Factors Affecting Role of Women in Decision Making in Agriculture Sector of Punjab

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ABSTRACT

The modernisation in all spheres of life and emancipating of women has led to their increased role in decision making. Research showed that woman are self-confident, self-reliant and independent. This paper conducted a primary research to identify the Role of women in Decision Making in Agriculture in Punjab. A primary survey was conducted in Amritsar, Adampur and Bhogpur from Jalandhar and Doraha and Jagraon from Ludhiana. Five villages from each blocks were selected using random sampling technique. Ten respondents i.e., married female members of farming families from each of the villages were selected using convenience sampling for the purpose of the study. Only one respondent per family was taken for study. Sample size of the study was 300. Factor Analysis was applied on the data collected to identify Eight factors confirming the role of women in Agriculture decision making- namely- **Educational qualification, Financial status of the family, wife's occupation, Type of family, Husband's status, Age of woman, Dowry and financial status of girl's parents, children and their gender.**

Keywords: *Role of Women Decision Making, Factor Analysis, Agriculture.*

1. Introduction:

India is basically an agricultural country as about eighty percent of its population is living in rural areas. Women constitute 46.68 per cent of India's rural population and they have played a pivotal role in agricultural sector in India. According to 1971 census, out of 31.3 million women workers, 28 million (89.40%) were engaged in rural work and among them, 87.00% were performing agricultural operations. Also, majority of the Indian workers were involved in agriculture; 67.48 per cent of the male workers and 80.07 per cent of the female workers were either cultivators or agricultural labourers (Menon, 1976).

Female in rural families of developing countries like India, being generally not very educated and liberate, were hence subordinate to the dictates of the male head of the family. Yet their role in a family in arriving at an appropriate decision cannot be ruled out altogether. The change was taking place in the rural family structure which is expected to bring changes in the role of women in decision making in various farm and household activities.

The neglect of women in agricultural development can be argued to be serious obstacle in reaching the desired objectives. It is conceded by all quarters that economic well-being is a pre-requisite for general development and economic progress of a society was possible only with an efficient management of the availble resources. It was, therefore, surprising that almost half of the human resources in the rural sector have been ignored while

planning. An important reason for this state of affairs could be the lack of scientific studies delineating the role of women in rural economy (Bariana, 2008).

The modernisation in all spheres of life and emancipating of women has led to their increased role in decision making. In some activities her role was direct and in others it was indirect but simultaneously with the rapid development of agriculture in Punjab and its transformational from traditional to more capital intensive technology, the role of women is also changing. Women formed very important and integral part of any society. Their role in every sphere of life was as important, if not more, as that of men. And it became even more so in sectors like agriculture which was generally perceived as very much male dominated but where changing socio-cultural environment and education levels were prompting men to allow and women to take up a larger role and responsibility. The present study is expected to throw light on the role played by women in agriculture sector of India. The study is an attempt to examine decision making patters in rural families and also to find out the nature and the extent of the involvement of women in decision making process. It is hoped that this study will prove useful for the social scientists and of interest of academicians and intellectuals.

2. Review of Literature:

Tripathi (1999) examined the level and pattern of women's contribution in hill economy and their participation in decision making process at the existing level of resource use. The study was based on an intensive enquiry of 140 farm families selected problems women should not fight alone, they must seek the cooperation and sympathy of all. Women themselves should be made conscious about the rights so that they can fight for them.

Pathak and Arora (2008) found that a woman was self-confident, self-reliant and independent. Women preferred small enterprises such as beauty parlours, boutiques, preparation of decorative items and readymade garment shops. These enterprises were less risk oriented and did not require huge capital to start, run, maintain and sustain. Also, they found women to be initially hesitant to set up their enterprise and started the same at home. After success, they shifted to the central places to attract more customers. The setting up of their enterprise helped them to improve their financial and social status as well as made them more independent, self-reliant and self-confident.

3. Methodology:

The universe of study was the state of Punjab comprising 20 districts, 141 blocks and 77 tehsils. Punjab is divisible into 6 agro climatic regions viz., sub mountain undulating region, undulating plain region. Western plane region, western region, flood plain region and central plain region.

The central plain region was taken as the area of the present study as this region, 70 to 80 kms in width, and cuts through the states from North West to south east. The region covers 18000 sq. kms which represented about 36% of the total are of Punjab. The region covered includes the parts of Amritsar, Gurdaspur, Kapurthala, Jallandhar, Ludhiana, Bhagat Singh Nagar, Ferozpur, Barnala, Sangrur, and Patiala district.

Three districts of Punjab i.e., Amritsar, Jalandhar and Ludhiana were selected on the basis of convenience sampling of the study, these districts were selected for the study as they, apart from these economically very important, also represented all the regions viz., Majha, Doaba and Malwa regions of Punjab.

Further, two blocks from each districts were selected for the study on the basis of random sampling. They were majitha and tarsikka from Amritsar, Aadampur and Bhogpur from Jalandhar and Doraha and Jagraon from Ludhiana.

Further, five villages from each blocks were selected using random sampling technique. Ten respondents i.e., married female members of farming families from each of the villages were selected using convenience sampling for the purpose of the study. Only one respondent per family was taken for study. Sample size of the study was 300.

This study was mainly based on primary data collected from women of farm familiies with the help of well drafted , structured and pre tested questionnaire. As the sample of the study was to be taken from among the women folk of the farming families of the rural Punjab, the questionnaire was first translated to Punjabi and then was used to get the relevant data for the study. An analysis of the factors affecting the participation of women in decision making process was made. For this purpose, the factor analytical approach has been applied on 39 statements, which have been measured on a five point likert scale.

4. Data for factor analysis:

In order to test the suitability of the data for factor analysis, the following steps were taken:

- The correlation matrix was computed and examined. This revealed that there were enough correlations to go ahead with factor analysis.

- Anti- image correlations were also computed. These showed that partial correlations were low, indicating the true factors existed in the data.

- Kaiser-Meyer-Olkin measure of sampling adequacy (KMO-MSA) for individual variables was studied from the diagonals of partial correlation matrix. This was found to be sufficiently high for all variables.

- Overall MSA (measure of sampling adequacy) was found to be 0.655 which indicated that the sample was good enough for sampling.

- Bartlett's test of sphericity showed stastically significant number of correlation among the variables.

Hence, all the above mentioned five standards revealed that the data set collected was fit for factor analysis.

The principal Component Analysis has been employed for extracting factors. Varimax rotated analytic results have been reported in the table 1.1. It can be obsered that eight factors have been extracted which together accounted for as high as 54.704% of the total variance.

Rotation Method

As a part of analysis, the orthogonal rotation with varimax technique was also conducted. Thereafter, the oblique rotation with the promax procedure was also run. The pattern matrix revealed the results which were near to that much revealed by varimax technique. Further, the factors correlation matix low or negative

correlations among some of the factors. Hence, the retention of varimax rotation results was preferred to that of component matrix.

Table 1.1 revealed the communalities of the variables and total variance explained. The last coloumn showed the communalities. It is the row sum of squared factor loading. They show the amount of variance in a variable that is accounted for by the four factors taken together. The size of a communality is a useful index for accessing how much variance in a particular variable is accounted for by the factor solution.

The large communalities indicate that a large amount of variance ahs been accounted for by the factor solution whereas the small communalities show that a substantial portion of the variance in the variable is unaccounted for by the factors.

The eigen value translates approximately to the 'variance explained' concept of regression analysis. The higher the eigen value of the factor, the higher was the amount of variance explained by the factor.

5. Findings:

Factor analysis applied on the 39 statements extracted 9 factors that effected the role of women in decision making in the agriculture of Punjab.

Table 1.1

Rotated Component Analysis

Variable	1	2	3	4	5	6	7	8	Communalities
VAR 01	-0.013	0.033	-0.664	0.018	0.214	0.131	0.052	0.047	0.510
VAR 02	0.782	0.325	0.334	0.043	0.012	0.253	0.034	0.022	0.896
VAR 03	0.211	-0.021	0.059	0.711	0.032	0.172	0.017	-0.155	0.609
VAR 04	0.38	0.449	0.336	0.009	-0.016	0.134	0.110	0.017	0.346
VAR 05	-0.035	0.213	-0.023	0.449	0.021	-0.151	0.031	0.024	0.273
VAR 06	-0.119	0.082	0.014	0.017	0.623	-0.073	0.172	0.011	0.445
VAR 07	0.162	0.101	0.042	0.081	0.027	0.040	0.472	0.039	0.271
VAR 08	0.018	0.135	0.041	0.603	0.161	0.011	0.031	0.027	0.412
VAR 09	0.018	0.036	0.138	0.093	-0.038	0.029	0.558	0.039	0.351
VAR 10	0.032	0.654	0.213	0.028	0.215	0.021	0.163	-0.012	0.548
VAR 11	0.596	0.224	0.137	0.029	0.017	0.233	0.031	0.016	0.481
VAR 12	0.117	0.009	0.025	0.032	0.072	0.016	0.549	0.023	0.323
VAR 13	0.017	0.036	0.152	0.071	-0.026	0.015	0.061	0.592	0.385
VAR 14	0.021	0.036	0.161	0.532	0.022	0.136	-0.014	0.057	0.315
VAR 15	0.669	0.214	0.118	0.032	0.011	0.210	0.022	0.012	0.553
VAR 16	0.013	0.161	0.626	0.031	0.118	0.070	0.148	0.021	0.460
VAR 17	0.798	0.212	0.113	0.021	-0.013	0.207	0.018	0.019	0.739
VAR 18	0.210	0.171	0.045	0.032	0.443	0.192	0.034	0.015	0.311
VAR 19	0.021	0.011	0.442	0.029	0.172	0.051	0.012	0.163	0.256
VAR 20	-0.014	0.713	0.011	0.217	0.118	0.011	0.163	0.032	0.597
VAR 21	0.022	0.147	0.084	0.056	0.021	0.035	-0.603	0.033	0.399

VAR 22	-0.042	0.028	0.033	-0.162	0.063	0.007	0.090	0.538	0.331
VAR 23	0.061	0.172	0.025	0.537	0.118	0.041	0.033	0.019	0.339
VAR 24	0.041	0.028	0.167	0.032	0.054	0.028	0.603	0.031	0.399
VAR 25	0.803	-0.128	0.109	0.336	0.031	0.198	0.019	0.012	0.715
VAR 26	0.036	0.027	0.105	0.092	0.072	0.602	0.061	-0.138	0.412
VAR 27	0.023	0.554	0.015	0.219	0.014	0.131	0.113	0.011	0.386
VAR 28	0.018	0.042	0.039	0.072	0.142	0.056	0.023	0.471	0.254
VAR 29	0.131	0.016	0.532	-0.040	0.153	0.078	0.063	0.091	0.344
VAR 30	0.013	0.046	0.027	-0.023	0.052	0.442	0.029	0.138	0.232
VAR 31	0.017	0.182	0.011	0.018	0.557	0.037	0.014	0.108	0.357
VAR 32	0.132	0.036	0.057	0.033	0.041	0.497	0.041	0.062	0.277
VAR 33	0.192	0.036	0.025	0.018	0.594	0.016	0.110	0.024	0.430
VAR 34	0.062	-0.038	0.660	0.071	0.142	0.210	0.012	0.092	0.519
VAR 35	0.026	0.153	0.008	-0.071	0.621	0.042	0.162	0.117	0.457
VAR 36	0.016	0.137	0.557	0.041	0.201	0.072	0.012	0.033	0.379
VAR 37	0.172	-0.036	0.601	0.061	0.017	0.198	0.023	0.051	0.438
VAR 38	0.022	0.071	0.026	0.119	0.092	0.006	0.024	-0.510	0.290
VAR 39	-0.137	0.014	0.141	0.014	0.035	0.511	0.080	0.013	0.308
Eigen Value	3.702	3.359	3.103	3.068	2.937	2.417	2.122	1.624	
%age of variance	8.423	8.097	7.782	7.371	7.025	6.170	5.629	4.207	
Comm% Varianc	8.423	16.520	24.302	31.673	38.698	44.868	50.497	54.704	

The Naming of Factors:

The final step in the factor analysis was the naming of factors. The labelling has been institutively developed by the factor analyst depending upon its appropriateness for representing the underlining dimensions of a particular factor. Although, the process of naming the factors was not very scientific, some guidelines have been recommended (Hair et all, 1995). A factor loading represented the correlation between an original factor and its factor.

Table 1.2 shows the appropriate names given to the factors on the basis of variables represented in each case. The names of the factors, statements, labels and factor loadings have been summarised in the table.

Table 1.2 Naming of Factors

Factor no.	Name of the dimension	Lable	Statement	Factor loading
1.	Educational qualification	V2	Family seeks advice because of ones education	0.782
		V11	Education makes ones respected in the family	0.596
		V15	Education helps a gfirl in getting	0.669

			married	
		V17	Educated families respect women more	0.798
		V25	Educated people are generally decision maker	0.803
2.	Finincial status of family	V4	Finincially sound families respect women more	0.449
		V10	Women of finincially sound families have more freedom	0.654
		V20	Poor families discriminate more against women	0.713
		V27	Finincially sound familoies involve women more in decision making	0.554
3	Wives occupation	V1	Wives occupation is not important for husband	-0.664
		V16	Earning women have relatively more say in family in decision making	0.626
		V19	Working girls are preffered for marriage	0.442
		V29	Husband s seeks advice from wives	0.532
		V34	Working women are more independent	0.660
		V36	Earning women are respected more	0.557
		V37	Working women have more finincial freedom	0.601
4.	Type of family	V3	Larger family , lesser is the importance of women in decision making	0.711

		V5	Man generally take decisions in joint families	0.449
		V8	Women in joint families are restricted more to domestic activities	0.603
		V14	Husbands consult wives more in nuclear families	0.532
		V23	Position in family effects womens participation in deision making	0.537
5.	Husband's status	V6	Wife of an idle hunband is respected less	0.623
		V18	Elder son and his wife are given more importance	0.443
		V31	Importance of wife is directly related to that of her husband	0.557
		V33	An educated husband is an asset	0.594
		V35	Windows are generally consulted less	0.621
6.	Age of woman	V26	Age means experience	0.602
		V30	People generally seek advice from parents	0.442
		V32	Elder women are generally consulted regarding family issues	0.497
		V39	Importance of women is directly related to their age	0.511
7.	Dowry and financial status of girl's parents	V7	Good financial condition of parents help girls in getting respect from in-laws	0.472
		V9	Women's participation is directly related to the amount of Dowry they bring along	0.558
			Girl's financially sound parants are	

		V12	more respected by her in-laws	0.549
		V21	Dowry is not an important factor	-0.603
		V24	People are generally dowry seekers	0.603
8.	Children and their gender	V13	Childless women are generally considered less important	0.592
		V22	More children mean more respect for women	0.538
		V28	Mothers having male children are given more importance	0.471
		V38	People don't discriminate among children because of their gender	-0.510

Factor 1: Educational qualification:

Table 1.2 revealed that educational qualification was found to be the most important factor that decided and affected their role in decision making explaining 8.423% of the variance. Five statements were loaded on this factor. All the statements referred to the education of the women like education made an individual respected in the family, educated families respected women more and educated people were generally decision makers. The implication was that the respondents found education to be a very important factor that decided the role women played in decision making process.

Factor 2: Financial status of the family:

The second important factor that affect the role of a women in decision making and explaining as high as 8.097% of the variance was found to be the financial status of the family. Four statements were loaded on this factor and all the statements were found to be highly correlated and referred to the financial status of the family like financially sound families respected women more and financially sound families involved more in decision making. Hence financially sound families were found to be involving women more in decision making.

Factor 3: wife's occupation:

The next important factor found to be affecting the role of women's participation in the decision making process was wife's occupation. The factor explained 7.782% of the variance. Seven statements were loaded on this factor which were highly correlated and referred to the wife's occupation like earning women had relatively more say in the family's financial decisionand working women were more independent. The implication was that earning women participated more in decision making.

Factor 4: Type of family:

The next factor that affected the role of women in a decision making process was found to be the type of family i.e., whether the family was joint or a nuclear one. The factor explained variance of 7.371%. Five statements

were loaded on the factor. They were found to be highly correlated and pointed towards the type of the family like larger the family, lesser was the importance of women in decision making and husbands consulted wives more in nuclear families. The variables of this factor implied that women participated more in decision making in nuclear families whereas in joint families, their role in decision making was restricted to a lesser extent.

Factor 5: Husband's status:

Husband's status was found to be the next important factor that affected the role of women in decision making. Five statements were loaded on the factor and explained variance of 7.025%. All the statements referred to the status of the husband like wife of an idle husband was respected less and importance of wife was directly related to that of her husband. The implication was that wife of a husband enjoying a high status in the family participated more in decision making.

Factor 6: Age of woman:

The next important factor that affected the role of women in decision making was found to be the age of a women. Four statements were loaded on this factor which explained 6.170% of the variance. All the statement referred to the age of women like age meant experience and elder women were generally consulted regarding family issue. The variable of this factor implied that older women participated more in decision making as compared to younger ones as they were seen as source of wisdom as well as experience.

Factor 7: Dowry and financial status of girl's parents:

Dowry and financial status of girl's parents was found to be another factor that affected the role of women in the decision making. This factor explained a variance of 5.629%. Five statements were loaded on the factor which referred to the Dowry and financial status of girl's parents like girl's financially sound parents were respected more by her in-laws and people were generally dowry seekers. This implied that women having financially very well off parents or those bringing a good amount of dowry were involved relatively more in decision making by their in-laws.

Factor 8: children and their gender:

The last important factor found affecting the role of women in decision making was the gender of theor kids. This factor explained a variance of 4.207%. Four statements were loaded on the factor which referred to children's gender like childless women were given less importance and mothers having male children were given more importance. The variables of this factor implied that a woman's importance and hence here participation in decision making was directly related to her ability to bear children and her participation in decision making increased even more in case she had male children. Hence women with only female children was given relatively less importance which decreased even more in case of woman was childless.

From the above analysis, it was evident that educational qualification of a women emerged as the most important factor affecting her participation in decision making. More educated a woman was, more was the role she was supposed to play in the decision making process. Apart from this, better financial status of a family and her own occupation and hence her own earning capacity helped her have a bigger role in decision making. Also, women were found to play a bigger role in nuclear families than in joint families. Women with husband having

a higher status in family also enjoyed more importance. Apart from these, older women with financially sound parents and with children, especially male, participated more in decision making process.

Overall, the analysis explains the cumulative variance of 54.704%   which was good enough for factor analysis technique.

Hence educational qualification of a woman emerged as the most important factor affecting her participation in decision making. More educated a women was, more was the role she was supposed to play in the decision making process. Apart from this, better financial status of a family and her own occupation and hence her own earning capacity helped her have a bigger role in decision making. Also, women were found to play a bigger role in nuclear role in nuclear families than in joint families. Women with husband having a high status in the family also enjoyed more importance. Apart from these, older women, women with financially sound parents and with children especially male, participated more in the decision making process.

6. Recommendations:

On the basis of the results, following Recommendations have been made:

* Farm families must educate their girl children as that will lead to their being respected more by their husband and his family. Also, women will be able to contribute more by taking various jobs, professions and even farming.
* Small and marginal farming families should respect their women folk and should involve them more and more in decision making in the family.
* As earning women were found to be respected and consulted more by their families, women should try and take up some jobs and activities through which they can earn for their families.
* In case of matrimonial alliances, people should value a girl's education and her other skills and abilities rather than dowry.
* Government should establish agricultural education centres exclusively for women and hold training camps for women regularly in villages.
* People should motivate and help women to get education and training relating to agricultural and other aligned activities so that women could take up these and earn for their families.
* People must shun their bias against the girl child as it is leading to female foeticides and discrimination against mothers of girl children.
* Man should recognize and respect the role of women in agriculture sector and appreciate their contribution in the welfare of the family as well as in the farm sector at the macro level.

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