

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Agriculture is the single largest production sector of the economy of Bangladesh contributing 13.82% to its total gross domestic product (GDP). The sector also accommodates 40.6% of the country's labor force (BBS, 2019). Her GDP depends mainly on the performance of the agricultural sector. However, here various natural calamities: floods, cyclones, droughts, and the losses of production of food and cash crops are almost regular phenomena. Yet, in recent years, there has been a substantial increase in food grain production. The agricultural holding in the country is generally small, but the uses of modern machinery and equipment are gradually increasing. Rice, wheat, maize, pulses, jute, sugarcane, potato, tea, fruits, and vegetables are the principal crops of the country. Moreover, crop diversification programs, credit supply, extension work, research, and input distribution policies pursued by the Government of Bangladesh (GoB) yield positive results in this lucrative sector. Hence, the country is now on the threshold of self-sufficiency in food grain production (BBS, 2019).

DAE is the sole and largest public organization disseminating agro-information to farm people. The agricultural extension workers of DAE are devoted to supporting farmers mainly through disseminating farm information. The Sub-Assistant Agricultural Officers (SAAOs) are the frontline extension worker-cum field-level professional leaders of DAE working at the grass-root level for the farm people. The SAAOs are vital in disseminating agricultural innovations, practices, and modern technologies among the farm people. They also communicate with the farmers and analyze their situations, problems, and needs as well. This personnel are posted at the block (i.e., at the grass-root level with an average of 900 farm families) with specified agricultural development duties and responsibilities, including technology transfer to the farmers. The implementation of the plan of action of the Department of Agricultural Extension to support the farmers is the leading task of SAAOs (DAE, 2016). The SAAOs generally work in a particular area/block at the union level under the Upazila Agriculture Office. They are the most responsible persons at the block for the dissemination of information related to agriculture, and their performance lead to the agricultural development of that locality. So, the performance of the SAAOs in Bangladesh is an essential element for the development of the agricultural sector of the country.

DAE is accelerating the country's technological, social, and economic development. It provides unified agricultural extension services to farmers all over the country. 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 the following areas: working with various groups, organizing and running demonstrations, assessing farmers' problems and work planning in other terms on their job performance (Ahmed, 2007).

1.2 Brief Introduction of the Department of Agricultural Extension (DAE)

The DAE is the leading organization of the Government of Bangladesh (GOB), responsible for conducting agricultural extension activities for the farm people. From 1862 to 1865, the country had to face a severe famine. The then Government formed a famine commission. That commission advocated for the first time creating an Agriculture Department. Consequently, in 1870, the Agriculture Department was formed as a revenue Department. In 1960, a separate Agriculture Department was established by the Government. Then, an agriculture farm covering 1000 acres of land was set-up in Monipur area of Dhaka city (presently the National Parliament area and Sher-E-Bangla Agricultural University/SAU). That farm was attached to the Agriculture Department. For researching in agriculture, a laboratory was established in 1909, and in 1914, the government employed an Agriculture Extension Officer in each district, but their academic background was not in agriculture. In 1943, agriculture graduates were appointed to the Agriculture Department. In 1950, the then government of East Pakistan initiated the extension and development program among farmers through the Village Agricultural and Industrial Development (VAID) project. The government established the Plant Protection Wing in 1956, Bangladesh Agriculture Development Corporation (BADC) in 1961, Agriculture Information Center (AIC) in 1962, and DAEM and DARI in 1970 (DAE, 2012). After the independence of Bangladesh, the government took initiatives to strengthen the agriculture extension program and established the Cotton Development Board (CDB), the Tobacco Development Board (TDB), and the Horticulture Board (HB). In 1975, the Directorate of Agriculture (Extension and Management) and the Directorate of Jute were established. In 1982, six agencies responsible for the transfer of technologies: DAE (E and M), DA (jp), Plant Protection Directorate, Horticulture Board, Tobacco Development Board, and Central Extension Resource and Development Institute (CERDI) were merged to form the present Agriculture Extension

Department (DAE, 2012). From 1977 to 1990, the DAE conducted agriculture extension activities under the Training & Visit (T&V) approach. But since 1990, the agriculture extension programs have been going on successfully under the group approach. In 1996, the Government adopted the New Agriculture Extension Policy (NAEP) to conduct well-planned Agriculture Extension Services in Bangladesh. The mission of the Department of Agricultural Extension is to provide efficient and effective need-based extension services to all categories of farmers to enable them to optimize their uses of resources to promote sustainable agricultural and socio-economic development in Bangladesh.

1.3 The Frontline Extension Officers of the DAE

The Sub-Assistant Agricultural Officers (SAAOs) provide technical support to the farmers at the block level. They work with the farmers to design extension programs and analytics, which require specialized agricultural work. The frontline technical workers require basic skills and knowledge, formal education for training and socialization, and on-the-job training (Barley, 1996). Considering these aspects, the skills of the SAAOs represent a crucial resource enabling the DAE to meet its strategic objectives. The effective management of the SAAOs is an essential step in enhancing farmers' crop production. The SAAOs have to motivate the farmers to adopt improved farming practices leading to increased farm production and income. The diffusion of new technologies also requires to develop local institutions and farmers' organizations. These are needed as most farmers are smallholders and individually ineffective in obtaining the services and support necessary to sustain agricultural development. But many ways and means can be considered for improving agriculture in Bangladesh. Nevertheless, the best way to improve the farmers' understanding is to utilize available resources better to maximize their farm outputs by enhancing the performance of the SAAOs.

1.4 Statement of the Problem

The development of technology has influenced work design and working life in organizations. Uses of new technologies in organizations increase job demands, e.g., workload, time pressure, and the need to analyze problem-solving in unexpected situations (Griep et al., 2021). An individual's credibility greatly determines the performance of a job to do (Motowidlo, 2003). In India, several studies have been conducted on the job performance of Agriculture Extension Officers and other extension workers (Debnath et al., 2014; Mishra et al., 2005; Rezaei et al., 2007). In contrast, in Bangladesh, very few studies were conducted

considering the job performance of field extension workers. The finding of such research could help to make necessary changes in the extension system to adjust with the country's socio-economic conditions. Thus, the researchers became interested to work in that field.

The performance of an employee is how well he/she performs his/her tasks, duties, and responsibilities as well. In this link, the performance of an organization is also crucial. The achievement of the goals and objectives of an organization is assessed by the cumulative performance of its resources and employees. Thus, the performance should be evaluated and maintained periodically. Considering the above facts, the researcher felt interested in assessing the job performance of the SAAOs who are responsible for disseminating information and technologies to the farmers and assisting the farming community with their socio-economic development. The effect of work design on their job performance will be explicitly highlighted. This specification will help improve job efficiency through the recommendation(s) of the appropriate policy. Thus, the improved job efficiency of the SAAOs could considerably enhance the country's agricultural development.

The present research work is a broader concept of the variables of job performance. This study may contribute in two ways to understanding the work design's effects on job performance. Firstly, along with other socio-economic characteristics, the effects of work design on psychological strains, affective commitment, self-efficacy, and job satisfaction will be investigated. And the second contribution of this research is the understanding of the work design considering the job demands (i.e., attention demands, problem-solving demands, responsibility demands, and quantitative demands), job control (i.e., time control, method control, skill discretion, and decision authority), perceived organizational support and perceived colleagues' support of the SAAOs. A better understanding represented by this research may assist organizations in determining which characteristics are correlated and contribute to the job performance of the SAAOs. This could help human resource managers formulate strategies for work redesigning in their organizations and enhance job performance among the SAAOs (Motowidlo, 2003).

An individual's job performance is fundamental to achieving desired objectives of an organization. The job performance may be facilitated as well as hindered by many factors. The SAAOs are performing for the achievement of DAE's objectives. Thus, it is necessary to know how SAAOs work in the field to achieve DAE's goals: improving the living standard

of rural people and the farming community by increasing agricultural production. In this regard, it is pertinent to know the answers to the following questions:

- To what extent do the SAAOs perform their job demands, job control, receive organizational and colleagues' support? In other terms, how much do SAAOs follow their work design?
- What is the extent of their performance at their work?
- Does the extent of their work design enhance the extent of the job performance of the SAAOs?
- Which challenges are needed to be addressed to improve the work design and job performance of the SAAOs?

In view of the above questions, the researcher undertook this study entitled “Effect of Work Design on Job Performance of SAAOs of DAE”.

1.5 Objectives of the Study

The general objectives of the present study are to investigate the effects of work design on the job performance of SAAOs. However, the specific objectives are:

- i. To determine the extent of the work design of the SAAOs;
- ii. To determine the extent of the job performance of the SAAOs;
- iii. To determine the effect of the work design on the job performance of the SAAOs;
- iv. To explore the influence of the selected characteristics of the SAAOs on their job performance; and
- v. To identify the challenges for improving the existing work design and the job performance of the SAAOs.

1.6 Significance of the Study

Many agencies provide extension services in Bangladesh. Nonetheless, the DAE plays a vital role in this reverence. The organization is providing its services through many SAAOs who work as grass-root level extension agents and provide service directly to the farmers. So, they must be in their best form in what they are doing. Studies on the job performance of agricultural extension agents generally focus on the evaluation of the extension systems and methodology rather than the personnel. For instance, the economic evaluation of the performance of the extension system (Oyinbo et al., 2021; Dzanku & Osei, 2022), and the economic impacts of the extension systems of agriculture extension (Biswas et al., 2021). But there is inadequate focus on the determinants of the levels of the job performance of the extension agents. Studies concerning the evaluation of job performance in the context of

extension organizations are still limited. In the agricultural extension organizations of Bangladesh, more specifically considering the DAE, there is a lack of proper and adequate understanding of the performance of its extension personnel.

Moreover, over the years, agricultural extension services have been criticized as ineffective (Ekumankama & Anyanwu, 2007; Ibrahim et al., 2008; Okwoche & Asogwa, 2012; Nnadi et al., 2012; Agbarevo, 2013). Though these researchers provided incisive insights into the effectiveness of the extension agents and the possible reasons, their studies did not show the effects of work design on the job performance of the extension personnel. That makes understanding the job performance and work design of the extension agents in extension delivery unclear. That has left a gap in research. Thus, the present study was conducted to understand the work design and job performance of these frontline extension workers. The findings of the study may help to identify the present status of the existing work design and job performance of the SAAOs, which could reflect the actual scenario of the efficiency in transferring farming technologies to the farmers. The findings of the study can also be helpful to planners and policymakers at the national level in formulating strategies for agricultural extension work based on the requirements in improving the existing work design to enhance the job performance of the SAAOs. The findings may also highlight the issues of work design and job performance that need to be addressed in discharging the duties and job responsibilities of the SAAOs, resulting in a good flow of information among the targeted farmers.

1.7 Assumptions of the Study

An assumption is a supposition that an apparent fact or principle is true in the light of the available evidence(s) (Goode, 1945). An assumption is taken as a fact or believed to be true without proof. The researcher made the following assumptions while undertaking such a study.

- i. The SAAOs included in the sample were competent enough to satisfy the queries designed by the researcher.
- ii. The responses furnished by the respondent farmers were reliable.
- iii. The views and opinions furnished by the SAAOs included in the sample were the representative views and opinions of the SAAOs in the Dinajpur district.
- iv. Environmental conditions and organizational procedures under which SAAOs work are generally similar throughout the study area.

- v. Authorities have adequate knowledge about the job performance of SAAOs working under their supervision.
- vi. Ratings of the job performance of the SAAOs by the respective Upazila Agriculture Officers (UAOs), Additional Agriculture Officers (AAOs), Agriculture Extension Officers (AEOs), and farmers are generally free from any bias.
- vii. The farmers under the study are well acquainted with the work of the SAAOs.
- viii. The measure of the job performance of the SAAOs is normally and independently distributed with their mean and standard deviation as well.

1.8 Limitations of the Study

The present study was undertaken to determine the work design and assess the job performance of the SAAOs, and their relationships with their selected characteristics. Attempts were also made to find out the issues that needed to be considered by the SAAOs to improve their job performance in the concerned rural areas. Nevertheless, to make the study manageable and meaningful from the viewpoint of research, it was necessary to abide by some limitations, as noted below:

- i. The study was confined to seven (7) Upazilas: Birganj, Bochaganj, Chirirbandar, Birol, Kaharol, Khansama, and Sadar under the Dinajpur district.
- ii. In assessing the job performance of the SAAOs and the researcher had to rely on the opinions of the SAAOs (self) and the supervisors of the respective officers of the SAAOs at the Upazila levels, e.g. Upazila Agriculture Officers (UAOs), Additional Agriculture Officers (AAOs) and Agriculture Extension Officers (AEOs). Similarly, direct beneficiaries of the extension services of SAAOs, e.g., farmers' opinions, were also sought in this regard.
- iii. The various characteristics of the SAAOs have implications for job performance. But only 13 characteristics were purposively selected for the said investigation.
- iv. There are various items of the job performance of the SAAOs. However, only selective 10 items of the job performance were considered for this study. The SAAOs, UAOs/AAOs/AEOs, and the farmers assessed these 10 items too.
- v. The focus of the study was confined to investigating the in-depth effect of work design on the job performance of SAAOs, but it was not possible to explore other issues related to the job performance in depth.
- vi. Many of the factors of work design, job performance, and situations were excluded from the investigation due to the limitations of time, money, and other resources.

1.9 Definition of the Key Terms

Some key terms used throughout the study have been defined and interpreted below to simplify the understanding:

Absenteeism: It refers to the habitual non-presence of an employee at their jobs. Habitual non-presence extends beyond what is deemed to be within an acceptable realm of days away from the office for legitimate causes, e.g. scheduled vacations, occasional illness, family emergencies, etc.

Affective commitment: This refers to the values of an employee's responsibility towards the organization. An employee affectively committed and strongly identifies with the organization's goals and desires to remain a part of the organization. So it is the emotional attachment of an employee to his/her organizational values.

Employee's productivity: Productivity generally refers to the ability of an individual, team, or organization to work efficiently within that time to maximize its output. High productivity of an employee results from a mix of factors: motivation, personality, natural talent, training or education received, environment, support from others, time management, and even luck. Physical elements also foster productivity: exercise, healthy eating, mental peace, and sufficient sleep can also boost-up efficiency.

Employees' turnover: The employees' turnover, or turnover rate, is the measurement of the number of employees leaving an organization during a specified period, typically one year. But an organization usually measures the total number of employees whose leave, turnover, etc. can also apply to subcategories, e.g., individual departments or demographic groups.

Extraversion: It is a broad personal trait encompassing specific characteristics, e.g., sociability, assertiveness, high activity level, positive emotions, and impulsivity. The nature of this trait and its defining characteristics have changed considerably over time, and some different mechanisms have also been proposed to underlie the trait as the situation is needed.

Human resource management (HRM): This is the practice of recruiting, hiring, deploying, and managing an organization's employees. This is often referred to simply as human resources (HR). A company or organization's HR department is usually responsible for creating, putting into effect, and overseeing policies governing workers and the organization's relationship with its employees.

Job autonomy: Autonomy in the workplace means allowing employees to work in a way that suits them. With autonomy at work, employees can decide how and when their work should be done.

Job burnout: It is a special type of work-related stress- a state of physical or emotional exhaustion that also involves a sense of reduced accomplishment and loss of personal identity. "Burnout" is not a medical diagnosis. Rather, some experts think other conditions, e.g., depression, and frustration are behind burnout.

Job control: Job control refers to the ability to selectively stop the execution of processes and continue their execution later. A user typically employs this facility via an interactive interface supplied jointly by the system.

Job demand: It refers to the physical, psychological, social, or organizational aspects of a job requiring continuous physical and/or psychological effort. Job demands may lead to positive and/or negative outcomes depending on the demand and the individual's ability to cope.

Job enlargement: Job enlargement is a design/technique in which the number of tasks associated with a job is increased (and appropriate training provided) to add greater variety to activities; thus reducing monotony. Job enlargement is considered a horizontal restructuring method in that the job is enlarged by adding related tasks. Job enlargement may also result in greater workforce flexibility in an organization.

Job enrichment: Job enrichment is a process that is characterized by adding dimensions to existing jobs to make those more motivating. Typical examples of job enrichment include adding extra tasks (also called job enlargement), increasing skill variety, adding meaning to jobs, creating autonomy, and giving feedback. The biggest reason to invest in job enrichment is that it leads to motivation too in any organization.

Job facilities: Job facilities refers to the opportunity provided by an organization to its employees for a better working environment and performance of job with satisfaction. This study reveals the job facilities of SAAOs as evaluated through transport, travel allowances, training materials, ICT facilities, required funds, etc. provided by the Department of Agricultural Extension (DAE).

Job performance: Job performance refers to the extent of the competence of an employee. It means to reach a goal or set of goals within a job, role, or organization (Campbell et al., 1990), but not the actual consequences of the acts performed within a job. It assesses whether

a person commits to a job well. It is studied academically as a part of industrial and organizational psychology and forms a part of human resources management. It is an important criterion for organizational outcomes and success.

Job rotation: Job rotation is a management approach where employees are shifted between two or more assignments or jobs at regular intervals to expose them to all verticals of an organization. It is a pre-planned approach to test the employee's skills and competencies to place him/her in the right place. In addition, it reduces the monotony of the job and gives them a wider experience, and helps them gain more insights.

Job satisfaction: Job satisfaction refers to the feeling of fulfillment or contentment of the SAAOs with various aspects of their jobs, e.g., pride in the jobs, enjoyment from the work, the scope of using personal initiatives, cooperation, recognitions, prestige, pays, advancement, opportunity, etc.

Job simplification: Work or job simplification is removing tasks from the existing roles to make those more focused. Job simplification aims to develop improved work methods that maximize output while minimizing both expenditure and cost.

Managerial orientation: Managerial orientation refers to the commitment of individuals to managerial goals and values. This is reflected in the behavior leading to the achievements of the management-related objective, including efficiency and accountability.

Meta-analysis: Meta-analysis is a quantitative, formal, and epidemiological study design used to systematically assess the results of the previous research to derive conclusions about that body of research. Typically, but not necessarily, the study is based on randomized and controlled clinical trials.

Organizational citizenship behavior (OCB): Organizational citizenship behavior is a term used to describe all the positive and constructive actions of employees and behavior which are not a part of their formal job descriptions. It's anything that employees do, out of their own free desires, supporting their colleagues and benefits the organization as well.

Organizational justice: Organizational justice concerns behavior at the workplace, from treatment by superiors to pay, access to training, and gender equality. It is originally derived from equity theory, which suggests that all individuals judge fairness based on the amount they give (input) compared to the amount they get back (output).

Organizational structure: An organizational structure is a system that outlines how certain activities are directed to achieve an organization's goals. These activities can include rules,

roles, and responsibilities. The organizational structure also determines how information flows between levels within the company.

Professional training need: Professional training need refers to the perception of the need for training SAAOs in various aspects of agricultural work. This agricultural extension can increase knowledge, skills, capacity, and experience.

Role conflict: Role conflict occurs when workers are given different and incompatible roles simultaneously, or their role overlaps with another worker or workgroup. The greater the role conflict, the higher the likelihood of a worker experiencing work-related stress.

Self-efficacy: Self-efficacy refers to an individual's belief in his/her credibility to perform and achieve a task. It reflects confidence in controlling one's motivation, behavior, and social environment.

Self-esteem: Self-esteem describes a person's overall subjective sense of personal worth or value. In other words, self-esteem may be defined as how much you appreciate and like yourself regardless of the circumstances.

Work design: Work design refers to the contents, structure, tasks, and activities of employees' work. It is studied mainly regarding job characteristics, e.g., autonomy, workload, role problems, and feedback. Work design concerns the contents and organization of one's work tasks, activities, relationships, and responsibilities (Parker, 2014). Work design is an overarching term to describe the contents, structure, and organization of tasks, activities, and roles that individuals and groups perform in work settings.

Work engagement: Work engagement is the harnessing of the members of the organization to their work roles. In engagement, people employ and express themselves physically, cognitively, emotionally, and mentally during role performance.