family, housing conditions, presence of other female members and adoption level of household technology.

H_o3 There is a significant relationship between attitude of the respondents towards technology and selected personal, household and situational variables.

Table 5.5 :   Correlation coefficient values showing relationship between selected   variables and attitude of the respondents

Variables 1	Attitude r' values 2	df 3
Personal Variables		
Age	-0.128^*	298
Education	0.258^{**}	298
Work status	0.307^{**}	298

	1	2	3

Household Variables

Size of the landholding		0.311^{**}	298
Income of the family the spouse		0.301^{**}	298

Adoption Level of Technology

a)	Household		0.215^{**}	298
b)	Health		-0.178^{**}	298
c)	Farm		-0.135^{**}	298
d)	Communication			
	i)	Mass media	0.426^{**}	298
	ii)	Extension personnel	0.078	298

** Significant at 0.05 level
* Significant at 0.01 level

Pearson's product moment correlation cofficient values indicated (Table 5.5) that a significant positive relationship existed between attitude of homemakers and education level of homemakers and educational level of respondents (r=0.258, Sig.0.01), work status (r=0.243, Sig.0.01), size of the landholding (r=0.311, Sig. 0.01), income of the family (r=0.301, Sig.0.01), region (r=0.239, Sig. 0.01), adoption level of household technology (r=0.215, Sig.0.01) and adoption level of mass media technology (r=0.426, Sig.0.01). A negative significant relationship was found between attitude of the homemakers and age of the

respondents (r=-0.128, Sig.0.01), adoption level of health technology (r=-0.178, Sig. 0.01) and adoption level of farm technology (r=-0.135, Sig.0.01). No relationship was found between extension contact and attitude of the respondents.

The hypothesis was thus partially accepted considering the 'r' values.

It can be concluded that there was a significant relationship between age, education, work status of the respondents, size of the landholding, income of the family, region, adoption level of household, farm and mass media technology and attitude of the homemakers. This indicates that higher the education of the respondents, more favourable was their attitude towards technology. As the work status of the respondents increased their favourableness towards technology adoption also increased. Larger the size of the landholding and higher the income of the family, more positive was the attitude. MOre the adoption level of household and mass media technology more favourable was the respondents attitude towards technology. Further, the young homemakers had more favourable attitude towards technology than the older homemakers. This was due to the fact that as compared to the older respondents the young respondents were more prone to change and were motivated to adopt new ideas and practices hence, they had developed more favourable attitude towards technology. It was also found that higher the adoption level of farm and health technology less was the favourableness towards technology. This could be due to the

fact that mechanization of agriculture was adverse to the gainful employment of women, hence they had developed unfavourable attitude. Moreover, the respondents perceived that cost of health technology was more than its benefits hence they had unfavourable attitude towards adoption of technology.

As the extension contact of the respondents was very low, no relationship was found between extension contact and respondent's attitude towards adoption of technology.

$H_o 4a$ There is a significant relationship between perception of the respondents regarding benefits of selected technology and their attitude towards adoption of technology.

Pearson's product moment correlation coefficient values presented in the Table 5.6 indicate a significant positive relationship between attitude of the respondents regarding technology and their perception regarding benefits of household ($r = 0.218$, Sig. 0.01) and mass media technology ($r = 0.128$, Sig. 0.05). However, no relationship could be established between attitude of the homemakers and their perception regarding benefits of farm technology, health technology and contact with extension personnel.

Table 5.6 :   Correlation coefficient values showing
                relationship between perception of homemakers
                regarding benefits of selected technology and
                their attitude towards it

	Variables	Attitude (r values)	df
	Perceived benefits of technology		
a.	Household	0.218^{**}	298
b.	Health	0.078	298
c.	Farm	0.096	298
d.	Communication		
	i) Mass media	0.128^{*}	298
	ii) Contact with extension personnel	0.048	298

*   Significant at 0.05 level
**   Significant at 0.01 level

The hypothesis was thus accepted for household technology and mass media technology and rejected for health technology, farm technology and contact with extension personnel.

Thus, it can be concluded that there existed a significant relationship between attitude of the respondents and their perception regarding benefits of household and mass media technology. It can be inferred that more the perceived benefits regarding household and mass media technology more favourable was the attitude of the respondents towards technology. No relationship could be established between

attitude of the respondents towards technology and the benefits perceived by them regarding farm and health technology. It can be attributed to the fact that as respondents could perceive very few benefits of these two technology hence, no relationship could be established between perception of homemakers regarding their benefits and respondents attitude towards technology. As respondents had very less contact with extension agents so it failed to have an effect on their attitude towards technology.

$H_o 4b$ There is a significant relationship between perception of the respondents regarding costs of selected technology and their attitude towards adoption of technology.

Table 5.7 : Correlation coefficient values showing relationship between perception of homemakers regarding costs of selected technology and their attitude towards it

Variables	Attitude 'r' values	df
Perceived costs of technology		
a. Household	0.089	298
b. Health	-0.205**	298
c. Farm	-0.139*	298
d. Communication		
i) Mass media	0.079	298
ii) Contact with extension personnel	-0.129*	298

*   Significant at 0.05 level
**   Significant at 0.01 level

The 'r' values presented in the Table 5.7 indicate that a significant negative relationship existed between attitude of respondents towards technology and their perception regarding costs of farm technology (r = -0.139, Sig 0.05), health technology (r = -0.205, Sig. 0.01) and contact with mass media (r = -0.129, Sig. 0.05) No relationship was found between attitude of the respondents towards technology and their perception regarding costs of household technology and mass media technology.

The hypothesis was thus partially accepted in view of the 'r' values.

It can be concluded that more the perception of costs of farm and health technology by the respondents more unfavourable was the attitude of the respondents towards technology. Further higher the perceived costs of extension personel by the respondents, more unfavourable was their attitude towards technology. This negative correlationship between the perceived costs of above mentioned technology by the respondents and their attitude towards the same could be attributed to the fact that if respondents had felt more negative impact of technology then that had resulted in the formulation of unfavourable attitude towards technology, on the part of the respondents.

$H_o 5$: There is a significant difference in homemaker's level of participation in decision making due to adoption

level of technology and personal and household variables.

Analysis of variance was computed to test the significant difference in homemaker's level of participation in decision making process.

Situational Variable

Adoption Level of Technology : Differentials in respondent's extent of -participation in decisions pertaining to farm (F value = 23.893, Sig. 0.05), health (F value = 28.127, Sig. 0.05) and economic matters (F value = 19.241, Sig. 0.05) were observed due to adoption level of technology. Scheffe's value computed to see the difference between groups revealed that respondents belonging to low adopters of technology category had more say in decisions pertaining to farm, health and economic matters as compared to those belonging to medium and high adopters of technology (Appendix xxvii).

Personal Variable

Age : The age of the respondents significantly influenced their extent of participation in decisions related to household (F value = 27.156, Sig. 0.05) and health (F value = 24.425, Sig. 0.05), Young homemakers had higher extent of participation in decisions related to health as indicated by their mean decision score (Appendix xxviii). However, middle aged and old homemakers had high extent of participation in decisions related to household.

Edcuation : Literacy level of the respondents exerted significant influence on their extent of participation related to household (F value = 17.648, Sig. 0.05), health (F value = 38.433, Sig. 0.05) and economic (F value = 12.411, Sig. 0.05) decisions. It was observed that literate homemakers in both the regions had higher mean score as compared to the illiterate respondents thus indicating their high extent of participation in decision making process (Appendix xxix). However, literacy level of the respondents failed to show any significant difference in their level of participation in farm related decisions.

Work Status : Extent of participation of respondents in decisions related to household (F value 24.334, Sig. 0.05), health (F value = 19.679, Sig. 0.05), farm (F = 23.879, Sig. 0.05) and economic matters (F = 26.409, Sig. 0.05) varied significantly according to their work status. Housewives had greater say in matters concerning household as compared to the unpaid and paid workers (Appendix xxx). However, paid workers had high extentt of participation in decisions related to farm, health and economic matters as indicated by their high mean scores. Housewives had minimum say in farm, health and economic decisions.

Household Variables

Type of Family : Type of family resulted in significant variations in extent of participation of respondents in decisions related to household (F value = 9.749, Sig. 0.05) farm (F value = 10.043, Sig. 0.05), health (F value = 27.539,

Sig. 0.01) and economic matters (F value = 16.353, Sig. 0.01). In both the regions, extent of participation of homemakers in all areas of decision making was found to be more in nuclear families as compared to the joint families (Appendix xxxi).

Size of the Landholding : This household variable also exerted a significant influence on respondent's extent of participation is decisions related to farm (F value = 21.495, Sig. 0.05) and economic matters (F value = 19.231, Sig. 0.05). However it failed to exert a significant influence on decisions pertaining to household and health. The Scheffe's value computed to see the difference between the groups (Appendix xxxii) revealed that respondents belonging to small farming households had greater say in farm and health related decisions as compared to the respondents belonging to medium and large farming households.

Income of the Family :   Family's income accounted for differentials in respondent's extent of participation in decisions pertaining to household, (F value = 20.145, Sig. 0.05), farm (F = 21.495, Sig. 0.05) and economic matters (F = 19.231, Sig. 0.05). It was observed that respondents belonging to high income group had greater say in matters concerning household (Appendix xxxiii). However, they had minimum say in farm and economic decisions. It can further be observed that respondents belonging to low income groups had greater extent of participation in decisions related to farm

and economic matters as indicated by their mean decision scores.

The hypothesis was thus partially accepted for situational (adoption level of technology), personal (age, education and work status of the respondents) and household (type of family, size of the landholding and income of the family) variables.

H_o6 :   There is a significant relationship between quality of consumption pattern of households and adoption level of different technology and selected personal, household and other situational variables.

The 'r' values indicated (Table 5.8) that there exists a significant positive relationship between quality of consumption pattern of the households and size of the land holding (r = 0.318, Sig. 0.01), Family's income (r = 0.249, Sig. 0.01), ownership of milch animals (r = 0.175, Sig. 0.01), adoption level of farm technology (r = 0.162, Sig. 0.01) and adoption level of communication technology (r = 0.110, Sig. 0.05). A negative relationship existed between quality of consumption and type of family (r = 0.264, Sig. 0.01). Further, no relationship existed between quality of consumption and age, education and work status of the homemakers, age and education of the spouse, adoption level of household technology and adoption level of health technology.

Table 5.8 : Correlation coefficient values showing relationship between selected variables and quality of consumption

Variables	Quality of Consumption 'r' value	df
Personal Variables		
Age	0.045	298
Education	0.052	298
Work Status	0.089	298
Household Variables		
Age	0.056	298
Education of spouse	0.091	298
Family type	-0.264^{**}	298
Size of the landholding	0.318^{**}	298
Family income	0.249^{**}	298
Ownership of milch animals	0.175^{**}	298
Situational Variables		
Region	0.187^{**}	298
Adoption of Technology		
Household	0.073	298
Health	0.042	298
Farm	0.162^{**}	298
Communication	0.110^{*}	298

* Significant at 0.05 level
** Significant at 0.01 level

The hypothesis was thus accepted for type of family, size of the landholding, family's income, ownership of milch animals, region, adoption level of farm technology, and adoption level of communication technology and rejected for age, education and work status of the homemaker, age and education of the spouse, adotpion level of household technology and adoption level of health technology.

Thus, it can be concluded that as the size of the landholding and income of the family increase so did the quality of consumption pattern of the households. Higher the number of milch animals possessed by the households, better was their quality of consumption. This could be attributed to the fact that possession of cows and buffaloes led to higher consumption of milk and milk products in these households. Further, higher the adoption level of farm and communication technology better was the quality of consumption of the households. Nuclear families had better quality of consumption than the joint families as indicated by the negative relationship.

However, no significant relationship could be established between quality of consumption of the households and any of the personal variables of the respondents, age and education of the spouse, adoption level of household technology and adoption level of health technology.

H_o7 : Status of Rural Women and Family Resource Development is a function of adoption level of

different technology and selected personal, household and other situational variables.

A. To identify the determinants of Status of Rural Women, the data were subjected to step-wise multiple regression analysis. Initially, 12 explanatory (independent) variables were incorporated in the equation viz; age, education and work status of the respondent, type of family, family size, income of the family, size of the landholding, region, adoption level of household, farm, health and communication technology. At the final run 7 variables were accepted in the equation (Table 5.9). The equation was able to explain 52 per cent of the variation (adjusted R square = 0.52951, F value = 48.911, df = 7/291, Sig. = 0.000). All the accepted explanatory variables viz; education of the homemaker (personal), family type (household), region and adoption level of farm, health and communication technology (situational) were found to be determinants of SORW at 0.01 level.

Table5·9:Step-wise Multiple Regression Analysis

Dependent Variable : SORW

Multiple R	= 0.73523		
R Square	= 0.54056	F = 48.911	Sig. F = 0.000
Adjusted R Square	= 0.52951	df = 7/291	
Standard Error	= 13.38758		

Independent variables	Order of entry & df	F Prob value	F	Partial b' value	SE B	t' Values
Adoption level of communication Technology	1	156.211.000***		1.881	.387	4.850**
Family Type	2	102.500.000***		-9.453	1.867	-5.063**
Adoption level of farm Technology	3	88.950.000***		-0.526	0.129	-4.058**
Region	4	72.376.000***		-7.452	1.797	-4.145**
Adoption level of Health Technology	5	63.207.000***		2.591	0.695	3.727**
Homemaker's Educattion	6	54.730.000***		6.133	2.087	2.939**
Adoption level of Household Technology	7	48.911.000***		0.763	0.286	2.668**
Constant				32.240	2.575	12.520**

*** Significant at 0.001 level
** Significant at 0.01 level

It is evident from the Table that an increase in adoption level score of communication technology by one unit will lead to a corresponding increase of the dependent variable by 18 per cent (1.881) while keeping other independent variables fixed/constant. Similar was the case with regard to other explanatory variables viz; adoption level of health technology, homemaker's education and adoption level of household technology

which were all positively related to the dependent variables.

Type of family, adoption level of farm technology and region were found to be negative determinants of SORW. Joint family seemed to negatively affect the status of rural women as indicated by the negative beta value (-9.453). Data further reveals that adoption level of farm technology negatively affects the SORW (-0.526). This is because of the fact that mechanization of farming results in either loss of employment of rural women or their marginalization or pauperization, which severely undermines their economic status within the households. This also holds true for the advancement of region, as SORW found to be better-off in the backward region as compared to the advanced region, were mechanization of farming had taken place.

It is noteworthy, that communication technology (Step No.1) entered much before homemaker's education (Step No. 6) which reflects that impact through communication technology is more powerful than through the formal education.

The above hypothesis was thus partially accepted. It is however, pointed out that variables which were rejected by the equation (Appendix xxxiv) were found to be highly correlated with the corresponding variables, included in the equation.

B. To identify the determinants of Family Resource Development, the data were subjected to step-wise multiple regression analysis. Initially, 12 explanatory variables, as mentioned earlier, were incorporated in the equation. However, at the final run, 5 variables were accepted in the equation (Table 5.10). The equation was able to explain 39 per cent of the variation (adjusted R Square = 0.39085, F value = 24.740, df = 5/293, Sig. F = 0.00). All the accepted explanatory variables viz; homemaker education (personal), family type, family's income, (household), region and adoption level of farm technology (situational) were found to be determinants of FRD at 0.01 level.

Table 5.10 :   Step-wise Multiple Regression Analysis

Dependent Variable : FRD

Multiple R	= 0.63821	
R Square	= 0.40731	F = 24.740 Sig. F = 0.000
Adjusted R Square	= 0.39085	df = 5/293
Standard Error	= 14.548	

Independent variables	Order of entry & df	F Prob value	F	Partial b' value	SE B	t' Values
Family's Income	1	47.493	0.00 ***	11.262	1.634	6.892 **
Region	2	39.016	0.00 ***	1.25	0.354	3.552 **
Family Type	3	35.274	0.00 ***	-3.76	0.895	-4.204 **
Adoption level of farm Technology	4	29.592	0.00 ***	1.50	0.360	4.172 **
Homemaker's Educattion	5	24.740	0.00 ***	0.36	0.142	3.732 **
Constant				44.181	6.157	7.175 **

***   Significant at 0.001 level
*   Significant at 0.01 level

It is evident from the Table that family's income, which entered at step number one, contributes 11.262 to FRD when one unit of this variable is increased, while keeping other explanatory variables fixed/constant. Similarly other variables viz; region, adoption level of farm technology and homemaker's education contributes positively to the dependent variable according to their beta values stated in the Table, if their one unit is increased.

Type of family emerged as a negative determinant of FRD (-3.76). In other words, it can be stated that FRD will be better in nuclear families than the joint families.

The hypothesis was thus partially accepted. It is however, noteworthy that seven variables which were rejected by the equation (Appendix xxxv) were found to be high correlated with the corresponding variables included in the equation. Hence, it can be concluded that whatever holds good for the included variables is also true for the other correlated variables.