



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.



Challenges of Small Enterprise Beneficiaries of Palli Daridro Bimochon Foundation: An Organization Work for Rural Development in Bangladesh

**M. R. Islam ^{a++}, M. R. Islam ^{b#}, M. S. Ali ^{b#}, M. H. Kabir ^{b#*}
and M. A. T. Mia ^{ct}**

^a PDBF, Ministry of LGRD & Co, Bangladesh.

^b Department of AEIS, SAU, Dhaka-1207, Bangladesh.

^c Department of AS, DRMC, Dhaka-1207, Bangladesh.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJAEES/2024/v42i12344

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/110795>

Original Research Article

Received: 17/10/2023

Accepted: 22/12/2023

Published: 15/01/2024

ABSTRACT

The major purpose of the study is to determine the extent of the problems faced by the small enterprise beneficiaries of Palli Daridro Bimochon Foundation (PDBF) on their socio-economic development and to explore the relationships between the socio-economic characteristics of the small enterprise beneficiaries and their problem. A total of 838 small enterprise beneficiaries of four upazilas under 55 districts of PDBF constituted the population of the study. A face to face interview

⁺⁺ Senior Assistant Director;

[#] Professor;

[†] Assistant Professor;

^{*}Corresponding author: E-mail: mhumayunsau@gmail.com;

survey was conducted to collect data from the randomly selected 271 respondents. The major proportion (61.62 percent) of the small enterprise beneficiaries faced medium problems in their socioeconomic development, while 19.56 percent faced high and 18.82 percent faced low problems. An overwhelming (81.18%) majority of small enterprise respondents of PDBF faced medium to high problems faced. Among fourteen problems, a high rate of interest was ranked 1st, followed by inadequate loan amount as per demand and duplication of business in the same business area. Correlation analysis revealed that length of involvement, savings deposit, loan availability, satisfaction towards loan received condition, and attitude towards Small Enterprise Loan Program (SELP) of PDBF were significantly associated with the problems of small enterprise respondents. Therefore, it may be recommended that the PDBF authority should consider the significant factors to reduce the respondents' problem and to maximize their socioeconomic development.

Keywords: Beneficiaries; PDBF; problem Faced; small enterprise; socio-economic development.

1. INTRODUCTION

Small and medium sized enterprises (SMEs) are regarded as the growth engine that propels the economy and generates employment on a global scale. Their ability to promote economic growth, maintain the global economic recovery, create jobs, and lower poverty has propelled them to the forefront of the sustainable development agenda. In Bangladesh, SMEs directly support 31.2 million people's livelihoods and provide jobs for 7.8 million people [1]. The growth rate of Gross Domestic Product (GDP) at current prices in the manufacturing sub sector of Bangladesh in small, medium, and micro industries is 18.18 [2]. SMEs have a significant positive impact on a nation's GDP growth, job creation, and standard of living [3]. Small enterprises have a favorable impact on a nation's economic development. Additionally, the report notes that whereas SMEs in high-income economies typically support entrepreneurship activities in the pursuit of economic expansion, in less developed economies they aid in the creation of jobs for the population [4].

SMEs have a significant role in the growth of the local economy, particularly in terms of generating jobs, fostering economic expansion, and reducing poverty. SMEs propel a nation's economic growth. Generally speaking, banks are not interested in financing SMEs. The higher operational costs, lower returns, and more risk connected to SME finance are the cause of this conservatism. The modest loan amount results in higher operational costs and the need for close oversight and monitoring. The main cause of the increased risk is that small and medium-sized business owners are very unlikely to meet the collateral requirements because, in most cases, they lack transportable property. Sometimes

banks and non-bank financial institutions are hesitant to loan SMEs, citing collateral as an explanation [5]. Thus, small and medium entrepreneurs in Bangladesh have been facing a lot of problems like high interest rates, inadequate loan amounts, product duplication, lack of training, poor road and network infrastructure etc. Palli Daridro Bimochon Foundation (PDBF) is the premier socio-economic development organization in the country. PDBF has been providing small entrepreneurial loan facilities to generate more income and employment by providing technical benefits to these small businessmen and entrepreneurs. It plays an important role in bridging the gap between the loan program, microfinance, and institutional lending. For a long time, PDBF has been providing small enterprise loans to rural clientele. Therefore, the present study was undertaken considering the following objectives:

- i) To determine and describe some selected characteristics of the small enterprise beneficiaries;
- ii) To explore the extent of the problem faced by the small enterprise beneficiaries of PDBF on the socio-economic development;
- iii) To determine the relationships between socio-economic characteristics of the small enterprise beneficiaries and their problem conformation.

2. METHODOLOGY

2.1 Study Area

The study was conducted in four upazilas (sub-district) drawn from one upazila in each of the four districts of 55 districts of PDBF in

Bangladesh to objectively represent the entire working area. The area is selected purposively. There has been observed active participation of the beneficiaries in these selected areas.

2.2 Population and Sampling

Out of 838 total populations, 271 small enterprise beneficiaries were selected considering Yamane formula [6]. A total number of 271 respondents were finally selected which constituted the sample of the study by using a stratified random sampling technique. A reserve list of 27 small enterprise respondents (about 10 % of the sample) was also prepared in case of unavailability of the respondents. The sample unit that is the PDBF beneficiaries selected randomly. The random selection process helps to avoid biasness of the study output.

2.3 Selection and Measurement of Variables

The extent of the problem faced by the small enterprise beneficiaries was the focus variable and twelve socio-economic characteristics were selected as explanatory variables namely age, educational qualification, total dependency ratio, training exposure, length of involvement, savings deposit, loan availability, loan utilization, loan repayment behavior, satisfaction towards loan received condition, decision making ability and attitude towards SELP of PDBF. The study

employed descriptive statistics, specifically mean, standard deviation, and percent, to measure the socioeconomic characteristics of the small firm beneficiaries. The study's variables were operationalized by direct questioning, the researcher's creation of pertinent scales, and the use of scales created by others. Table 1 displays the study's measuring unit.

2.4 Measurement of Dependent Variable

Problem Faced by the SELP beneficiaries in socio-economic development was the dependent variable of this study. There were fourteen (14) things on the interview schedule. Each of the fourteen (14) things was rated on a four-point rating scale: no problem, less problem, moderate problem, and severe problem. A score of 0, 1, 2, and 3 was given to each item, accordingly. By aggregating the farmers' scores over fourteen (14) criteria, the issues that the small business beneficiaries encountered could be ascertained. Therefore, the farmers' issues might be ranked from 0 to 42. The beneficiaries were divided into four categories—no difficulty faced, low problem faced, medium problem faced, and high problem faced—based on the score that was acquired.

Problem Faced Index (PFI) for each of the items was measured by using the following equation 1 [7, 8, 9].

$$PFI = P_s \times 3 + P_m \times 2 + P_l \times 1 + P_n \times 0 \dots \quad (1)$$

Table 1. Summarized operationalization of the variables of the study with measuring unit

Variables	Measuring Unit	Operationalization
Age	Actual years	Direct question
Educational Qualification	Schooling Year(s)	Direct question
Total dependency ratio	Percent	Used (TDR) formula
Training exposure	No. of months (1 for 1 month)	Scale developed for this study
Length of involvement	Score (1 for 1 year)	Direct question
Decision-making ability	Score	Scale developed by Ali (2008) [3] used for this study
Savings deposit	'000' Taka	Direct question
Loan availability	Percent	Used (LA) formula
Loan utilization	Percent	Used (LU) formula
Loan repayment behaviour	Percent	Used (LRB) formula
Satisfaction towards loan received condition	Score	Scale developed for this study
Attitude towards small enterprise loan programme of PDBF	Score	Scale developed for this study with the help [7-10],

In the given context, PFI stands for Problem Faced Index, Ps for the number of respondents who experienced a severe problem, Pm for those who experienced a moderate difficulty, Pl for those who experienced a smaller problem, and Pn for those who experienced no problem. Then, Standardized Problem Faced Index (SPFI) was measured to compare the problem of the items. SPFI was measured for each problem item by using the following equation 2.

$$\text{Standardized Problem Faced Index (SPFI)} = \frac{\text{PFI of the each item}}{\text{Highest possible PFI}} \times 100 \quad (2)$$

2.5 Data Collection and Analysis

The prime task in materializing the objectives of the study was to collect data by interviewing 271 respondents from the study areas. The researcher made all possible efforts to establish the desired rapport with the respondents so that the respondents did not feel any hesitation to furnish proper information. The respondents were interviewed in their leisure time so that they could give accurate information in a cold mind. Data were collected from 15 October 2021 to 15 March 2022.

Once the field survey was finished, the data was gathered and modified to prepare it for analysis. There were statistical treatments performed, including percent, mean, standard deviation, range, and frequency. Equation 3 was used to calculate Pearson's product-moment coefficient of correlation (r) in order to investigate the correlations between the study's chosen elements [11]. The SPSS (Statistical Package for Social Science) software program (version 23) was used for this purpose. In this investigation, the probability level of five percent was employed.

$$r_{xy} = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum(x_i - \bar{x})^2 \sum(y_i - \bar{y})^2}} \quad (3)$$

r_{xy} = Pearson's product-moment correlation coefficient

\bar{x} and \bar{y} = Means of the variables x and y , respectively

3. RESULTS AND DISCUSSION

3.1 Socioeconomic Characteristics of the Small Enterprise Beneficiaries

The socioeconomic characteristics of the small enterprise beneficiaries are presented in Table 2. Some of the salient features such as the number, percent, mean, and standard deviation (SD) of

the selected characteristics of the beneficiaries have been presented in Table 2. Middle-aged and secondary school educated respondents made up the largest percentage of the sample [12]. When it came to savings deposits, training exposure, and total reliance ratio, the majority fell into the low category. Most of the respondents were medium category in the case of their length of involvement with PDBF and decision making ability. In case of loan availability, loan utilization, loan repayment behavior, satisfaction towards PDBF loan received condition, and attitude towards the small enterprise of PDBF, the majority portion were in the high category (Table 2).

3.2 Problems Faced by the Small Enterprise Beneficiaries in Socio-economic Activities

Problem faced by the small enterprise beneficiaries in socio-economic development was considered as dependent variable of the study. It was measured based on their coping capacity with the selected 14 problems.

Problems faced by the small enterprise beneficiaries range from 1 to 26 against the possible range of 0 to 42 with the mean and standard deviation of 7.79 and 6.07 respectively. Based on the problem scores of the beneficiaries, they were classified into four groups namely, no, low, medium, and high problems faced. The distribution of the respondents according to the problem faced by the small enterprise beneficiaries under the study is given in Table 3.

Table 3 indicates that the highest proportion (61.62 percent) of the small enterprise beneficiaries faced medium problems in their socioeconomic activities, while 19.56 percent faced high and 18.82 percent faced low problems. Among the respondents, most of the respondent beneficiaries confront their problem using their long experience and knowledge gathered from day to day practices in small enterprise activities. The results suggest that the research area's small business beneficiaries struggled with socioeconomic activities. Several things, like a dearth of training facilities and low savings accounts, could be to blame for those issues. According to [13], the main obstacles to an enterprise's success are a lack of the necessary entrepreneurial skills, training, and traits. Furthermore, they contended that the primary reason for the failure of SME operations is a lack of adequate training and improved education.

Table 2. Distribution of respondents according to their characteristics (n=271)

Characteristics	Categories	Respondents		Mean	SD
		Number	Percent		
Age (years)	Young aged (18- 35)	60	22.10	40.24	10.167
	Middle aged (36- 55)	201	74.20		
	Old aged (>55)	10	3.70		
Education (schooling years)	Can sign only (0.5)	6	2.20	7.63	2.812
	Primary level (1-5)	27	10.00		
	Secondary level (6-10)	160	59.00		
	Higher secondary level (11-12)	56	20.70		
Total dependency ratio (percent)	Bachelor level (>12)	22	8.10	54.62	45.66
	Low total dependency ratio (0-50)	172	63.50		
	Medium total dependency ratio (51-100)	78	28.80		
	High total dependency ratio (> 100)	21	7.70		
Training exposure (months)	No training (0)	42	15.50	6.26	5.91
	Low training (1-6)	138	50.90		
	Medium training (7-12)	58	21.40		
	High training (>12)	33	12.20		
Length of involvement (years)	Low involvement (Up to 2)	64	23.60	4.70	3.00
	Medium involvement (3 - 5)	125	46.10		
	High involvement (>5)	82	30.30		
Decision making ability (score)	Low decision making ability (up to 8)	3	1.10	11.72	1.58
	Medium decision making ability (9-12)	187	69.00		
	High decision making ability (>12)	81	29.90		
	No saving deposit (0)	5	1.80		
Saving deposit (1 for '000' Tk.)	Low saving deposit (up to 40)	122	45.00	187.46	153.58
	Medium saving deposit (41-160)	89	32.80		
	High saving deposit (>160)	55	20.30		
Loan availability (per cent)	Low loan availability (up to 80 %)	62	22.90	87.98	14.29
	Medium loan availability (81 %-95 %)	84	31.00		
	High loan availability (>95 %)	125	46.10		
Loan utilization (per cent)	Low loan utilization (up to 50 %)	59	21.80	89.95	13.41
	Medium loan utilization (81 % - 95 %)	89	32.80		
	High loan utilization (>95 %)	123	45.40		

Characteristics	Categories	Respondents		Mean	SD
		Number	Percent		
Loan repayment behavior (per cent)	Low loan repayment behavior (up to 50 %)	59	21.80	89.95	13.41
	Medium loan repayment behavior (81 % - 95 %)	89	32.80		
	High loan repayment behavior (>95 %)	123	45.40		
Satisfaction towards loan received condition (score)	Low satisfaction (up to 12)	38	14.00	23.55	8.00
	Medium satisfaction (13-24)	91	33.60		
	High satisfaction (>24)	142	52.40		
Attitude towards SELP of PDBF (score)	Highly unfavorable attitude (0-16)	10	3.70	45.65	13.41
	Low unfavorable attitude (17-32)	10	3.70		
	Low favorable attitude (33-48)	78	28.80		
	Highly favorable attitude (49-64)	173	63.80		

Table 3. Distribution of the small enterprise beneficiaries of PDBF according to problem faced on socio-economic activities

Categories (Scores)	Respondents SELP beneficiaries		Mean	Standard Deviation
	Number	Percent (%)		
Low problem (Mean - SD)	51	18.82	7.79	6.07
Medium problem (Mean \pm SD)	167	61.62		
High problem (Mean + SD)	53	19.56		
Total	271	100		

Table 4. Problems faced by the small enterprise beneficiaries in socio-economic activities with rank order

Item of Problems	Extent of problem faced				Total	PFI scores	SPFI (%)	Rank order
	Severe Problem (3)	Moderate Problem (2)	Less Problem (1)	No Problem (0)				
High rate of interest	61	84	36	90	271	387	47.60	1
Inadequate loan amount as per demand	2	131	62	76	271	330	40.59	2
Product duplication in the same business area	25	38	24	184	271	175	21.53	3
Lack of training and input support for production and marketing	3	35	89	144	271	168	20.66	4
Lack of properly use of loan due to shortage of recovery period	18	26	51	176	271	157	19.31	5
Inadequate loan due to savings	17	29	35	190	271	144	17.71	6
Not getting a loan at the beginning of the business	8	27	51	185	271	129	15.87	7
Poor road and network infrastructure	0	47	24	200	271	118	14.51	8
Inability of proper using the loan	0	25	61	185	271	111	13.65	9
Extra expenses for various religious festivals and social occasions	5	26	40	200	271	107	13.16	10
Not new loan issued until final repayment of installments	0	18	57	196	271	93	11.44	11
Delay in loan disbursement due to lengthy process	0	17	59	195	271	92	11.33	12
Not getting loan at the time of need	0	17	28	226	271	62	7.63	13
Hindered the business growth for PDBF corruption	14	0	11	246	271	53	6.52	14

3.3 Item Wise Comparative Severity of the Problems Faced by the Small Enterprise Beneficiaries of PDBF in Socio-economic Activities

The Problem Faced Index (PFI) score, Standardized Problem Faced Index (SPFI), and Rank order are shown in Table 4. The observed PFI scores of the items ranged from 53 to 387 against the possible range of 0-813. Table 4 showed that based on the Standardized Problem Faced Index (SPFI) among the 14 selected problem items 'high rate of interest' was ranked first (47.60%), 'inadequate loan amount as per demand' was ranked second (40.59%) and third (21.53%) was 'product duplication in the same business area'. The next five important problems in descending order were 'lack of training and other input support for production and marketing', 'lack of properly used of loan due to shortage of recovery period', 'inadequate loan due to savings' and 'poor road and network infrastructure'. However, 'hindered the business growth for PDBF corruption' was ranked last (6.52%).

3.4 Relationship between the Selected Characteristics of the Small Enterprise Beneficiaries and their Problem Faced in Socio-economic Activities

Relationships of twelve selected characteristics (age, educational qualification, dependency ratio,

training exposure, length of involvement, savings deposit, loan availability, loan utilization, loan repayment behavior, satisfaction towards loan received condition, decision-making ability, and attitude towards the small enterprise of PDBF) of the small enterprise beneficiaries and their problem faced in socio-economic activities have been shown in Table 5.

Data presented in Table 5 showed significant relationship between length of involvement, saving deposit, loan availability, satisfaction towards loan received condition and attitude towards SELP of PDBF and problems faced by the small enterprise beneficiaries of PDBF. Out of these five significant variables, two variables namely satisfaction towards loan received condition and attitude towards PDBF and problems faced by the small enterprise beneficiaries of PDBF showed negative significant relationship. The rest three variables showed a positive significant relationship with problems faced by the small enterprise beneficiaries of PDBF. Involvement with an organizations help people to learn pros and cons of that organization and this ultimately help to better adjust with an organization [14, 15]. However, sometimes the reverse condition also happened that is higher the involvement lower the success in an activities. Attitude is also an important item to accept a technology or loan for improving socio-economic condition [16-18]. The study findings indicate favorable attitude of the beneficiaries lower the problem face socio-economic development activities.

Table 5. Pearson's product moment co-efficient of correlation showing relationship between beneficiaries characteristics and problem

Dependent variable	Independent variables	Value of co-efficient correlation
Problem Faced by the SELP beneficiaries in socio-economic activities	Age	-.015
	Educational qualification	.015
	Total dependency ratio	-.013
	Training exposure	.053
	Length of involvement	.343**
	Savings deposit	.218**
	Loan availability	.155*
	Loan utilization	-.020
	Loan repayment behavior	.043
	Satisfaction towards loan received condition	-.609**
	Decision-making ability	.059
	Attitude towards SELP of PDBF	-.308**

*=Significant at 0.05 level of probability; **= Significant at 0.01 level of probability

4. CONCLUSIONS

From the above findings and discussion, it may be concluded that the overwhelming (81.18%) majority of small enterprise beneficiaries of PDBF faced medium to high problems faced. Therefore, it may be concluded that the problem faced by the small enterprise beneficiaries is a serious issue to be addressed to maximize socioeconomic development. Small enterprise beneficiaries in the study area experienced several problems, of which, length of involvement, savings deposit, loan availability, satisfaction towards loan received condition, and attitude towards small enterprise of PDBF were significant. Therefore, it is highly recommended that the respective authority may provide better interventions like training, low interest rates, and high loan amount that would increase the profitability of the small business. Moreover, different credit organizations (both GOs and NGOs) may come forward with easily accessible credit services to boost small businesses within the study area and other areas with similar topographical and socioeconomic conditions.

DISCLAIMER

This paper is an extended version of a Thesis document of the same author.

The Thesis document is available in this link: <http://archive.saulibrary.edu.bd:8080/xmlui/bitstream/handle/123456789/4834/18-09325.pdf?isAllowed=y&sequence=1>

[As per journal policy, Thesis article can be published as a journal article, provided it is not published in any other journal]

ACKNOWLEDGEMENTS

The researchers express their sincere gratefulness to small enterprise respondents and the Palli Daridro Bimochon Foundation (PDBF), for providing cherished information.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Voluntary National Reviews (VNRs). Accelerated action and transformative pathways: realizing the decade of action and delivery for sustainable development. Government of the People's Republic of Bangladesh; 2020.
2. Bangladesh Bureau of Statistics. Statistics & Informatics Division (SID), Ministry of Planning, Government of the People's Republic of Bangladesh; 2022.
3. Abdul OE. Entrepreneurial skills and growth of Small and Medium Enterprise (SMEs): A comparative analysis of Nigerian entrepreneurs and Minority entrepreneurs in the UK. *Int. J. Acad. Res. Bus. Soc. Sci.* 2018;8(5):27-46.
4. Hasan RA, Islam KMZ. Bridging the Gap between Microfinance and SME Financing in Bangladesh: unlocking the potentials, Daffodil International University, *J. Bus. Econ.* 2008;3(1):1-17.
5. Islam MM, Bari MA, Ali MS, Rahman MM. Contribution of Palli Daridro Bimochon Foundation activities on socio-economic development of the beneficiaries in Bangladesh. *IOSR J. Agri. Vet. Sci.* 2014;7(1): 01-07.
6. Yamane T. *Statistics: An Introductory Analysis*. 2nd Edition, Harper and Row, New York; 1967.
- Likert R. A technique for measurement of attitudes. *Archives of Psychology.* 1932;140: 5-55.
- Ali MS. Adoption of Selected Ecological Agricultural Practices by the Farmers. Ph.D. Thesis, Department of Agricultural Extension Education, BAU, Mymensingh, Bangladesh; 2008.
7. Amin MA, Bashir MA, Akhter N, Afroj M, Islam MZ, Rahman MM, Baque MA. Constraints faced by the farmers in IPM practices in rice cultivation. *J. Sci. Tech. Environ.* 2016;4(1):245-250.
8. Uddin MN, Kabir KH, Roy D, Hasan MT, Sarker MA, Dunn ES. Understanding the constraints and its related factors in tilapia (*Oreochromis* sp.) fish culture at farm level: A case from Bangladesh. *Aqua.* 2020;530:735927.
9. Islam MS, Islam MS, Kabir MH, Alam MZ, Nur-e-Alam SM. Use of communication media by the Bean farmers. *International Journal of Science and Business.* 2019b; 3(2):126-137.
10. Islam MS, Kabir MH, Ali MS, Sultana MS, Mahasin M. Farmers' knowledge on climate change effects in agriculture. *Agricultural Science.* 2019a;10:386-394.
11. Alam MZ, Islam MS, Kabir MH. Problems faced by the bean farmer in selected areas

- of Pabna district in Bangladesh. Research in Agriculture, Livestock and Fisheries. 2018;5(1):11-18.
12. Pearson K. Note on Regression and Inheritance in the Case of Two Parents. Proc. Royal Soc. London. 1895;58 (347-352):240-242.
13. Ullah H, Shah B, Hassan FSU, Zaman T. The Impact of Owner Psychological Factors on Entrepreneurial Orientation: Evidence from Khyber Pakhtunkhwa-Pakistan. Int. J. Edu. Soc. Sci. 2011;1(1).
14. Obi J, Ibidunni AS, Tolulope A, Olokundun MA, Amahian AB, Borishade TT, Fred P. Contribution of small and medium enterprises to economic development: Evidence from a transiting economy. Data in brief. 2018;18: 835-839.
15. Bello A, Jibir A, Ahme I. Impact of Small and Medium Scale Enterprises on Economic Growth: Evidence from Nigeria. Global J. Econ. Bus. 2018;4(2): 236 -244.
16. Islam MR, Islam MR, Ali MS, Kabir MH. Impact of Small Enterprise Loan Programme of Palli Daridro Bimochon Foundation on the Beneficiaries Socio-economic Development: A Case of Bangladesh. Asian Journal of Agricultural Extension, Economics & Sociology. 2022;40(10): 1198-1205.
17. Kabir MM, Islam MS, Ali MS, Abdullah MM. Farmers' perception towards harmful effects of climate change on agriculture. Asian Journal of Agricultural Extension, Economics & Sociology. 2018;27(1):1-8.
18. Kabir MH, Rainis R. Farmers' perception on the adverse effects of pesticide on environment: a case of Bangladesh. International Journal of Sustainable Agriculture. 2012;4(2):25-32.

© 2024 Islam et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/110795>