

Exploring the Factors Affecting Job Satisfaction among Sub Assistant Agricultural Officers in Dinajpur District, Bangladesh

ABSTRACT

Ensuring job satisfaction is imperative due to its constructive impact on employee welfare, motivation, and output. Exploring the SAAOs' extent of job satisfaction and finding out the influences of different socio-economic factors towards their job satisfaction, were the aims of this study. Data were collected using a pre-tested interview schedule from randomly selected seventy-one (71) SAAOs of seven upazilas of Dinajpur district. SAAOs' job satisfaction was measured based on his/her extent of satisfaction with 10 selected items using a 4-point rating scale. The percentages, means, and standard deviations were employed to summarise the data gathered during the interviews. The inferential statistical investigation involved using correlation and regression analysis. Findings revealed that the highest proportion (53.5 percent) of the respondents had medium job satisfaction. The SAAOs were mostly dissatisfied with the financial support and lack of necessary supplies from the office provided by the organization. Ten independent variables namely, additional education, job demand, job control, organizational support, perceived colleagues' support, job facilities, managerial orientation, psychological well-being, self-efficacy, and job performance had significant positive relationships with job satisfaction according to correlation analysis. According to multiple regression analysis, 64.4 percent of the variance in job satisfaction could be explained by all the independent variables, and organizational support, perceived colleagues' support, psychological well-being, and job performance were the most significant factors. However, perceived colleagues' support had the highest contribution (56.2 percent) in explaining the job satisfaction of SAAOs. For ensuring the job satisfaction of SAAOs, Department of Agricultural Extension (DAE) can emphasize on strategies like professional development of the SAAOs, feedback, rewards and accolades and a supportive organizational culture.

Keywords: Job satisfaction, Job performance, Turnover, Absenteeism, SAAOs.

1. INTRODUCTION

Agriculture is the single largest production sector of the economy of Bangladesh contributing 13.82 percent to its total gross domestic product (GDP) and accommodating 40.6 percent of the country's labor force [1]. Department of Agricultural Extension (DAE) is the largest public sector extension service provider in Bangladesh aiding immensely to the agricultural development of the country. Its mission is to provide need-based extension services to all categories of farmers and enable them to optimize their use of resources, to promote sustainable agricultural and socio-economic development. The core functions of DAE include increasing agricultural productivity, human resource development, and technology transfer. The DAE emerged mainly for the transfer of agricultural technology among farmers with a package program of information, education, and motivation [2].

As an integral part of DAE, the Sub-Assistant Agricultural Officers (SAAOs) are the frontline extension worker-cum field-level professional leaders, working at the grass-root level for the farm people [3]. The SAAOs are vital in disseminating agricultural innovations, practices, and modern technologies among the farm people. They work as facilitators and communicators, helping farmers with their farming activities and their decision-making, and ensuring appropriate knowledge to implement and obtain efficient production. According to the guidelines of the DAE, each SAAO is assigned to provide high-quality extension services for farm households. Since the extensive coverage of each SAAO is large, the success or failure of his/her extension services depends largely on his/her level of extension skills in working with various groups, organising and running demonstrations, assessing farmers' problems, and work planning in other terms on their job performance [4].

In our study's context, job satisfaction describes the mental disposition of an individual towards his or her job. It is a generalization of effective orientation to all aspects of the job. It indicates the general attitude toward a person's job, which shows the difference between the number of rewards employees receive and the amount they believe they should receive [5]. It is the extent to which one feels good about the job and the state of mind regarding the nature of his/her work. People are interested in working in the organisation as well as the services where they get more satisfaction [6]. The development and management of DAE need information on the level of job satisfaction of SAAOs to make sound policy decisions, for preventing and solving job-related problems. A job satisfaction survey is a procedure by which employees report their feelings towards their jobs and satisfaction. Although the government has given many facilities, still SAAOs face many problems that hinder their job performance and job satisfaction [8]. Job satisfaction is also important because it contributes to employee productivity, motivation, and engagement. When employees are satisfied with their jobs, they are more likely to be productive and motivated to do their best work. Additionally, job satisfaction can lead to higher levels of employee engagement, which can translate into better customer service and organizational success [9]. So, the job satisfaction of the SAAOs in Bangladesh is an essential element for the development of the agricultural sector of the country. The SAAOs under the umbrella of the field service wing of DAE, work in 64 districts to serve the farming communities [7] of the country. The Dinajpur district is the largest district among sixteen districts of the northern part of the country. The SAAOs of the district thus need to work in diverse agro-ecological conditions and crop varieties, thus finding out how satisfied are they with their job is crucial for ensuring their efficiency. Therefore, the present study was undertaken to examine the job satisfaction of SAAOs in Dinajpur district with the following specific objectives:

- i. to determine the extent of job satisfaction of the SAAOs in Dinajpur district; and
- ii. to determine the influence of selected socio-economic characteristics of the SAAOs on their job satisfaction.

2. MATERIALS AND METHODS

In conducting this study, an explanatory cross-sectional research design was employed [10]. The methodology is further expanded in the subsequent sections:

2.1 Study Area, Population and Sample

This study consists of qualitative and quantitative research approaches to get a comprehensive view of the job satisfaction of the SAAOs. A multistage random sampling technique was used for the selection

of sample SAAOs for data collection. In the first stage, out of thirteen upazilas of Dinajpur district, seven were selected randomly, namely, Birganj, Bochaganj, Chirirbandar, Birol, Kaharol, Khansama, and Sadar. A total number of 142 SAAOs, working in different blocks of the selected seven upazilas, were the population of the study. From this population, fifty percent accounting for seventy-one (71) SAAOs were selected for data collection in the second stage using a simple random sampling method. This probability random sampling in both stages is more preferable for the purpose of representation of the entire population through probabilistic method to control bias [10]. The map of the study area has been presented in Figure 1.

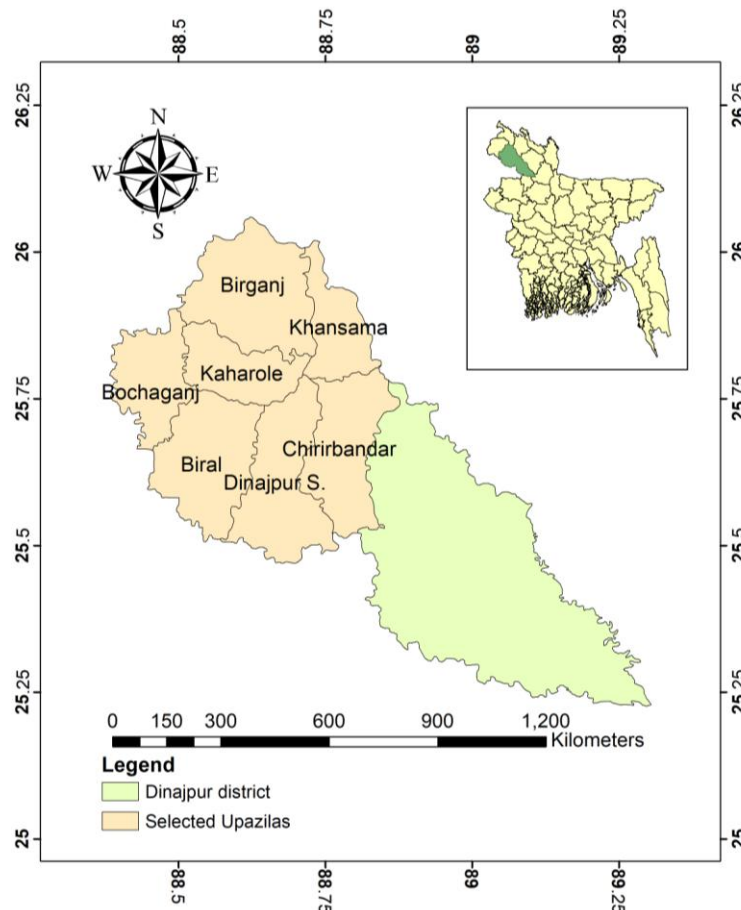


Fig. 1. Map showing the study area (Bangladesh inset).

2.2 Research Instrument and Data Collection

For the purpose of collecting data, an interview schedule was utilised. Both open- and closed-form questions and different scales were used in the interview schedule where they were needed. The interview schedule was pretested with eight SAAOs (other than the sample SAAOs) in the study area. Prior to completing the interview schedule, required adjustments and amendments were made based on the pre-test. The item construction for the job satisfaction scale, restructuring the item sequence and discard of irrelevant items was done during this adjustment and then the interview schedule was finalized. The interviews were individually conducted with the respondents at their convenience from 01 October to 31 December 2020. This timeframe was pre-decided as a part of the research work, however, the authors faced difficulty in collecting data for the prevalence of COVID-19 during this period. In spite of partial and full lockdown, the SAAOs were in field doing their routine duty. However,

during the period of data collection the lockdown was upheld. Both the researchers and the respondents maintained all the safety precautions during the data collection.

2.3 Measurement of the Variables

SAAO's job satisfaction was considered as the dependent variable of this study. To measure the respondent's job satisfaction, a 4-point rating scale as described by Bose et al. [11] was used. The score was assigned as 1 for 'dissatisfied', 2 for 'fairly satisfied', 3 for 'satisfied', and 4 for 'highly satisfied'. The items of the scale were constructed based on the review of previous literature [12, 13, 14, 15, 16]. A total of ten items were finalized for the scale. The overall job satisfaction score for each respondent was computed based on his/her extent of satisfaction with these ten selected items. Thus, the job satisfaction score of a respondent could range from 10 to 40, where 10 indicates dissatisfaction but 40 indicates the highest level of satisfaction with his/her job. Besides this, the ranking of the items of job dissatisfaction was determined by the Job Dissatisfaction Index (JDI) using the following formula [17]:

$$\text{Job dissatisfaction index (JDI)} = D \times 4 + FS \times 3 + S \times 2 + HS \times 1$$

Where, D= Number of SAAOs responding 'dissatisfied', FS= Number of SAAOs responding 'fairly satisfied', S= Number of SAAOs responding 'satisfied', HS= Number of SAAOs responding 'highly satisfied', for each specific item of the 'Job Satisfaction Scale'.

Moreover, sixteen personal and socio-economic characteristics of the respondents were evaluated to describe the profile characteristics of the sample SAAOs namely, age, additional education, family size, annual family income, service tenure, job demand, job control, perceived organizational support, perceived colleagues' support, job facilities, professional training need, managerial orientation, psychological well-being, affective commitment, self-efficacy, and job performance. All of these characteristics were chosen upon reviewing previous research work and available literature and included in the study based on their level of statistical significance with the job satisfaction. The measurement techniques of each variable are presented at Table 3.

2.4 Data Processing and Analysis

The collected data were coded, combined, tabulated, and interpreted. Descriptive statistics (frequency, percentage, mean, standard deviation, ranking) were used to describe the job satisfaction and selected characteristics of the SAAOs, and inferential statistics like correlation and multiple linear regression were used to determine the influence of the selected socio-economic characteristics on job satisfaction. Karl Pearson's Product Moment Correlation coefficient (r) [18] was used to test the relationships between the variables. However, correlation analysis only depicts the direction of the relationship among variables and cannot quantify their influence to explain job satisfaction. Thus, regression analysis (both enter and stepwise method) was used to examine how explanatory variables influence SAAOs' job satisfaction. It also helped to reveal the highest coefficient of determination (R^2), that is, the amount of change of the dependent variable by the independent variables. Overall, version 25 of the Statistical Packages for the Social Sciences (SPSS) programme was used to analyse the data.

3. RESULTS

3.1 Job Satisfaction of the SAAOs

Sub-Assistant Agricultural Officers' (SAAOs') job satisfaction was the dependent variable of the study. The job satisfaction score of the SAAOs ranged from 11 to 39 against a possible score of 10 to 40. The mean and standard deviation was 24.49 and 9.04, respectively. The categorical distribution of the job satisfaction of the SAAOs is presented in Table 1.

Table 1. Distribution of SAAOs according to their job satisfaction

Categories	Respondents (n=71)		Mean	Standard deviation
	Frequency	Percent		
Low job satisfaction (10 to 20)	18	25.4	24.49	9.04
Medium job satisfaction (21 to 30)	38	53.5		
High job satisfaction (31 to 40)	15	21.1		
Total =	71	100.0		

The findings implied that the majority of the SAAOs belonged to the medium job satisfaction category. A little more than half of the respondents (53.5 percent) had medium job satisfaction, while the percentage of respondents in the low to high category was more or less similar.

The ranking of the job satisfaction items according to SAAO's dissatisfaction was done through the Job Dissatisfaction Index (JDI) to determine the item-wise extent of SAAO's dissatisfaction in their workplace. As the 4-point rating scale was used for measuring the extent of satisfaction (in a continuum scale from satisfaction to dissatisfaction) of the SAAOs along with ten selected items, the possible range of JDI is 71 to 284, but the observed range is 155 to 220. The high score of the JDI indicates the high extent of dissatisfaction and vice-versa. The ranking distribution of the items is presented in Table 2.

Table 2. Rank order of the items according to SAAOs' dissatisfaction

Items	Extent of satisfaction				JDI	Rank order
	Dissatisfied	Fairly satisfied	Satisfied	Highly satisfied		
Pleasant working environment in office	19	10	22	20	170	7
Work environment in block	15	15	22	19	168	8
Working with farmers	12	16	16	27	155	10
Proper recognition from the authorities and farmers	23	11	17	20	179	6
Necessary supplies from office on time	25	13	23	10	195	2
Freedom to choose own way of working	26	9	23	13	190	3
Adequate financial support	27	26	16	2	220	1
Salary structure	21	11	28	11	184	4
Punishment for absenteeism due to negligence	12	25	26	8	183	5
Satisfaction with the duration of working hour	12	15	30	14	167	9

Findings reveal that SAAOs were mostly dissatisfied with the 'adequate financial support' provided by their organisation followed by 'necessary supplies from office on time' and 'freedom to choose own way of working'.

3.2 Selected Characteristics of SAAOs

There were various characteristics of SAAOs that might influence their job satisfaction. In the present study, sixteen characteristics were selected as presented in Table 3. The descriptive statistics of the selected characteristics are presented as follows.

Table 3. Descriptive statistics of the selected characteristics

Characteristics	Description/Unit	Range		Mean	Std. dev.
		Possible	Observed		
Age	Measured in years	-	27-58	41.83	10.60
Additional education	Years of education completed	13-18	13-17	14.01	1.43
Family size	No. of members	-	1-10	4.66	1.47
Annual family income	Total annual income ('000' BDT.)	-	211.68-996.32	446.37	165.29
Service tenure	No. of years		2-38	17.41	12.26
Job demand	Extent of demand of job measured in score using 15 items	0-45	8-43	24.93	10.20
Job control	Extent of control of job measured in score using 16 items	0-48	8-47	25.30	10.06
Perceived organizational support	Extent of perceived organizational support measured in score using 5 items	0-15	2-15	8.59	3.86
Perceived colleagues' support	Extent of perceived colleagues' support measured in score using 5 items	0-15	2-15	9.79	3.85
Job facilities	Job facilities measured in score using 10 items	0-20	2-19	8.62	4.19
Professional training need	Extent of need of professional training in score using 10 aspects	0-30	5-29	18.92	7.32
Managerial orientation	Extent of orientation with different managerial issues measured in score using 10 statements	10-40	15-40	30.00	7.48
Psychological well-being	Extent of well-being with different psychological issues measured in score using 6 items	0-18	2-18	11.77	4.47
Affective commitment	Extent of commitment with different affective issues measured in score using 5 items	0-15	3-15	10.41	3.67
Self-efficacy	Extent of self-efficacy measured in score using 10 statements	10-40	12-40	25.08	7.73

Job performance	Extent of job performance measured in score using 10 items	10-40	12-40	25.97	8.18
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3.3 Factors Influencing SAAO's Job Satisfaction

Three steps were followed to determine the influence of the selected characteristics of the SAAOs on their job satisfaction: first, the correlation analysis; second, the multiple linear regression; and finally, the stepwise multiple regression. The steps are given in the following subsections:

3.3.1 Correlation between the selected characteristics of the SAAOs and their job satisfaction

The correlation coefficient (r) was estimated to test the null hypothesis regarding the relationships between the dependent and independent variables. The computed values of the correlation coefficient (r) were compared against the relevant table values. Pearson's coefficient of correlation between the selected characteristics of the SAAOs and their job satisfaction has been presented in Table 4.

Table 4. Relationships between the dependent and independent variables

Dependent variable	Independent variable	Correlation coefficient (r)
Job satisfaction of the SAAOs	Age	0.191
	Additional education	0.405**
	Family size	0.104
	Annual family income	0.197
	Service tenure	0.195
	Job demand	0.630**
	Job control	0.570**
	Perceived organizational support	0.701**
	Perceived colleagues' support	0.754**
	Job facilities	0.370**
	Professional training need	0.034
	Managerial orientation	0.315**
	Psychological well-being	0.609**
	Affective commitment	0.224
	Self-efficacy	0.424**
	Job performance	0.628**

*** indicates significant at 1 percent level of significance

The results shown in Table 4 depict that among sixteen selected personal and socioeconomic characteristics, ten, namely, additional education, job demand, job control, organizational support, perceived colleagues' support, job facilities, managerial orientation, psychological well-being, self-efficacy and job performance had significant positive relationships with the job satisfaction of SAAOs. These ten significant variables were later entered into the multiple regression analysis to find out their respective contribution to the dependent variable.

3.3.2 Multiple linear regression for the contribution of the selected characteristics of the SAAOs on their job satisfaction

The multiple regression analysis was run to determine the influence of different explanatory variables

on the job satisfaction of SAAs. Out of the sixteen independent variables, ten variables that showed a significant relationship with the dependent variable were included in the analysis of the regression due to their significant values in the correlation analysis. Table 5 represents the overall summary of the model of the multiple linear regression analysis.

Table 5. Table of multiple regression model summary

Multiple R	R ²	Adjusted R ²	Std. error of the Estimate	F statistics
0.833	0.695	0.644	5.39362	13.648***

Significant: *** $p < 0.005$

The findings of Table 5 represent that the multiple correlation coefficient between all the predictor variables and job satisfaction was 0.833. Moreover, the coefficient of determination (R^2) indicates that the total of 69.5 percent of the variance in job satisfaction of SAAs could be explained by all the independent variables included in the study. However, the adjusted R^2 pointed out that 64.4 percent variance in the dependent variable resulted from the significant independent variables. In addition, the regression model is significant at one percent level of significance (F statistics = 13.648). Thus, this model is fit to predict the contribution of the concerned independent variables. The different independent variables had their own units of measurement which did not permit the comparison of the unstandardized regression coefficient values [19]. So, the standardized regression coefficient values were also computed to avoid the problems of different units of measurement and the results are presented in Table 6.

Table 6. Contributing variables to explain the job satisfaction of the SAAs

Variables entered	Unstandardized coefficient (B)	Standardized coefficient (β)	t-value
(Constant)	4.702		0.666
Additional education	-0.169	-0.027	-0.296
Job demand	-0.018	-0.020	-0.159
Job control	0.090	0.100	0.950
Perceived organizational support	0.754	0.322	2.526*
Perceived colleagues' support	0.647	0.276	2.088*
Job facilities	0.485	-0.067	-0.746
Managerial orientation	-0.080	-0.066	-0.791
Psychological well-being	0.487	0.241	2.250*
Self-efficacy	-0.041	-0.035	-0.365
Job performance	0.248	0.225	2.237*

* = Significant at 5 percent level of significance

Findings presented in Table 6 indicate that the observed t -value for the regression coefficient was significant for four independent variables, namely, perceived organizational support, perceived colleagues' support, psychological well-being, and job performance. The four significant variables of regression analysis were included in stepwise multiple regression analysis to determine the unique contribution of these variables to the dependent variable.

3.3.3 Stepwise multiple regression for determining the unique contribution of the selected characteristics of the SAAOs on their job satisfaction

The four significant variables of the multiple regression model were included in the stepwise regression analysis and their results are presented in Table 7.

Table 7. Summary of step-wise multiple regression analysis showing contributing variables to the job satisfaction of the SAAOs (n=71)

y (Job satisfaction of SAAOs)						
Variables entered	Unstandardized coefficient (B)	Standardized partial (β) coefficient	Value of 't'	Adjusted R^2	Variation explained in %	F value
Constant	0.866		0.388			
Perceived colleagues' support	0.660	0.281	2.263*	0.562	56.2	90.679***
Job performance	0.219	0.198	2.227*	0.611	4.9	56.066***
Psychological well-being	0.480	0.237	2.721*	0.636	2.5	41.708***
Perceived organizational support	0.679	0.290	2.626*	0.665	2.9	35.759***

* = Significant at 5 percent level of significance, *** = Significant at 0.1 percent level of significance

The results of Table 7 indicate that perceived colleagues' support had the highest contribution (56.2 percent) to the job satisfaction of SAAOs. The rest of the 3 variables viz., job performance, psychological well-being, and perceived organizational support had 4.9 percent, 2.5 percent, and 2.9 percent contributions in predicting the job satisfaction of the SAAOs, respectively.

4. DISCUSSION

In order to acquire recognition, money, promotions, and other things that contribute to a sense of fulfillment, one must be satisfied with their work [20]. In the study area, the respondents had a medium level of satisfaction in their respective job. A number of complicated and subjective elements, including work circumstances, relationships with coworkers and supervisors, pay, possibilities for professional development, and the congruence of personal ideals with corporate values, can impact an individual's level of job satisfaction [21]. Moderate job satisfaction among employees generally suggests that they have a neutral attitude towards their work, neither severely disliking nor strongly enjoying [22]. It indicates a modest degree of satisfaction with their job positions, duties, and the overall work atmosphere.

It is important to ensure that employees are fully content and satisfied with their jobs so that employee turnover can be avoided, and higher productivity is achieved. Thus, a dedicated effort from the authorities should be implied to shift SAAOs' satisfaction and attitudes. Moreover, employers must evaluate and comprehend the aspects and factors that contribute to a moderate degree of work satisfaction. This can facilitate the identification of areas requiring improvement and enable focused

endeavors to better the overall employee experience. Consistent feedback, transparent communication, and proactive employee engagement programs can significantly impact job satisfaction levels in a favorable manner [23]. Moreover, sufficient financial assistance should be ensured by the organisation for augmenting job satisfaction, as it exhibits a direct correlation with employees' perception of worth and acknowledgement of their efforts, thereby cultivating a favorable organizational climate. Employees are inclined to exhibit enhanced job satisfaction, decreased tension, and increased motivation when they possess a sense of financial security; these positive attributes ultimately contribute to increased organizational productivity and employee retention [21]. In addition, necessary office supplies need to be provided to boost their work efficiency.

The findings of the study revealed that four factors, namely perceived colleagues' support and organisational support, job performance and psychological well-being are positively related with SAAOs' job satisfaction. All of these factors contributed to the moderate level of job satisfaction of the SAAOs. These findings are in line with [24, 25, 26, 27, 28, 29, 30] and so on. Support from colleagues and organisation can come out as a significant contributor of employee's job satisfaction. Colleagues who foster collaboration, offer encouragement, and promote a sense of teamwork contribute to a conducive workplace culture. Employees ought to experience a sense of belonging to a unified and encouraging group. According to research, business managers who adopt transformational leadership proactively foster and cultivate a sense of collaboration and cooperation [31]. A positive organizational culture is predicated on collaboration and cooperation, which are in accordance with the tenets of positive psychology and generate concrete advantages including increased productivity, innovation, and creativity [32]. Being appreciated and recognized for one's efforts, having effective methods for receiving feedback, and feeling a strong sense of mutual trust all significantly contribute to enhancing job satisfaction [33].

On the other hand, job satisfaction is strongly correlated with job performance, and it is also a positive predictor of job satisfaction. Not only does job dissatisfaction decrease job performance and morale, but it can also negatively impact employees' financial condition [34]. It is indeed alarming, if SAAOs are not engaged in their work with satisfaction, they are less likely to have the motivation to be productive and carry out quality services toward farmers. Therefore, it is deemed obligatory to take initiatives in enhancing SAAOs' satisfaction in their jobs to improve their overall performance [35].

An individual's psychological well-being is also reflected on his job satisfaction. There is a positive correlation between employee job satisfaction and psychological well-being, which is defined as the presence of positive emotions, a sense of purpose, and a sensation of mastery over one's work [36]. Mental and emotional well-being positively influences an individual's outlook on challenges, fostering resilience and optimism that ultimately contributes to heightened levels of job satisfaction [37]. Conversely, through the provision of social support, a positive work environment, and a sense of accomplishment, job satisfaction can have a positive effect on psychological well-being. A dynamic interplay exists between job satisfaction and psychological well-being, in which an individual's mental and emotional state impacts job satisfaction, and a fulfilling occupation contributes to the enhancement of overall psychological well-being [36].

5. CONCLUSION

Ensuring the contentment and satisfaction of Sub-Assistant Agricultural Officers (SAAOs) in their job roles is imperative for the overall productivity of the agricultural sector as a whole. The Department of Agricultural Extension (DAE) and similar authorities could play a vital role in achieving this by employing diverse strategies that focus on professional development, support, and engagement. Professional development is key to enhancing job satisfaction among SAAOs. The DAE can contribute to their growth by offering training programs and workshops aligned with the career goals of SAAOs. These initiatives not only can enhance their skills but also contribute to a sense of job satisfaction. Regular feedback and performance evaluations are essential tools that can assist SAAOs in understanding their strengths and areas for improvement. This constructive feedback can foster a sense of achievement, contributing positively to overall job satisfaction. Moreover, clear communication about organizational goals, values, and expectations can create a transparent work environment. This transparency, facilitated by the DAE, can promote a positive atmosphere and a better understanding of the organization's direction, contributing to job satisfaction. In addition, encouraging a culture of collaboration and teamwork within the DAE can further enhance social support for SAAOs. This sense of belonging and teamwork contributes significantly to increase job satisfaction. Recognizing and rewarding SAAOs for their contributions and achievements can be a crucial aspect of boosting morale. DAE can implement acknowledgment practices to reinforce a positive workplace culture, thereby contributing to elevated job satisfaction. In conclusion, an organization that prioritizes the professional development of SAAOs, values open communication, and fosters a supportive workplace culture, is likely to enhance overall job satisfaction and, consequently, the organization's productivity.

REFERENCES

1. BBS. Bangladesh Bureau of Statistics. Ministry of Planning. Government of People's Republic of Bangladesh, Dhaka. 2018.
2. Bhuiyan MH. Extension organization and management. Department of Agricultural Extension and Information System, Sher-e-Bangla Agricultural University, Dhaka, Bangladesh. 1999.
3. DAE. Agricultural extension manual. Department of Agricultural Extension, Ministry of Agriculture. Government of the people's Republic of Bangladesh. Dhaka, Bangladesh. 2018.
4. Kashem MA. Fundamental of extension education. 2nd ed. Chotto Bazar, Mymensingh: Fulkuri Printing Press; 2023.
5. Clibrk J, Delic M, Mitrovic S, Culibrk D. Job satisfaction, organizational commitment and job involvement: the mediating role of job involvement. *Frontiers in Psychology*. 2018; 9:132. <https://doi.org/10.3389/fpsyg.2018.00132>.
6. Jonardhan KS. A study of job performance and job satisfaction of agricultural extension officers and factors associated with them (Master's dissertation). University of Agricultural Sciences, Bangalore. 1980.
7. Ahamed F. Farmers' satisfaction on agricultural development in selected areas of Bangladesh (Ph.D. dissertation). Department of Agricultural Extension and Information System, Sher-e-Bangla Agricultural University, Dhaka-1207. 2017.
8. Hossain A, Faruk MO, Ulla MS, Ali MS. Extent of job satisfaction of sub assistant agriculture officers of the department of agricultural extension. *International Journal of Applied Research*.

2019; 5:84-92.

9. Sypniewska B, Baran M, Kłos M. Work engagement and employee satisfaction in the practice of sustainable human resource management– based on the study of Polish employees. *International Entrepreneurship and Management Journal*. 2023; 19:1069–1100. <https://doi.org/10.1007/s11365-023-00834-9>.
10. Hasan MF, Khatun F, Begum H. *Research methodology in social sciences*. Dhaka: Borna Prokashoni; 2018.
11. Bose R, Hossain MA, Anam MM, Hasnat M, Kabir H. Performance of sub-assistant agricultural officer as a professional leader. *International Journal of Natural and Social Sciences*. 2014; 1:41-47.
12. Islam MT, Alam LR. Job satisfaction of newly recruited civil servants of Bangladesh. *Bangladesh Journal of Public Administration*. 2022; 30(4): 49-68.
13. Park S. Determinants of the job satisfaction of public officials: testing the mediation effect of organizational commitment. *Public Organization Review*. 2020; 20:665–684. <https://doi.org/10.1007/s11115-020-00465-6>.
14. Berliana M, Siregar N, Gustian HD. The model of job satisfaction and employee performance. *International Review of Management and Marketing*. 2018; 8(6):41-46. <https://doi.org/10.32479/irmm.7183>.
15. Islam N, Saha G. Job satisfaction of bank officers in Bangladesh. *SSRN Electronic Journal*. 2016. <https://doi.org/10.2139/SSRN.2856224>.
16. Ahmad H, Ahmad K, Shah IA. Relationship between job satisfaction, job performance attitude towards work and organizational commitment. *European Journal of Social Sciences*. 2010;18(2):257-267.
17. Hasan MF, Rain MRK, Mondol MAS, Sarmin S. Farmers' attitude towards farm mechanization. *Bangladesh Journal of Extension Education*. 2020;32(2):41-52.
18. Pearson, K. Notes on regression and inheritance in the case of two parents. *Proceedings of the Royal Society of London*. 1895;58: 240-242.
19. Hasan MF, Hossain MF, Rahman MS, Sarmin S. Factors contributing to farmers attitude towards practicing aquaculture in Dinajpur district of Bangladesh. *Bangladesh Journal of Extension Education*. 2019;31(1&2):77-85.
20. Kaliski BS. *Encyclopedia of business and finance*. 2nd ed. Thompson Gale, Detroit; 2007.
21. Tatar A. Impact of job satisfaction on organizational commitment (pp.43–47). Akdeniz University. 2020.
22. Gazi MA, Islam MA, Shaturaev J, Dhar BK. Effects of job satisfaction on job performance of sugar industrial workers: empirical evidence from Bangladesh. *Sustainability*. 2022;14(21):14156. <https://doi.org/10.3390/su142114156>.
23. Kim B, Park E, Cameron GT. Transparent communication efforts inspire confident, even greater, employee performance. *Asian Journal of Public Relations*. 2017;1(1):9-31.
24. Pratiwi R. Fostering job satisfaction: The role of communication quality and colleague support in job involvement. *AKSES Jurnal Ekonomi dan Bisnis*. 2020;14(2):66–70. <https://doi.org/10.31942/akses.v14i2.3270>.
25. Gul H, Usman M, Liu Y, Rehman Z, Jebran K. Does the effect of power distance moderate the relation between person environment fit and job satisfaction leading to job performance? Evidence from Afghanistan and Pakistan. *Future Business Journal*. 2018;4(1):68–83.

<https://doi.org/10.1016/j.fbj.2017.12.001>.

26. Occhipinti SF, Rollo NM, Klimowicz EJ. The effects of coworker relationships, involvement, and supportiveness on job satisfaction and performance. Student Publications; 2018.
27. Sugiarto I. Organizational climate, organizational commitment, job satisfaction, and employee performance. Diponegoro International Journal of Business, 2018;1(2):112. <https://doi.org/10.14710/dijb.1.2.2018.112-120>.
28. Adigun AO, Oyekunle IA, Onifade T. Influence of job satisfaction on employees' performance in MTN Nigeria. Global Journal of Human Resource Management. 2017; 5(5):54–60.
29. Jiang Z, Hu X. Knowledge sharing and life satisfaction: the roles of colleague relationships and gender. Social Indicators Research. 2016;126(1):379-394 <https://doi.org/10.1007/s11205-015-0886-9>.
30. Petersen KS, Labriola M, Nielsen CV, Larsen EL. Work reintegration after long-term sick leave: domains of influence on co-workers' ability to be supportive. Disability and Rehabilitation. 2016;38(19):1872-1883. <https://doi.org/10.3109/09638288.2015.1107772>.
31. Pathiranage YL. Organizational culture and business performance: an empirical study. International Journal of Economics and Management Studies. 2019;6(6):1-12. <https://doi.org/10.14445/23939125/ijems-v6i6p101>.
32. Radu C. Fostering a positive workplace culture: impacts on performance and agility. Human Resource Management. 2023. <https://doi.org/10.5772/intechopen.1003259>.
33. Jessen JT. Job satisfaction and social rewards in the social services. Journal of Comparative Social Work. 2010;5(1):21–38. <https://doi.org/10.31265/jcsw.v5i1.51>.
34. Yean TF, Johari J, Yahya KK, Chin TL. Determinants of job dissatisfaction and its impact on the counterproductive work behavior of university staff. SAGE Open. 2022;12(3). <https://doi.org/10.1177/21582440221123289>.
35. Maican S, Muntean A, Paștiu CA, Stępień S, Polcyn J, Bogdan DI, Dârja M, Moisă C. Motivational factors, job satisfaction, and economic performance in Romanian Small Farms. Sustainability. 2021;13(11):5832. <https://doi.org/10.3390/su13115832>
36. Wright TA. Much more than meets the eye. Organizational Dynamics. 2010;39(1):13–23. <https://doi.org/10.1016/j.orgdyn.2009.10.009>.
37. Cao X, Zhang H, Li P, Huang X. The influence of mental health on job satisfaction: mediating effect of psychological capital and social capital. Frontiers in Public Health. 2022;10. <https://doi.org/10.3389/fpubh.2022.797274>.