

Original Research Article

QUANTIFICATION OF THE CONTRIBUTION OF RURAL WOMEN IN SOCIOECONOMIC DEVELOPMENT

ABSTRACT

Rural women contribute in socioeconomic development and they are good partners to economic development of every society. They are important agents of addressing rural socioeconomic development. The study aimed to quantify the contribution of rural women to socioeconomic development at two villages named Sachibunia and Islamnagar at Batiaghata upazilla under Khulna District of Bangladesh, and to explore the relationship between each of the selected characteristics of the rural women and their extent of contribution in socioeconomic development. Data were collected from randomly selected 120 respondents during the period of January to February, 2019. The selected characteristics of the respondents were age, educational qualification, family size, farm size, annual family income, organizational participation, extension media contact, training exposure, poverty status, number of performed daily activities, time spent in performed daily activities, involved in income generating activities at how many days per month, role in decision making for different activities and problem faced by respondent for participating in income generating activities. The extent of contribution to socioeconomic development was the dependent variable. Data were collected using a structured interview schedule. Spearman's rank order correlation co-efficient (ρ) was computed to ascertain the relationships between the selected characteristics and dependent variable. Rural women have performed different daily activities and their time spent for it converted into money. Quantified contribution to family income based on unemployed respondent was (26%) whereas contribution by other members of the family was (74%) and quantified contribution to family income based on employed respondent was (50%) whereas contribution by other members of the family was (50%). Contribution was also measured according to educational qualification. Quantified contribution to family income based on low educated respondent (paid) was (48%) whereas contribution by other members of the family was (52%) and quantified contribution to family income based on highly educated respondent (paid) was (60%) whereas contribution by other member of the family was (40%). Quantified contribution to family income based on low educated respondent (unpaid) was (29%) whereas contribution by other members of the family was (71%) and quantified contribution to family income based on highly educated respondent (unpaid) was (23%) whereas contribution by other member of the family was (77%). Negative and significant relationship found between the problem faced by respondents and their contributions in terms of money to socioeconomic development. It might be concluded that, contribution of rural women to socioeconomic development is so much essential. For that, adequate support from government and non-government organization should be provided to increase the contribution rate by ensuring barrier free participation of rural women in income generating activities.

Key words: Contribution, Rural women, Income generating activity, Participation, Socioeconomic development.

1. INTRODUCTION

Rural women as half of the rural population have an important role in economic activities which leads to the entire social development of a community; therefore in order to achieve rural development an attention to women that involves in economic and development activities with men is required. Rural

Comment [T1]: This topic appears attractive, but I have problem with the term 'quantification'. How?

Comment [T2]: socioeconomic development of which country or state?

Comment [T3]: It may not be necessary in the abstract, so expunge.

Comment [T4]: Still a challenge

Comment [T5]: Delete

Comment [T6]: Is this possible? I doubt the possibility of the measurement. This may be wrong. Please, educational qualification may not be a yardstick.

Comment [T7]: 1.You do not have evidence (no statistical proof to support your assertion). The country you are referring is not known.

43 women contribute in socioeconomic development as they involve in different forms of economic activities
44 for their family and societal improvement. Such economic activities involve agriculture, trade transaction,
45 gardening, social forestry, food processing, hairdressing and weaving. In explaining the important role
46 women made, the world conference on the United Nations decades of women was that two-third of the
47 total workforce done by women in the world are rural women who live in rural communities with poor
48 social amenities. But still the value of the economic activities of rural women in the area of sustainable
49 development is not well recognized.

Comment [T8]: Clumsy statement. You are not passing information here. Revisit and recast the statement.

50 Bangladesh is basically an agricultural country. Agriculture contributes about 14.74% to country's total
51 GDP (BBS, 2017). Concerns about sustainability in agricultural systems center on the need to develop
52 technologies and practices that do not have adverse effects on environmental goods and services, are
53 accessible to and effective for farmers, and lead to improvements in food productivity. Women's
54 participation and their role in economic structures is an indicator of the modernization of the national
55 economy and economic development. Development strategies should be based on a more active
56 participation of rural women in economic activities. Providing the fact that women make the half of the
57 population in rural communities is considered the major manufacturers of food and income for rural
58 households which are the important aspect of agricultural production all over the world. Women in our
59 rural area greatly contribute through their household and agricultural work but their work has hardly been
60 recognized. Considering this fact the researchers persuaded to conduct the present research.

Comment [T9]: Recast

Comment [T10]: How?

Comment [T11]: This still keeps a doubt. Visit T7

Comment [T12]: You have not established any gap.

Comment [T13]: Please, check the grammatical error.

61 In order to proper direction to the research, the following specific objectives were formulated:

- 62 i. To determine and describe the personal socioeconomic characteristics of the rural women.
- 63 ii. To quantify the contribution of rural women in socioeconomic development.
- 64 iii. To explore the relationships between selected characteristics of rural women and extent of
65 women contribution in socioeconomic development.

Comment [T14]: The parameters of the personal socioeconomic characteristics are not unveiled in the introduction part.

Comment [T15]: This objective is questionable? Seems inappropriate.

66

68 2. METHODOLOGY

69 A researcher is responsible for describing clearly what sorts of research design, methods and procedures
70 would be followed. The design of the study was a descriptive and diagnostic survey research. That is, the
71 study was designed to describe the quantification of the contribution of rural women in socioeconomic
72 development. It was also designed to describe the personal socioeconomic characteristics of the rural
73 women and also to draw relationship between those characteristics and extent of women contribution in
74 economic activities for socioeconomic development. Data were collected by means of conducting a face
75 to face interview with respondents using a structured schedule. The study was conducted in two villages
76 named Sachibunia and Islamnagar under Batiaghata upazilla of Khulna district in Bangladesh. A list of
77 women performing different productive activities related to socioeconomic development were collected
78 with the help of field level officer of Department of Agricultural Extension (DAE). The total number of
79 women were considered as population of the respective villages and among them sample were selected
80 randomly. Irrespective of size of population of the selected two villages, the researcher selected 120
81 women taking 60 from each of the villages. In order to collect relevant information from respondents, an
82 interview schedule was carefully designed focusing the objectives of the study. Both open and close form,
83 simple and direct questions were included in the interview schedule. The questions were systematically
84 arranged to help the respondents to understand the consequence easily. Scales were developed for
85 collecting information required for measuring the selected characteristics. Before finalization, the interview
86 schedule was pre-tested with 10 women of the study area were excluded from the sample. On the basis

Comment [T16]: Expunge!

Comment [T17]: If your study adopted descriptive and diagnostic survey research, then why bringing in relationship in objective three.

Comment [T18]: This is quite absurd. Questionnaire should be used instead. How did you analyze the data then. Did you manufactured data. This appears too confusing. At this point, you need to go back to do the needful.

Comment [T19]: On what ground did you do this. Please, be specific. Rather, this is a purposive sampling.

Comment [T20R19]: Get it right please.

Comment [T21]: I guess you used questionnaire. Check, and correct that please.

Comment [T22]: Now, it is clear that you used questionnaire.

87 of the pre-test experiences, corrections, modifications and alterations were made before finalizing the
88 interview schedule for final data collection. During modification of the schedule, valuable suggestions
89 were received from the research supervisor and relevant experts. The interview schedule was then
90 printed in its final form and multiplied. The researcher himself collected data from the respondents
91 through the personal interview during January to February, 2019. During this time the researchers had to
92 made several visits for collecting valid and reliable data from the respondents. Before starting collection of
93 data, the researcher met the respective Deputy Director (DD), Upazilla Agriculture Officer (UAO) and the
94 concerned Sub Assistant Agriculture Officers (SAAOs). By the help of concerned authority the researcher
95 met with the respondents and interviewed them. The researcher discussed the objectives of the present
96 study with the respondents so that they did not feel hesitate at the time of interview. However, if any
97 respondent failed to understand any question, the researchers explained and clarified the questions and
98 statements as much as possible so that the women could easily understand and answer the questions
99 correctly. After completion of the interview, it was checked and editing was done in case of necessity. All
100 the interview schedules were prepared for data tabulation after completing the field study. Collected data
101 were summarized and inspected thoroughly. A master sheet was prepared to tabulate the data by
102 transferring all the individual variables in order to meet the objectives of the study. During data
103 processing, appropriate scoring technique was followed to convert the data into quantitative form in case
104 of qualitative data. Local units of measurements were converted into standard units. In case of some
105 variables, proper indices and scales were made through the simple accumulation of score assigned to
106 individual or pattern of attributes. Indices and scales were considered the efficient instruments for data
107 reduction and analysis. All personal characteristics were categorized and arranged in simple tables for
108 interpretation and discussion. Number, frequency and percentage were used for statistical description.
109 The independent variables were some of the selected characteristics of the respondents. The selected
110 characteristics of the respondents were age, educational qualification, family size, farm size, annual
111 family income, organizational participation, extension media contact, training exposure, poverty status,
112 number of performed daily activities, time spent in performed daily activities, involved in income
113 generating activities at how many days per month, role in decision making for different activities and
114 problem faced by respondent for participating in income generating activities.

115 Contribution in terms of money (Time spent for performing different daily activities converted into money)
116 constituted dependent variable of the study. Time spent for performing different daily activities converted
117 into money were quantified by using formula. For example, a woman had performed different types of
118 daily activities. At first, how many times she had spent for those activities was counted. Suppose, time
119 spent was 8 hours. A working day = 8 hours and 8 hours working day equivalent to 500 TK (General
120 payment for worker). For 8 hours per day, earning money = 500 TK. Women perform different types of
121 activities every day. So that, monthly earning money = $(500 \times 30) = 15,000$ TK. Yearly earning money =
122 $(500 \times 365) = 1,82,500$ TK.

123 Contribution to family income (%) by respondent was quantified through a formula.

124 **Quantified contribution to family income by respondent = $(\text{Annual income by respondent} \div \text{Total}$**
125 **annual family income) $\times 100$ %.**

126 Participation score (PS) and participation index (PI) were calculated by using the following formula:

127 $PS = (N_1 \times 0) + (N_2 \times 1) + (N_3 \times 2) + (N_4 \times 3)$

128 Where,

129 PS = Participation Score

Comment [T23]: Please, effect corrections
sequel to T21

- 130 N₁= No. of respondents participated not at all / no role
 131 N₂= No. of respondents participated rarely / rarely role
 132 N₃= No. of respondents participated moderately / passive role
 133 N₄= No. of respondents participated extremely / active role

134
$$\text{Participation score} = \frac{\text{Observed participation score}}{\text{Possible participation score}} \times 100$$

135

136 After completion of field survey, all the data of the interview schedule were compiled. Various statistical
 137 measures such as number, mean, standard deviation, minimum, maximum and percentage were used in
 138 describing the independent and dependent variables of the study. For clarity of understanding, tables
 139 were used to present the data. Spearman's rank order correlation co-efficient (ρ) is a nonparametric
 140 measure of the strength and direction of association that exists between two variables measured on at
 141 least an ordinal scale. Thus Spearman's rank order correlation co-efficient (ρ) was computed for exploring
 142 the relationships between the selected characteristics of the respondents and their contribution in
 143 socioeconomic development. Data were analyzed by using the Statistical Package for Social Science
 144 (SPSS).

145 3. RESULTS AND DISCUSSION

146 3.1 Selected characteristics of the rural women

147 Middle aged women (44.2%) were highly involved in socioeconomic development followed by young aged
 148 (40%) and old aged women (15.8%). About (46.7%) of respondents had secondary level of education
 149 followed by (11.7%) respondent were illiterate and (3.3%) of respondent had above higher secondary
 150 level of education. Maximum numbers of families in rural areas were medium in size that was about
 151 (50.8%) followed by small sized family (35.8%) and large sized family (13.3%). About (45.8%) of the
 152 respondents had small farm size and only (3.3%) had large farm size. However, about (7.5%) of the
 153 respondents had medium farm size and (30.8%) of the respondents had marginal farm size and only
 154 (12.5%) of the respondents were landless. Majority of the respondents had medium family income
 155 (45.8%) followed by extremes lower income (11.7%), lower income (31.7%) and higher income number of
 156 (10.8%). About (8.3%) of the respondents had no interest to participate in any organization followed by
 157 (58.3%) of the respondents had in medium participation, (30%) of the respondent had in low participation
 158 and (3.3%) of the respondents had more interest to participate in any organization. Majority of the rural
 159 women (49.2%) had low extension contact and (47.5%) had medium extension contact. There were so
 160 small amount of women only (3.3%) who had possessed higher extension contact. The respondents
 161 (85.8%) had medium training followed by (8.3%) of the respondents had no training as they were not to
 162 be interested to receive any training. About (4.2%) of respondents had medium training opportunity
 163 followed by (1.7%) of the respondents had high training as they were mostly interested to receive any
 164 training from different government and non-government organization. About (52.5%) of the respondents
 165 were involved in medium number of daily activities followed by low number of daily activities (5.8%) and
 166 higher number of daily activities (15.8%) of the respondent. Most (78.3%) of the respondent spent
 167 moderate time in performing different types of daily activities whereas about (1.7%) of respondents spent
 168 short time and (20%) of the respondents spent long time. Most (43.8%) of the respondents were in
 169 moderate days involved for performing different types of income generating activities whereas about
 170 (29.8%) were in short days involved and (25.6%) of the respondents were in long days involved. Majority

171 of women (47.5%) had medium role in decision making for different activities whereas about (45.8%) of
 172 the respondents had low role and (6.7%) of the respondents had high role for decision making for
 173 different activities. Majority of the women (54.2%) faced low problem for participating in income
 174 generating activities compared to (18.3%) women faced medium problem and only about (27.5%) faced
 175 higher problem. (Table 1)

Comment [T24]: The interpretation of results seems to create a grammatical shock so to say. Please, use research oriented language.

176

177 **Table 1. Distribution of rural women according to their selected characteristics (N= 120)**

Parameter	Category	Score	Respondents (N=120)		Mean	SD	Min	Max
			Number	Percentage				
Age	Young	≤35	48	40	40.29	10.59	20	62
	Middle	36-50	53	44.2				
	Old	>50	19	15.8				
Education (Schooling years)	Illiterate	0	14	11.7	6.37	3.97	00	17
	Primary	1-5	37	30.8				
	Secondary	6-10	56	46.7				
	Higher Secondary	11-12	9	7.5				
	Above higher secondary	Above 12	4	3.3				
Family size (No. of members)	Small	≤4	43	35.8	5.32	1.66	3	10
	Medium	5-7	61	50.8				
	Large	>7	16	13.3				
Farm size (Hectare)	Landless	< 0.02	15	12.5	0.65	0.79	0.01	4
	Marginal	0.02-0.20	37	30.8				
	Small	0.21-1.0	55	45.8				
	Medium	1.01-3.0	9	7.5				
	Large	>3	4	3.3				
Annual income (TK)	Extra low	≤ 1,20,000	14	11.7	2,49,475	82151.21	1,12,000	3,90,000
	Low	1,20,001-2,40,000	38	31.7				
	Medium	2,40,001-3,60,000	55	45.8				
	High	>3,60,000	13	10.8				
Organizational Participation (Score)	No	0	10	8.3	9.13	4.8	00	19
	Low	1-8	36	30				
	Medium	9-16	70	58.3				
	High	>16	4	3.3				
Extension contact	Low	≤ 20	59	49.2	22.74	8.62	6	42
	Medium	21-40	57	47.5				
	High	> 41	4	3.3				
Training exposure	No	0	10	8.3	2.33	1.21	0	6
	Low	1-4	103	85.8				
	Medium	5-8	5	4.2				
	High	>8	2	1.7				

178

179

180

181 **Table 1. Continue.....**

Parameter	Category	Score	Respondents (N=120)		Mean	SD	Min	Max
			Number	Percentage				
Poverty status (Score)	No	0	9	7.5	6.19	4.91	00	25
	Low	1-10	98	81.7				
	Medium	11-20	9	7.5				
	High	21-30	4	3.3				
Number of performed daily activity	Low	<4	7	5.8	6.67	1.93	3	10
	Medium	4-7	63	52.5				
	High	>7	50	41.7				
Time spent in performed daily activities (Hours)	Short	< 6	2	1.7	7.25	1.31	5	11
	Moderate	6-8	94	78.3				
	Long time	> 8	24	20				
Involved in income-earning activity (Days per month)	Short	<15	36	29.8	17.67	4.24	12	30
	Moderate	15-20	53	43.8				
	Long	>20	31	25.6				
Role in decision making (Score)	Low	1-10	55	45.8	11.35	6.08	1	30
	Medium	11-20	57	47.5				
	High	21-30	8	6.7				
Problem faced (Score)	Low	0-28	65	54.2	28.48	11.67	4	50
	Medium	29-39	22	18.3				
	High	40-50	33	27.5				

182 *SD- Standard deviation, Min.- Minimum, Max.- Maximum Source: Field survey, 2019

183 **3.2 Relative position (Rank order) of the selected 15- issues of rural women in case of**
184 **role in decision making related to socioeconomic development.**185 Role in decision making by women is an important factors which is directly or indirectly responsible for
186 upgrading any socioeconomic improvement of a nation. Data represents that among all roles in decision

187 making by women, a nature of decision like rearing of poultry, goat and cattle had been ranked first
 188 simultaneously and marriage of sons / daughter had been ranked second simultaneously. (Table 2)

189 **3.3 Relative position (Rank order) of the selected 15-issues about problem faced by rural**
 190 **women during participation in income generating activities**

191 There are different types of problems which are faced by rural women during participation of income
 192 generating activities. Despite being a developing country, Bangladesh always faces the problem of
 193 poverty and illiteracy. The main victim of this problem is women, especially the rural women. Data
 194 represents that among all problems, lack of education had ranked first simultaneously. (Table 3)

195 **Table 2. Relative position (Rank order) of the selected 15- issues of rural women in case**
 196 **of role in decision making related to socioeconomic development based on participation**
 197 **score (PS) and participation index (PI) (N=120)**

Nature of decision	Extent of role in decision making				PS	PI	Rank (15-issues)
	Active	Passive	Rare	No			
	role (3)	role (2)	role (1)	role (0)			
1. Buying or selling lands	5×(3)	6×(2)	9×(1)	100×(0)	36	10	14 th
2. Taking or giving lands on lease	7×(3)	5×(2)	10×(1)	98×(0)	43	11.94	13 th
3. Receiving credit	20×(3)	30×(2)	10×(1)	60×(0)	130	36.12	6 th
4. House construction	5×(3)	20×(2)	10×(1)	94×(0)	55	15.27	10 th
5. Vaccinations of children	40×(3)	40×(2)	20×(1)	20×(0)	220	61.11	3 rd
6. Education of children	50×(3)	20×(2)	20×(1)	30×(0)	210	58.33	4 th
7. Participation in ceremonies	20×(3)	20×(2)	10×(1)	70×(0)	110	30.55	8 th
8. Cultivation of crops	8×(3)	12×(2)	20×(1)	80×(0)	68	18.88	9 th
9. Rearing of poultry, goat and cattle	80×(3)	20×(2)	15×(1)	5×(0)	295	45	1 st
10. Marriage of sons / daughter	70×(3)	30×(2)	15×(1)	5×(0)	285	79.16	2 nd
11. Adoption of high yielding varieties	10×(3)	5×(2)	5×(1)	100×(0)	45	12.5	12 th
12. Agricultural farm activities	20×(3)	30×(2)	10×(1)	60×(0)	130	36.11	5 th
13. Buying of agricultural inputs	10×(3)	5×(2)	5×(1)	100×(0)	50	13.88	11 th
14. Processing of farm products	30×(3)	20×(2)	10×(1)	60×(0)	120	33.33	7 th
15. Marketing of farm products	5×(3)	5×(2)	8×(1)	102×(0)	33	9.1	15 th

199 **Table 3. Relative position (Rank order) of the selected 15-issues about problem faced by**
 200 **rural women during participation in income generating activities based on participation**
 201 **score (PS) and participation index (PI) (N=120)**

Problem	Extent of problem				PS	PI	Rank (15- issues)
	Extreme (3)	Moderate (2)	Rarely (1)	Not at all (0)			
1. Lack of education	106×(3)	10×(2)	0×(1)	4×(0)	338	93.88	1 st
2. Lack of awareness	39×(3)	68×(2)	3×(1)	10×(0)	256	70.48	4 th
3. Lack of family support	15×(3)	24×(2)	8×(1)	73×(0)	101	28.05	12 th
4. Lack of training	65×(3)	20×(2)	4×(1)	31×(0)	249	66.38	5 th
5. Gender discrimination	34×(3)	44×(2)	20×(1)	22×(0)	210	58.38	6 th
6. Shortage of knowledge	79×(3)	15×(2)	4×(1)	22×(0)	271	75.27	3 th
7. Lack of extension contact	20×(3)	48×(2)	17×(1)	35×(0)	173	48.05	8 th
8. Low wage	10×(3)	74×(2)	27×(1)	11×(0)	205	54	7 th
9. Low efficiency	10×(3)	50×(2)	32×(1)	28×(0)	162	45	10 th
10. Physical weakness	45×(3)	13×(2)	10×(1)	52×(0)	171	47.5	9 th
11. Lack of capital	101×(3)	4×(2)	0×(1)	15×(0)	311	86.38	2 nd
12. Social problem	4×(3)	27×(2)	17×(1)	72×(0)	83	23.05	13 th
13. Political problem	13×(3)	18×(2)	35×(1)	54×(0)	110	30.55	11 th
14. Superstition	3×(3)	11×(2)	15×(1)	91×(0)	46	12.77	14 th
15. Religious	0×(3)	3×(2)	22×(1)	95×(0)	28	7.77	15 th

202

Source: Field survey, 2019

203

204 **3.4 Quantification of contribution to socioeconomic development in terms of earning**
 205 **money (yearly) as the money gained by converting the time spent for performing**
 206 **different daily activities.**

207 Contribution to socioeconomic development in terms of earning money (yearly) as the money gained by
 208 converting the time spent for performing different daily activities ranged from 1,00000 TK to 2,60,000 TK
 209 with a mean of 1,33,033 TK and standard deviation of 36730.10. On the basis of contribution to
 210 socioeconomic development in terms of earning money (yearly) as the money gained by converting the

211 time spent for performing different daily activities, the respondents were classified into three groups.
212 Majority of the women (66.7%) would be low earning money followed by (25.5%) of the women would be
213 medium earning money and (7.5%) of the women would be higher earning money to contribution in
214 socioeconomic development (Table 4). Unemployed women had performed so many daily activities. Their
215 contribution to family income was measured directly in terms of money as their passing time to different
216 activities not only household activities but also another income generating activities converted into
217 money. Annual quantified contribution of women to family income was 1,05,000 TK. whereas annual
218 family income was 2,94,475 TK and total income would be 3,99,475 TK (Figure 1). Quantified contribution
219 to family income based on unemployed respondent was (26%) whereas contribution by other members of
220 the family was (74%) (Figure 2).

221 Employed women had performed their activities and earned money to contribute in family income. Annual
222 quantified contribution of women to family income was 2,50,000 TK. whereas annual family income was
223 5,00,000 TK and total income would be also 500000 TK because as they had earned money directly, for
224 that their income was previously added with annual family income (Figure 3). Quantified contribution to
225 family income based on employed respondent was (50%) whereas contribution by other members of the
226 family was (50%) (Figure 4).

227 Low educated respondent (paid) had performed their activities and had earned money to contribute in
228 family income. Annual quantified contribution of women to family income was 1,20,000 TK. whereas
229 annual family income was 2,50,000 TK and total income would be also 2,50,000 TK because as they had
230 earned money directly, for that their income was previously added with annual family income (Figure 5).
231 Quantified contribution to family income based on low educated respondent (paid) was (48%) whereas
232 contribution by other members of the family was (52%) (Figure 6).

233 Highly educated respondent (paid) had performed their activities and had earned money to contribute in
234 family income. Annual quantified contribution of women to family income was 3,00,000 TK. whereas
235 annual family income was 5,00,000 TK and total income would be also 5,00,000 TK because as they had
236 earned money directly, for that their income was previously added with annual family income (Figure 7).
237 Quantified contribution to family income based on highly educated respondent (paid) was (60%) as
238 contribution by other members of the family was (40%) (Figure 8).

239 Low educated respondents (unpaid) women had performed so many daily activities. Their contribution to
240 family income was measured directly in terms of money as their passing time to different activities not
241 only household activities but also another income generating activities converted into money. Quantified
242 contribution of women to family income was 1,00,000 TK. whereas annual family income was 2,50,000
243 TK and total income would be 3,50,000 TK (Figure 9). Quantified contribution to family income based on
244 low educated respondent was (29%) whereas contribution by other member of the family was (71%).
245 (Figure 10).

246 Highly educated respondents (unpaid) women had performed so many daily activities. Their contribution
247 to family income was measured directly in terms of money as their passing time to different activities not
248 only household activities but also another income generating activities converted into money. Annual
249 quantified contribution of women to family income was 1,50,000 TK. whereas annual family income was
250 5,00000 TK and total income would be 6,50,000 TK (Figure 11). Quantified contribution to family income
251 based on highly educated respondent (unpaid) was (23%) whereas contribution by other members of the
252 family was (77%) (Figure 12).

253

254

255 **Table 4. Distribution of respondents according to quantification of contribution to**
256 **socioeconomic development in terms of earning money (yearly) as the money gained by**
257 **converting the time spent for performing different daily activities.**

Categories	Score	Respondents (N=120)		Mean	SD	Min.	Max.
		Number	Percentage				
Low earning money.	<1,20,000	80	66.7				
Medium earning money.	1,20,000-2,40,000	31	25.8	1,33,033	36730.10	1,00,000	2,60,000
Higher earning money.	>2,40,000	9	7.5				
Total		120	100				

258 Source: Field survey, 2019

259

260

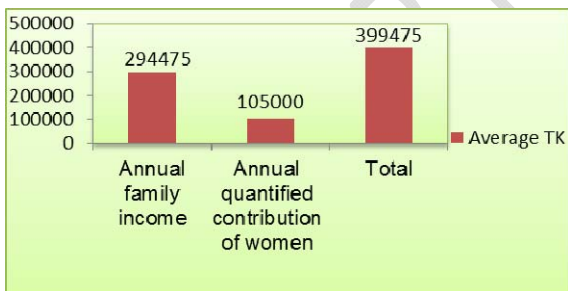


Figure 1: Quantification of contribution to family income in terms of money based on unemployed respondent.

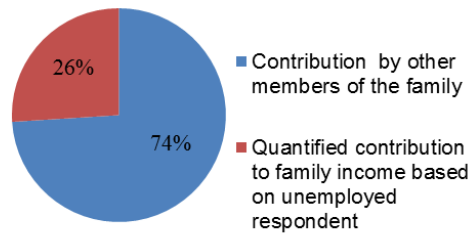


Figure 2: Quantification of contribution to family income in terms of money based on unemployed respondent as (%).

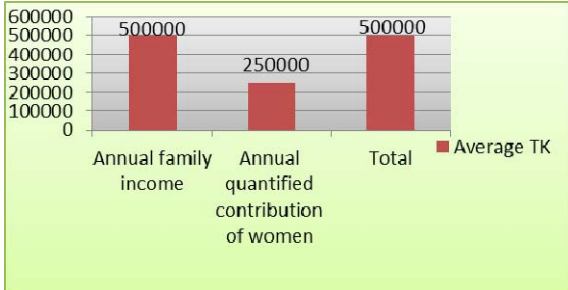


Figure 3: Quantification of contribution in terms of money based on employed respondents.

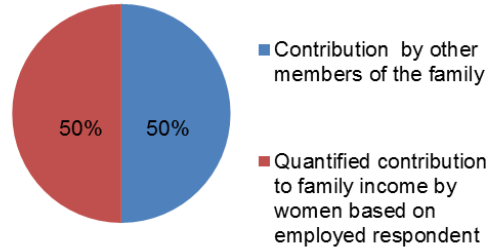


Figure 4: Quantification of contribution in terms of money based on employed respondents as (%).

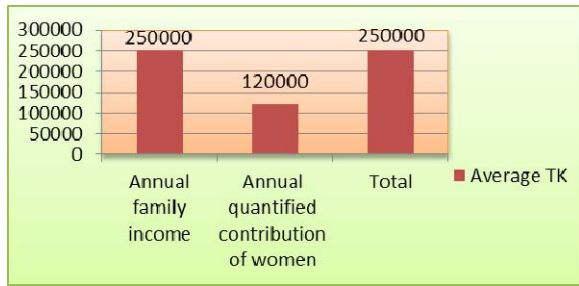


Figure 5: Quantification of contribution based on low educated respondent (paid).

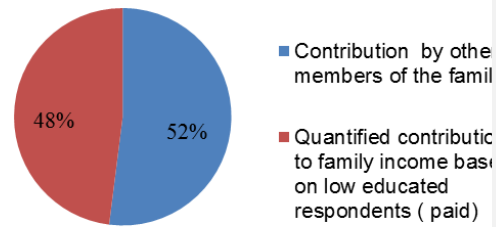


Figure 6: Quantification of contribution based on low educated respondent (paid) as (%).

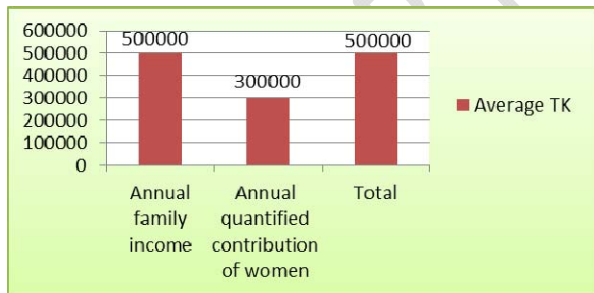


Figure 7: Quantification of contribution in terms of money based on highly educated respondents (paid).

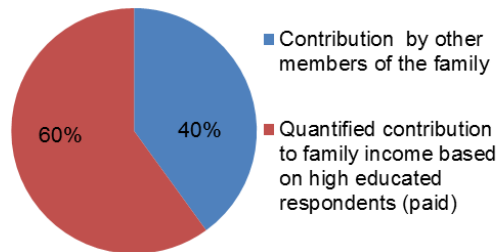


Figure 8: Quantified contribution to family income based on highly educated respondent (paid) as (%).

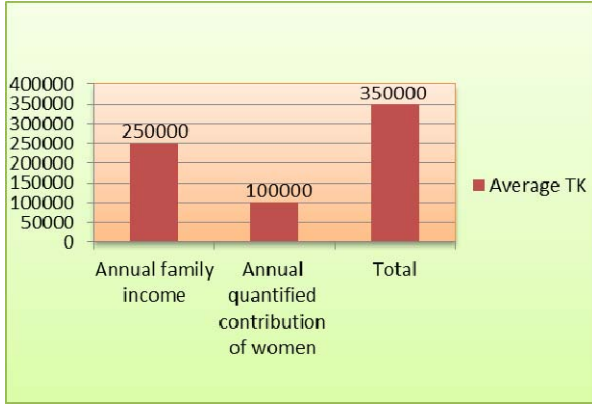


Figure 9: Quantification of contribution in terms of money based on low educated respondents (unpaid).

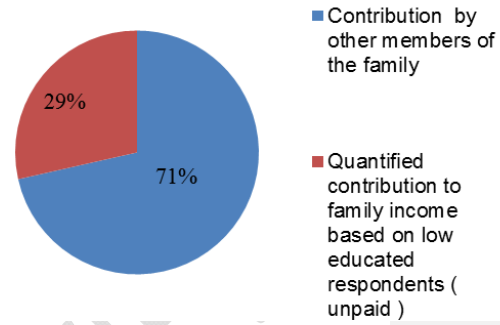


Figure10: Quantified contribution to family income based on low educated respondent (unpaid) as (%).

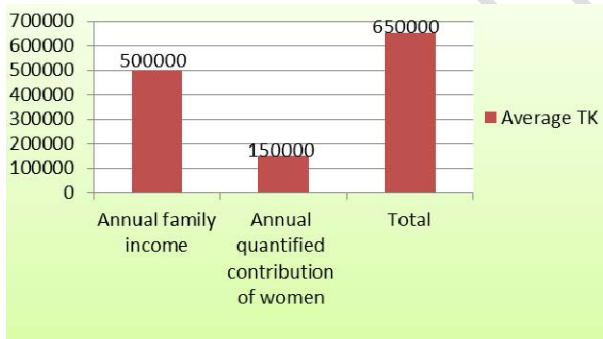


Figure 11: Quantification of contribution in terms of money based on highly educated respondents (unpaid).

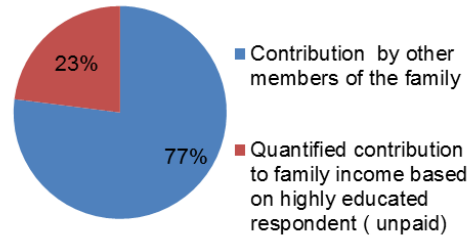


Figure 12: Quantified contribution to family income based on highly educated respondent (unpaid) as (%)

263 **3.5 Relationship between the selected characteristics of rural women and extent of**
 264 **women contribution in socioeconomic development.**

265 This correlation had been done by using Spearman's rank order correlation coefficient (ρ). The computed
 266 value of coefficient of correlation ρ (-0.066) showed a negative and non- significant relationship between
 267 the age of the respondents and their contributions in terms of money to socioeconomic development. The
 268 observed value of co-efficient of correlation ρ (0.166) displayed a positive and non-significant relationship
 269 between the family size of the respondents and their contributions in terms of money to socioeconomic
 270 development. The calculated value of co-efficient of correlation ρ (0.358**) showed a positive and
 271 significant relationship between the annual family income of the respondents and their contributions in
 272 terms of money to socioeconomic development. The calculated value of co-efficient of correlation ρ
 273 (0.451**) showed a positive and significant relationship between involved in income generating activities
 274 at how many days per month of the respondents and their contributions in terms of money to
 275 socioeconomic development. The calculated value of co-efficient of correlation ρ (-0.268**) showed a
 276 negative and significant relationship between the problem faced by respondents and their contributions in
 277 terms of money to socioeconomic development.

278 **Table 5. Relationship between the contributions in terms of money to socioeconomic**
 279 **development (Time spent for performing different daily activities converted into money)**
 280 **by women and their selected characteristics**

Dependent variable	Independent variable	Co-efficient of correlation " ρ "
Contribution in terms of money to socioeconomic development. (Time spent for performing different daily activities converted into money)	Age	-0.066 ^{NS}
	Educational qualification	0.214*
	Family size	0.166 ^{NS}
	Farm size	0.438**
	Annual family income	0.358**
	Organizational participation	0.364**
	Extension media contact	0.400**
	Training exposure	0.258**
	Poverty status	0.245**
	Number of performed daily activities	0.419**
	Time spent in performed daily activities	0.463**
	Involved in income generating activity at how many days per month	0.451**
	Role in decision making for different activities	0.453**
	Problem faced	-0.268**

281 ** Significant at the 0.01 level * Significant at the 0.05 level ^{NS} Non-significant

282

283

284 **4. CONCLUSION**

285 Women have played a key role in the conservation of basic support system. In the site of socioeconomic
286 development, their involvement is considerable. In general, women become important agents of
287 addressing rural communities and their socioeconomic development and they carried productive roles
288 and contributors to development through participation in economic activities. It might be concluded from
289 the gist of findings mentioned above that, contribution of rural women to socioeconomic development is
290 so much essential. For that, necessary steps concerning extension approach as well as adequate support
291 from government and non-government organization should be provided to increase the contribution rate
292 by ensuring barrier free participation of rural women in income generating activities.

Comment [T25]: Where

Comment [T26]: This statement obstructs the flow in this section.

Comment [T27]: Delete

293

294 **COMPETING INTERESTS**

295 Authors have declared that no competing interests exist.

296

297

298 **REFERENCES**

299

- 300 1. Aktaruzzama M. Functional participation of landless women in income generating activities (IGAs)
301 under SAIP of DAE. M.S Thesis, Department of Agricultural Extension Education, Bangladesh
302 Agricultural University, Mymensingh, Bangladesh. 2006.
- 303 2. BBS. Bangladesh Bureau of Statistics. Statistical Division, Ministry of Planning, People's Republic
304 of Bangladesh: Dhaka, Bangladesh. 2017.
- 305 3. Chowdhury MH. Women attitude towards crop diversification. M.S. (Ag. Ext. Ed.) Thesis,
306 Department of Agricultural Diversifications M.S. (Ag. Ext. Ed.) Thesis, Department of Agricultural
307 Extension education, Bangladesh Agricultural University, Mymensingh. 2003.
- 308 4. Haque MZ. Attitude of rural women towards Agriculture in selected area of pabna District. R.S.
309 (Ag, Ext. Ed.) thesis, Department of Extension Education, Bangladesh Agricultural University,
310 Mymensingh. 2002.
- 311 5. Hussain MS. Women contribution to Homestead Agricultural Production System Bangladesh.
312 Bangladesh Academy for Rural Development and Bangladesh Agricultural Research Institute.
313 1988.
- 314 6. Kabir G. Participation of Male Garo Youth in Selected Income Earning Agricultural Activities in
315 Haughty Upazila Under Mymensingh District. M.S. (Ag. Ext. Ed.). Thesis, Department of
316 Agricultural Extension Education, Bangladesh Agricultural University, Mymensingh. 2002.
- 317 7. Nogari M. Self-evaluation: Ideas for Participatory Evaluation of Rural Community Projects World
318 Neighbours; 1984.
- 319 8. Rashid MZ. Participation of School Dropout Teenage Rural Youth in Selected Agricultural
320 Activities in two villages of Mymensingh District. M.S. (Ag. Ext. Ed.) Thesis, Department of
321 Agricultural Extension education, Bangladesh Agricultural University, Mymensingh. 2003.