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Research article

An empirical study on factors affecting women's decision-making power within households in Bangladesh

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ABSTRACT

The study represents the decision-making status of selected women within the households in Bangladesh who rear small ruminants. A total of 320 women-led small ruminant rearers were selected for this study from four districts in Bangladesh using multi-stage random sampling technique. The results represented that most of the women (63%) are middle aged (21-40 age group) and primary level educated. Majority of households earn in between Tk. 8000 to Tk.18000 monthly. The findings of the study also revealed that women participated moderately in different activities in their households. Multiple linear regression analysis shows that decision-making power in households is positively correlated with an increase in income, education, credit and training of the respondent, and the relationships are highly significant ($P<0.01$). The study concluded that more participation of women in decision-making process within family eventually empowered them in their family which in turn can further assist the society and for the country.

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1.INTRODUCTION

Women represents more than half of the population of the country in Bangladesh (BBS, 2022). Their involvement in the economy is high throughout Asia, specially in agriculture (FAO, 2003). They contribute almost 43% of the agricultural labour force worldwide, but this exceeds 50%in Bangladesh (FAO, 2011). In many countries, women's participation in agricultural activities has substantially expanded in recent decades (Rashid and Gao, 2014). However, the different social structures in each country and region might enforce the fact that the participation varies from one country to another and even from one area to another (Javed et al., 2006). Women have been involved in livestock rearing as well as crop production in recent years (Jaim and Hossain, 2011). In fact, the extent of participation is determined by various factors like boldness of the women to express opinion, awareness of their rights and share of contribution to the family income. But, in the case of decision making, they might lag behind in participation (Jahan et al, 2015) whereas decision-making power is widely regarded as a key indicator of women's

empowerment. Numerous studies (Hashemi et al, 1996; Naved, 1994) have highlighted its importance in assessing the status of women within the family. In the field of economics, several research efforts have focused on household decision-making power, examining the balance of power between husbands and wives through various models and frameworks. (Basu, 2006; Hou and Ma, 2011). These studies help illuminate the extent to which women influence decisions within the household, providing insights into their overall empowerment.

Women's status is established by their position in their homes and in society (Khan, 2010). In Bangladesh, Women are generally permitted to participate in decision-making alongside their husbands and other family members when it comes to matters related to their children's education and marriage. (DFID, 2000). Most of the women cannot decide properly. They are less likely than men to make independent decisions about their mobility, asset purchases, and children's schooling (Sultana, 2011). Men, simply by virtue of being men, have more influence over family decisions.

A World Bank study in Bangladesh found that women's vulnerability was adversely affected by their limited role in household decision-making, low personal assets, limited access to and control over household resources (physical and financial assets), restricted mobility, heavy domestic workloads, and a lack of knowledge and skills (Sebstad and Cohen, 2002). However, to attain equality and peace both within the family, society and thereby nation, it is essential for women to be actively involved in decision-making at all levels (Mahmuda, 2008). Women have been deprived and may not be able to protect them from gender-based violence. Though women's participation in work increases their decision-making power in their household (Kadiyala et al., 2014) but family members hardly render any care and appreciation for their role and efforts.

Women participation in decision making is more important for the development of next generation. Moreover, without participation in decision making, women will face gender-based discrimination and deprivation in all aspects of their life. Participation in decision making process increases women's empowerment in the society while women's empowerment is a process by which they become able to organize themselves to increase their independence, assert their autonomy and have control over resources that will help them challenge and end their subordination (Keller and Mbewe, 1991).

Small ruminant rearing by women is an effective income-generating activity that can help meet the target from the Sustainable Development Goals (SDG) of overcoming poverty by 2030. Owning small ruminants can provide rural women with manageable income opportunities since the animals can be kept near homes and fed with kitchen scraps (Chen et al., 1999). Various theories suggest that in a family, the person with more resources will have greater power to influence decision-making. (Saffilios-Rothschild, 1969; Lamouse, 1969; Lupri, 1969). Women's income-generating activities whether full-time or part-time, play a crucial role in enhancing their decision-making power within the family (Denise and Gerald, 1972).

Despite the indicative importance, women participation in family decision-making, in developing countries, especially Bangladesh is limited to some extent (Sultana, 2010). So, the purposes of our study were to investigate factors that affect decision making power of women who rear small ruminant within their households to promote and thereby enhance the empowerment of women in household as well as in the country. The findings of this study offer valuable insights for policy analysts and agricultural administrators aiming to develop specific interventions for subsistence small ruminant keepers in Bangladesh.

2.MATERIALS AND METHODS

Selection of the study area and sample size

The study was conducted in four districts (Chattogram, Tangail, Noakhali and Chuadhanga) of Bangladesh considering the availability of small ruminant production. A multistage sampling technique was employed to collect data. In first stage, four districts were selected purposively. Second stage, two upazilas from one district was selected based on the concentration of small ruminant production of those areas. Four villages from one upazila were selected randomly in third stage. Finally, 10

respondents from each village were selected randomly. In total of 320 women- led small ruminant rearers were selected for this study. Women who rear two to six small ruminants (Sheep or goat or both sheep and goat) were selected as respondents of this study. From each household, a woman representative was selected for interviews. Research data, were collected following direct interviews and observations methods.

Preparation of questionnaire or interview schedule

Before data collection, a draft structured questionnaire or interview schedule was designed, pre-tested (16 households considered for pilot-testing) and checked for the appropriateness of the data. The schedules were prepared in English but for the purpose of effective communication with respondent it was translated into Bengali. The major areas included in the questionnaire consist of the information about family size, farm size, household monthly income, participation of women in household decision-making process etc.

Data coding, entry and cleaning

After data collection, the questionnaires were reviewed further for completeness, cleaned, organized, and coded. The data was then entered into an MS Excel spreadsheet before being transferred to the Stata program (Stata 14, Stata Statistical Software, Stata Corporation, College Station, Texas 77845 USA) for analysis.

Analytical techniques

Descriptive statistics (eg. mean, standard deviation, percentage, rank order etc.), were used in this study.

Participation index of the women small ruminant rearer

The women's participation in household decision-making was assessed using a 4-point Likert scale.The scale was weighted to rate the level of participants; to a high extent = 4, to a medium extent = 3, to a small extent = 2, Not at all = 1. The participants were asked to report their level of involvement in small ruminant farming and household activities. To rank the various activities carried out by rural women, the frequency of responses from each of the four-point range of a specific activity was tabulated and multiplied by concerned score. Then, for the purpose of ranking, those were added up to generate the overall score for each activity (Sailaja and Reddy, 2003).

The participation score for each respondent was calculated using the following formula:

$$\text{Participation Index (PI)} = 4 \times \text{HE} + 3 \times \text{ME} + 2 \times \text{SE} + 1 \times \text{NA} \ldots\ldots\ldots (1)$$

Where, HE = To a high extent, ME = To a medium extent, SE = To a small extent, NA=Not at all.

Determine the factors that influence women's decision-making power

The decision-making power score was measured on the basis of fifteen aspects such as agricultural production process, livestock rearing, family income, family expenditure, family saving, sanitation and safe water, health care, education of children, purchase of household assets, transfer of household assets, selling household assets, children marriage, marketing of agricultural production, receiving credit and freedom of mobility using above Likert scale. The score varied from 0 to 60 for each respondent, where 0 indicates inability to make decisions and 60 indicates high personal ability in decision-making. The Decision-making Power Index (DMPI) was calculated based on the actual positive responses provided by the respondents divided by highest score for each respondent with multiplied by 100. According to Sultana (2011), the decision-making power index (DMPI) was calculated using the following formulae:

$$\text{DMPI} = \frac{\text{Actual score of the level of involvement for each respondent}}{\text{Highest score for each respondent}} \times 100 \ldots\ldots\ldots\ldots (2)$$

A multiple regression model was applied to assess the significant impact of the explanatory variables on women's decision-making power. The selected explanatory variables are age, education, income of women (Income from small ruminant + Income from other sources), experience, credit, family size, marital status, farm size and training. The multiple linear regression model is presented as follows:

$$LogDMPI = \beta_0 + \beta_1 Age + \beta_2 Edu + \beta_3 logInc + \beta_4 Tra + \beta_5 MS + \beta_6 Cre + \beta_7 Exp + \beta_8 FarS + \beta_9 FamS + u_i \ldots\ldots (3)$$

Where,

DMPI= Decision-making power index
Age = Age (years)
Edu = Education (Year of schooling)
Inc = Income of women (Tk/monthly)
Tra = Training (Dummy; 0=no, 1=yes)
MS= Marital status (Dummy; 1=Married, 0=single)
Cre = Credit (Dummy; 0=no, 1=yes)
Exp =Experience (years)
FarS = Farm size (Decimal)
FamS = Family size (Number of family members)
β_0 = The intercept
β_1-β_9 = Coefficient of each explanatory variables
u_i = Error term

3. RESULTS AND DISCUSSION

Socio-economic characteristics ofrespondents

Table 1 represents the socio-economic characteristics of the women small ruminant rearer selected for the study. Of the sampled households, 63% were middle aged women (21-40 aged group) which is similar with Jahan et al. (2015) and Tabassum et al. (2019) who found that 37% farmers are middle aged women (25-34 aged group). About 23% of the respondents had 6 to 9 years of schooling, 36% had 1 to 5 years of schooling and 35% of the respondents were illiterate which corresponded and supported by a similar study in Tabassum et al. (2019). Around 97% women were married (double) and only 3% of women were divorced and widow. Almost 83% of the respondent received no training on small ruminant keeping. More than half (57%) of the respondents had no credit access from different financial institution or informal sources. Each household typically consists of an average four members. Sariyev et al. (2020) also reported similar household size with average three members in a household. Household has on average a dependency ratio of 23. This ratio reflects the proportion of dependents in the household, defined as individuals who are either under 12 years of age or over 64. The average farm size is 29.82 decimals. Households have on an average 7 years of small ruminant farming experiences in the study areas (Table 1).

About 94% of the respondents reared only goat followed by 4% only sheep and 1% both sheep and goat. Household members earned monthly income from different sources. Majority (38%) of total monthly income came from selling labour or rickshaw, taxi pulling or handicrafts making by household members in the study areas and only 10% of the total income come from small ruminant production.Figure 1 shows ranges of monthly household income of respondents in the study areas. Monthly household income refers income of all family members from different sources in a household. About 70% of households earn in between Tk. 8000 to Tk.18000 in the study areas. Only one percent households earn Tk. 68001 to Tk.78000 in the study areas.

Women participation in household decision-making process

The participation of women in decision-making regarding various household activities, as well as participation indices and order of ranking is presented in Table 2. The result shown that 48% respondents reported participating to high extent in decision to purchase of household assets. These activities were ranked first. This indicates that the women of studied areas were given priority in decision–making to purchase household assets. The husbands of these women and other members in their families take thewomen's opinions about these activities. About 60% of respondents reported participating to high and medium extents in decisions about the marriages of their children. Decisions about family income was ranked third highest in terms of participation, followed by participation in decision-making about child education. About half of the respondents reported that their participation in decisions about family expenditure ranked fifth.Sequentially, according to ranking, next extent of participation on household decision are livestock rearing, purchase of household assets, family saving, health care, selling household assets, freedom of mobility, sanitation, and safe water, receiving credit, transfer of household assets and marketing of agricultural production in this study.

Table1. Socio-economic characteristics of

sample farmers in the study areas.

Socio-economic characteristics	Frequency	Percentage (%)
Age (year)		
Below 21	8	2.50
21-40	203	63.43
41-60	103	32.19
61 to above	6	1.88
Years of Schooling		
None	112	35.00
1-5	116	36.25
6-9	73	22.82
10-11	15	4.69
12 and above	4	1.25
Marital Status		
Double	310	96.88
Single (Divorce/widow)	10	3.13
Training		
Yes	53	16.56
No	267	83.44
Credit		
Yes	138	43.13
No	182	56.88
Rearing small ruminant		
Only goat	302	94.38
Only sheep	13	4.06
Both sheep and goat	5	1.56
Source of monthly household income (Tk.)		
Cattle/Buffalo	1291.15	7.64
Sheep	429.90	2.55
Goat	1238.19	7.33
Chicken/Duck	154.13	0.912
Agriculture	1746.63	10.34
Business	3270.15	19.36
Service	1679.19	9.94
Remittance	691.65	4.09
Selling labour/ rickshaw,taxi pulling/handicrafts etc.)	6400.99	37.89

Socio-economic characteristics	Mean ±SD
Family Member(Number)	4.88 ±1.81
Farm Size (Decimal)	29.82 ± 16.18
Dependency ratio	22.75 ± 20.47
Experience (Year)	7.01 ± 3.99

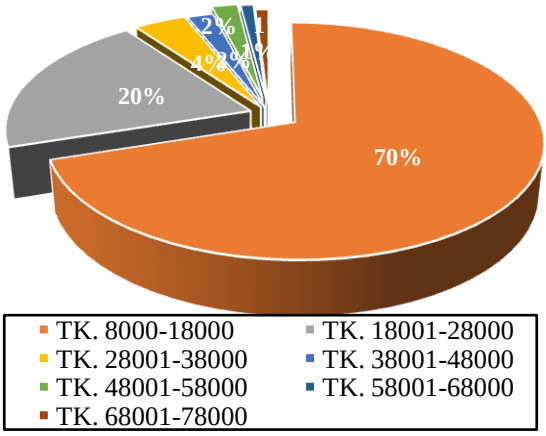

Figure 1. Monthly household income of respondents.

Further, respondents reported a medium extent of participation in decisions about family income, freedom of mobility, livestock rearing, family savings and receiving credit. But most of the women in the study areas did not participate at all in decision about sanitation and safe water, transfer of household assets, marketing of agricultural production, and family health care because these decisions are mostly made by male members of the family (Table 2).This finding is similar with that of Mulugeta and Amsalu (2014), Dan and Kim (2020) and Roy et al. (2017), who found that the majority of rural women are regularly engaged in different household activities, including food preparation, washing clothes, cleaning house, looking after family members, childcare, receiving credit, education of children marriage of their children, and rearing livestock.

Determinants of women decision-making power within the household

The explanatory variables that influence women's in the decision-making power at the household is presented in Table 3. The result from regression analysis indicated that among nine explanatory variables, four (education, log of income, training and credit) were significantly ($P<0.01$) influenced the decision-making abilities of women within household. The income of women is defined by total income from small ruminant and other sources, such as tailoring, handicrafts and other small business ventures. Table 3 shows that the income of women has a significantly positive effect on decision-making power.

Table 2.Extent of women's participation in various household decisions

Activities	To a high extent		To a medium extent		To a small extent		Not at all		Participation indices	Rank
	Freq.	%	Freq.	%	Freq.	%	Freq.	%		
Purchase of household assets	155	48.44	46	14.38	59	18.44	60	18.75	936	1
Children marriage	132	41.25	61	19.06	45	14.06	82	25.63	883	2
Family income	40	12.50	178	55.63	49	15.31	53	16.57	845	3
Education of children	100	31.25	46	14.38	52	16.25	122	38.13	764	4
Family expenditure	88	27.50	46	14.38	57	17.81	129	40.32	733	5
Livestock rearing	18	5.63	141	44.06	55	17.19	106	33.13	711	6
Agril. production process	94	29.38	29	9.06	47	14.69	150	46.88	707	7
Family saving	15	4.69	136	42.50	61	19.06	108	33.75	698	8
Health care	71	22.19	30	9.38	68	21.25	151	47.19	661	9
Selling household assets	21	6.56	68	21.25	43	13.44	188	58.75	562	10
Freedom of mobility	19	5.94	146	45.63	57	17.81	98	30.63	553	11
Sanitation and safe water	8	2.50	79	24.69	45	14.06	188	58.75	547	12
Receiving credit	26	8.13	105	32.81	60	18.75	129	40.32	517	13
Transfer of household assets	12	3.75	57	17.81	45	14.06	206	64.38	515	14
Marketing of agril. production	10	3.13	44	13.75	30	9.38	236	73.75	435	15

Note: Ferq.=Frequency, %= Percentage; Source: Author's estimation based on field survey data, 2021

That means if a respondent's monthly income increases by 1%, her decision-making power on household activities will be increased by 5.9% on an average, holding other variables constant. It also can be said that women who earn more have more power when participating in household decision-making. This finding agrees with other studies showing women having more income is more empowered in the family (Acharya et al., 2010; Basu, 2006; Naved, 1994) Educated women are defined as women who have a minimum of 2 years of schooling experiences in the study areas. As Table 3 shows, education has a statistically positive effect on making decisions in the household ($P< 0.01$). That means that the higher the education

of the women who rear small ruminants, the more likely she is to make household decisions alone. This finding is in accordance with (Bloom et al., 2001; Acharya et al., 2010) found positive relationship between education and empowerment. Educated women were more empowered than the illiterate women (Hossain et al., 2004).

Various studies have shown that educated women are more capable of contributing economically to their families and play a more active role in decision-making within the household. (Case et al., 1989; Cassidy and Warren, 1996). Women who have a lower level of education are more likely to follow the traditional depriving roles in Bangladesh.

Table 3.The coefficients of regression analysis for decision-making power

Log of DMPI	**Coefficient**	**Standard Error**	**[95% Conf. Interval]**	
Age (Years)	-.001	.001	-.003	.001
Education (Year of schooling)	.024***	.003	.017	.03
Log of income (Taka)	.059***	.023	.014	.104
Training [a]	.185***	.024	.138	.233
Marital status[b]	-.057	.052	-.16	.046
Credit[a]	.105***	.023	.06	.149
Experience (Year)	.001	.002	-.003	.005
Farm size (Decimal)	.000	.001	-.001	.002
Family size (Numbers)	-.012	.009	-.031	.006
Constant	3.46***	.195	3.08	3.84
Mean dependent var	3.97			
R-squared	0.356			
F-test	25.01***			
AIC	-139.18			

Note: [a]Dummy variable (1 = yes, 0 = no), [b] Dummy variable (1 = double, 0 = divorce/widow), Significant levels: *** P<0.01, ** P<0.05, * P<0.1; DMPI = Decission making power index; AIC = Akaike information criteria.
Source: Author's estimation based on field survey data, 2021

Training has a positive effect on the decision-making power of women and the relationship is statistically significant (P<0.01). This indicates that trained women are more involved in agricultural production processes. By using the knowledge, they gain from training, they are able to increase their livestock production and became income resilient, which helps to increase their decision-making power (Table 3).
Credit has a significant positive effect on household decision-making power (Table 3). This means that if women can obtain credit (for example, from NGOs, banks, relatives or friends) they can use it for the livestock production process to earn more income, which, in turn, increases confidence and decision-making power.

The coefficient of determination (R square) value 0.36 indicates that about 36% variation in decision-making power of women in the household is explained by the explanatory variables in the model, other factors holding constant (Table 3).

4. CONCLUSION

The study found that despite their poor socio-economic status the women who engaged in small ruminant rearing, their decision-making abilities are rated as being moderately satisfactory still not meet up to the expected level. However, this moderate level of decision-making power was ensured by the women's income from small ruminants. The study also found that education, training and income earned from small ruminants play significant positive role to increase women's decision-making power within household. Women empowerment also increases when women decision making power within households increases.

Therefore, it is very essential to take immediate steps to involve women actively in the mainstream development through providing them credit and various training facilities. These types of training might increase their knowledge and skill, and enrich income earning for improving their participation in the family

decision-making process. It can be concluded that this study is an initiative to show the empirical evidence of women's decision-making power and its determinants. Finally based on the empirical evidence of this study further scope of similar studies on women empowerment to support and strengthen future policy is recommended.

5. LIMITATIONS AND SUGESSTIONS

The study has some limitations:

- The study may not represent the full diversity of socio-economic, cultural, and geographic contexts in Bangladesh.
- Social desirability bias might lead participants to overstate their involvement in household decision-making.
- Data collected at a specific time sometimes may not account for evolving socio-economic or cultural conditions.

Following suggestions help to overcome the limitations:

- Conduct follow-up studies with larger and more diverse samples to validate the findings.
- Use triangulation methods, such as combining self-reported data with observational or third-party accounts, to validate responses.
- Incorporate longitudinal studies in future to track changes over time and establish causal links between variables.

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REFERENCES

Acharya, D. R., Jacqueline, S. B., Padam, S., Edwin, R. T. and Pramod, R. R. 2010. Women's autonomy in household decision-making: a demographic study in Nepal. Reproductive Health, 7:15.

Basu, K. 2006. Gender and say: a model of household behavior with endogenously determined balance of power. The Economic Journal, 116: 558-80.

BBS. 2022. Statistical Yearbook of Bangladesh. Bangladesh Bureau of Statistics, Ministry of Planning, Government of the People's Republic of Bangladesh.

Bloom, S., Wypij, D. and Gupta, D. M. 2001. Dimensions of women's autonomy and the influence on maternal health care utilization in a North Indian city. Demography, 38: 67–78.

Case, C. E., Greely, A. M. and Fuchs, S. 1989. Social determinants of racial prejudice. Sociological Perspective, 12(4): 469-483.

Cassidy, M. L. and Warren, B. O. 1996. Family employment and gender role attitude. Gender and Society, 10: 312-330.

Chen, T., Ketzis, J. and Sinn, R. 1999. The role of woman in the sheep and goat sector. Small Ruminant Research, 34: 259-269.

Dan, Y. and Kim, I. 2020. Women participation in livestock raising and household management in rural communities of Nafada, semi-arid region of Northeastern Nigeria. Advances in Social Sciences Research Journal, 7: 166-177.

Denise, B. K. and Gerald, S. L. 1972. Marital decision-making in American and Danish urban families: A research note. Journal of Marriage and Family, 34(1): 134-138.

DFID. 2000. Poverty eradication and the empowerment of women, Strategies for Achieving the International Development Targets. https://www.amazon.com/Poverty-elimination-empowerment-women-international/dp/186192299X, Accessed 5 January 2022.

FAO. 2003. Women in Agriculture: Closing the Gender Gap for Development. In: The state of food and agriculture, FAO. https://www.fao.org/4/i2050e/i2050e.pdf, Accessed 5 January 2022.

FAO. 2011. Women in Agriculture: Closing the Gender Gap for Development. In: The state of food and agriculture, FAO. https://www.fao.org/fileadmin/templates/cpesap/CRESAP_Info_package/Links/Module_6/Women_in_agriculture.pdf, Accessed 5 January 2022.

Hashemi, S. M., Schulter, S. R. and. Riley, A. P. 1996. Rural Credit Program and Women's Empowerment in Bangladesh, World Development, 24(4): 635-653.

Hossain, M., Bose, M. L. and Ahmad, A. 2004. Nature and Impact of Women's Participation in Economic Activities in Rural Bangladesh: Insights from Household Surveys. Working Paper No.20, Department of Economics Sweden: Laud University.https://www.econstor.eu/handle/10419/259892, Access date: January 2022.

Hou, X. and Ma, N. 2012. The effect of women's decision-making power on maternal health services uptake: evidence from Pakistan. Health Policy and Planning, 1–9. https://academic.oup.com/heapol/article/28/2/176/757843, Accessed 10 January 2022.

Jahan, F., Hossain, S. and Mahmud, F. K. 2015. Factors Influencing Women's Decision Making Power: Evidence from Bangladesh Urban Health Survey Data. International Journal of Research in Applied, Natural and Social Sciences, 3 (3): 133-150.

Jaim, W. M. H. and Hossain, M. 2011. Women's participation in agriculture in Bangladesh 1988–2008: Changes and determinants. In Preconference event on dynamics of rural livelihoods and poverty in South Asia, 7th Asian society of agricultural economists (ASAE) international conference, Hanoi, Vietnam, 1-15. https://www.academia.edu/34291327/Womens_Participation_in_Agriculture_in_Bangladesh_1988_2008_Changes_and_Determinants, Access date: January 2022.

Javed, A., Sadaf, S. and Luquman, M. 2006. Rural women's participation in crop and livestock production activities in Faisalabad-Pakistan.Journal ofAgriculture and SocialResearch, 3: 150-154.

Kadiyala, S., Harris, J., Headey, D., Yosef, S. and Gillespie, S. 2014. Agriculture and nutrition in India: mapping evidence to pathways, Annals of the New York Academy of Sciences, 1–14

Keller, B. and Mbewe, D. C. 1991. Policy and planning for the empowerment of Zambia's women farmers. Canadian Journal of Development Studies, 12: 75-88.

Khan, T. M. 2010. Socio-cultural Determinants of Women's Empowerment in Punjab, Pakistan (Unpublished Ph.D Thesis), Department of Rural Sociology, Faisalabad.

Lamouse, A. 1969. Family roles of women: A German example. Journal of Marriage and the Family, 13: 145-152

Larson, Lyle, E., Theodore, B. and Johannis, J. 1967. Religious perspective and the authority structure of the family. Pactific Socio- logical Review, 10: 13-24.

Lupri, E. 1969. Contemporary authority patterns in the West German family: A study in cross-national validation. Journal of Marriage and the Family, 31: 134-144.

Mahmuda, H. and Yoshihita, I. 2008. Participation and Decision Making Role of Rural Women in Economic Activities: A Comparative Study for Members and Non-Members of the Micro-Credit Organizations in Bangladesh. Journal of Social Sciences, 4 (3): 229-236.

Mulugeta M. and Amsalu, T. 2014. Womens role and their decision making in livestock and household management. Journal of Agricultural Extension and Rural Development, 6: 347-353.

Naved, R. 1994. Empowerment of women; listening to the voices of women. The Bangladesh Development studies, Special Issue on Women, Development and Change, Bangladesh Institute of Development Studies, 22 (2&3): 121-155.

Rashid, M. M. and Gao, Q. 2014. Empowerment status and decision-making ability of native and tribal women a household level comparative study along Bangladesh coast. The Indian Journal of Social Work, 75 (1): 115–136.

Roy, P., Haque, S., Jannat, A., Ali, M. and Khan, M. S. 2017. Contribution of women to household income and decision making in some selected areas of Mymensingh in Bangladesh. Progressive Agriculture, 28(2): 120-129.

Safilios-Rothschild, C. 1967. A comparison of power structure and marital satisfaction in urban Greek and French families. Journal of Marriage and the Family, 29: 345-352

Sailaja, A. and Reddy, M. N. 2003: Changing Needs of Farm Women in Agriculture, Manage Extension Research Review, Rajendranagar, Hyderabad, India, 164-175.

Sebstad, J. and Cohen, M. 2000. Microfinance, Risk Management, and Poverty: AIMS Paper, Washington, D.C.: Management systems international. https://pdf.usaid.gov/pdf_docs/PNACJ418.pdf, Accessed 2 February 2022.

Sariyeb, O., Loos, T. K., Zeller, M and Gurung, T. 2020. Women in household decision-making and implications for dietary quality in Bhutan, Agricultural and Food Economics, 8(13): 1-20

Sultana, A. M. 2010. Patriarchy and Women's Gender Ideology: A Socio-Cultural Perspective. Journal of Social Sciences, 6(1): 123-126.

Sultana, A. M. 2011. Factors effect on women autonomy and decision-making power within the household in rural communities. Journal of Applied Sciences Research, 7: 18-22.

Tabassum, M. Begum, N., Rana, M. S., Faruk, M. O. and Miah, M. M. 2019. Factors Influencing Women's Empowerment in Bangladesh. Science, Technology & Public Policy. 3(1) 1-7.