

Impact of government's motorcycle subsidy on job performance of agriculture extension officers in Southern province in Sri Lanka

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Abstract

Agricultural Extension is an ongoing, non-formal educational process that takes place over a period of time to transfer knowledge to rural farmers. In Sri Lanka, the ratio of farmers to extension officers is 800:1, and therefore, one extension officer has to extensively work with a larger group of farmers with a limited resource capacity. Considering these facts, the Sri Lankan government decided to provide motorcycle subsidy under National Budget Circular 2/2014 to increase the job performance and well-being of the Agricultural Inspectors. Even though the foresaid objective of this subsidy scheme is to improve the performances, there were no follow-up monitoring and evaluation system for this scheme. Therefore, this research is aimed at evaluating the impact of the government's motorcycle subsidy on job performance and well-being of Agricultural Inspectors in the southern province of Sri Lanka. The sample of 48 Agricultural Inspectors was randomly selected from 70 Agricultural Inspectors in the Galle district. Descriptive and inferential statistics tests

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were mainly used to analyze the data. Among the general constraints faced by the Agricultural Inspectors, the distance to be traveled, a higher number of farmers and area to be covered per day and less infrastructural facilities were major constraints. Importantly, the study revealed that the motorcycle subsidy has significantly affected the job performance of the Agricultural Inspectors directly by facilitating to perform their job roles and saving more time for Agricultural Inspectors to enhance their personal and career development through knowledge acquisitions.

Keywords: agricultural inspectors, job performance, motorcycle subsidy, well-being

INTRODUCTION

The agriculture sector plays a crucial role in Sri Lanka's economy by contributing 7.42% to the national Gross Domestic Product (GDP) and engaging approximately 23.73% of the workforce is related to the agricultural sector (Central Bank of Sri Lanka, 2019). However, agricultural production in developing countries continued to be low and it was generally believed that a dearth of information tailored to local needs and lack of technical knowledge at the farm level are the principal factors for this low and stagnant production (Muhammad, 1994). In that context, access to new knowledge and information plays a key role to improve the productivity agriculture sector. In this context, agricultural extension services play a bridging role between agriculture researchers who produced new knowledge and farmers (who use the new knowledge). Agricultural extension is an ongoing, non-formal educational process that assists in improving the living conditions of farmers and their family members by increasing the profitability of their farming activities. Therefore, extension service improves the farmer's knowledge, skills, and change of their attitudes in agricultural technology, farming activities, and agricultural marketing (Mahaliyanarachchi, 2003).

However, in most developing countries, there are few extension officers to serve many farmers and it is ranging from 1:100 to 1:10000 (Davis and Franzel, 2018). In Sri Lanka, the ratio of farmers to extension officer is 800:1. There is a need to determine the ways in which the same few extension officers can serve a larger group of farmers with minimum effort (Iwoga *et al.*, 2011). At this current scenario, extension services should contribute to increasing the productivity of the farming business and are supposed to support, guide, and direct farmers with the minimum

resource capacity. In the current context, agricultural extension services in Sri Lanka have been assigned to the authorities of the Department of Agriculture to ensure better performances with maximum efficiency. In order to obtain these services from agricultural extension officers, it is vital to motivate them to provide all the necessary infrastructure facilities and adequate staff. Furthermore, Mwangi and McCaslin (1995) point out that, extension workers who work harder will perform better if they are motivated and satisfied with their jobs. In addition, Lindner and Dooley (2002) note that effective performance in skills requires the application of related knowledge and helps make possible the acquisition of new knowledge. In addition, extension agents also need competencies in program planning and development (Boyd, 2004).

Considering these needs and requirements, Sri Lankan Government decided to motivate extension officers with the provision of the motorcycle subsidy under National Budget Circular 2/2014 to improve the job performance and well-being of the Agricultural Inspectors. Under this circular government provided the motorcycles to public officers engaged in field level duties, with the aim of expediting public service delivery and thereby providing their service more effectively to the public. However, there were no any formal mechanisms or procedures to evaluate the effectiveness of this subsidy program and therefore, the government does not have any procedure to continue this program.

Therefore, the main objective of this research is to analyze the impact of the government's motorcycle subsidy on job performance and well-being of Agricultural Inspectors and subsequently to evaluate the existing constraints of the Agricultural Inspectors of Sri Lanka. It is assumed that when Agricultural Inspectors are satisfied with their job and facilities, they would give a higher effort to complete their job tasks, and ultimately it helps to improve their overall performance.

Therefore, this research study will answer the following research questions; What are the general constraints of extension officers have to face? What are the direct impacts of Motorcycle subsidy on job performance and well-being of extension officers? Accordingly, this study is aimed to achieve main three specific objectives; to identify general constraints of extension officers' job performance and their knowledge dissemination and to study the direct impacts of Motorcycle subsidy on job performance, and to evaluate the impact of motorcycle subsidy on the well-being of extension officers.

MATERIALS AND METHODS

This study aims to analyze the impact of the government's motorcycle subsidy scheme using Agricultural Inspectors who are currently working in the three sub-agricultural divisions (East, Central, and West) in the Galle district. This research has been designed to collect data using a semi-structured questionnaire with the 48 Agricultural Inspectors which has been selected using simple random sampling out of 70 populations. Secondary data were gathered from previous articles, journals, government publications.

First, the research aims to identify the constraints faced by agricultural extension workers including the availability of logistics and other support, technical know-how, and other basic infrastructure facilities. Aligning to that, this study tries to see constraining factors associated with the covering area of Agricultural Inspectors, number of farmers' extension/visit per day, travel cost per day, travel time for extension work, availability of technical knowledge, adaptability to new knowledge and technology, the sufficiency of knowledge/skills available with Agricultural Inspectors, support from the farmers for the extension and the language barriers in the working area.

Furthermore, there are 13 variables were used to analyze the impact of motorcycle subsidy on the job performances of the Agricultural inspectors. Those variables were used to see any significant impact has happened on the improvement of the job role and job performances, covering a greater land area, accessing a higher number of farmers, improvement of the relationship with co-workers and farmers, improvement of the interest towards the job and the time for knowledge dissemination. The average score of the respondent was used to analyze the impact measures on the aforementioned variables.

Similarly, this study has focused to analyzing the impact of subsidy scheme on the different dimensions of the wellbeing of the Agricultural Inspectors using 6 variables. Those variables have been used to analyze the impact of subsidy scheme on personal security when travelling, balancing work-family life, saving time for knowledge enhancement, adequate time for leisure activities, time-saving for social interactions, and impact on health status.

RESULTS AND DISCUSSION

Prevailing constraints on the job performances of Agricultural Inspectors

In this study, selected few factors were evaluated as the constraining factors for job performances of the Agricultural Inspectors and how they have been perceived those factors as the constraining factors.

Covering area of Agricultural Inspectors

According to research findings, the majority of Agricultural Inspectors (76%) have to cover over 10 km² area per day while about 21% are covering 5-10 km² area and the rest of 3% are covering an area below 5 km² per day to cover their field work. Accordingly, Agricultural Inspectors need to cover a vast area within a limited time period and are perceived as one of the major constraining factors.

The number of farmers visits per day

Another important observed constraining factor was the number of farmers visit per day. According to Figure 1, 58% of Agricultural Inspectors visit more than 10 farmers per day, and 39% of Agricultural Inspectors visit between five to ten farmers per day while 3% visit less than 5 farmers per day. These findings imply the workload of Agricultural Inspectors per day with the minimum infrastructure facilities in some areas.

Travel cost per day

Another important constraining factor which was considered in this study is to travel cost per day which has to bore by the Agricultural Inspectors using their own money. According to the research, the majority (71%) of respondents spent over 100 rupees per day for the traveling cost while 29% spent 20-100 rupees per day. Moreover, Agricultural Inspectors perceived this traveling cost has to be recovered by any other incentives.

Travel time for extension work

Similarly, traveling time for the farmer visit has been considered as another constraining factor. According to the Figure 2, more than 60% of Agricultural Inspectors spend over 60 minutes for travelling to extension

workplace daily. While 34% spend 30-60 minutes for travelling to the extension workplace. Only about 5% of Agricultural Inspectors in the sample spend less than 30 minutes to travel.

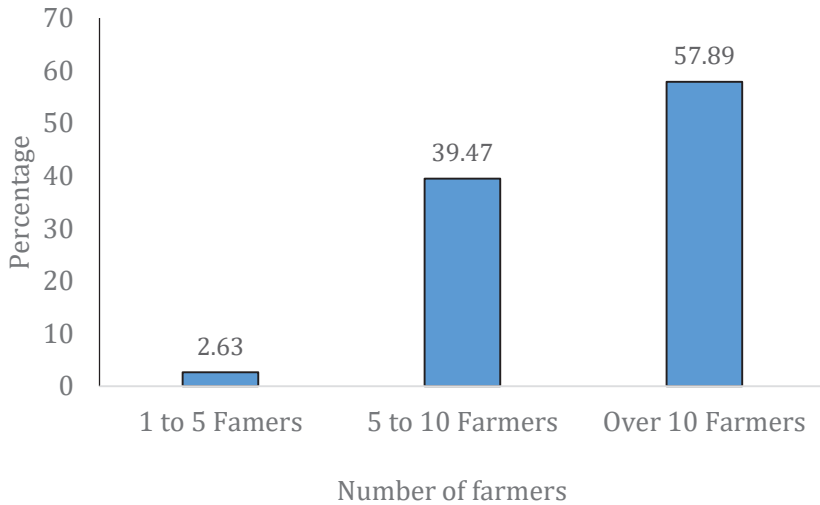


Figure 1: Number of farmers visit per day (Source: Survey data, 2020)

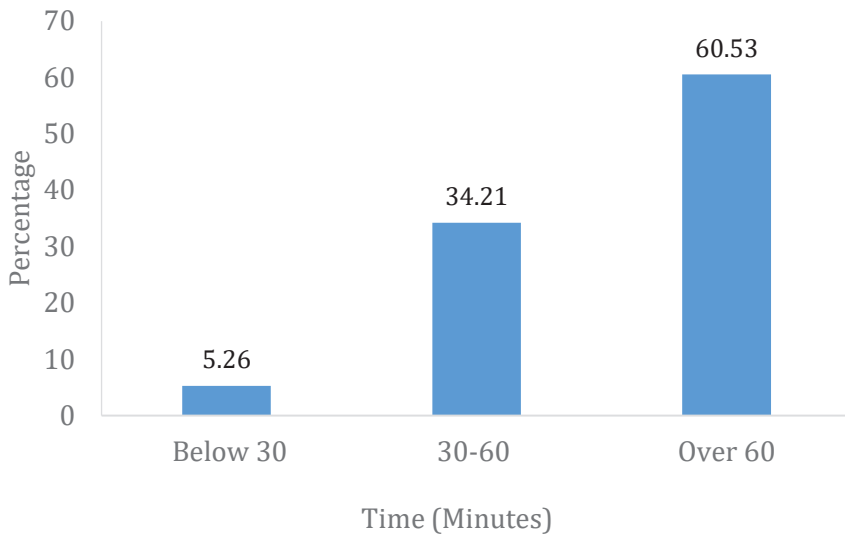


Figure 2: Travel time per day (Source: Survey data, 2020)

Supporting infrastructure facilities of the Agricultural Inspectors to perform their job roles

Importantly, this study focused to analyzing the available supporting factors for the Agricultural Inspectors to perform their job. Accordingly, current knowledge level of the sample towards the technical aspects of their job, adaptation to the new knowledge and their perception towards their satisfaction of the existing knowledge of their job, support of the farmers to perform their job, and the existence of any language barriers to communication with the farmers were measured. This has been done basically to analyze whether they are sufficiently aware of their job roles. Table 1 represents the findings on these aspects.

Table 1: Significance of job performance factors

Indicators	Percentage of respondents	
	Yes	No
Availability of Technical knowledge	21	79
Satisfaction of the current knowledge on their job	95	5
Adoptability of the new knowledge and technology	98	2
Farmers support to perform job well	87	13
Existence of any Language barriers to perform job well	32	68

(Source: Survey data, 2020)

As per Table 1, 79% of the responded sample was already having enough technical knowledge for extension related activities. The remaining 21% do not have enough technical knowledge in extensions activities. Importantly, 95% of Agricultural Inspectors have sufficient knowledge/ skills related to the extension while around 5% do not have sufficient knowledge/ skills related to the extension. Similarly, the majority of

respondents (60.5%) of the sample had high adaptation for the new technology while 39% respondents had moderate adaptation for the new technology and others 1.5 % had low adaptability to new knowledge. In context to communication barriers due to language issues, 68% of the respondents did not have any language barriers in their working area and 32% of respondents have faced language problems during their service duration.

Impacts of motorcycle subsidy on job performance

Furthermore, this study has analyzed the impact of motorcycle subsidy on the job performances of the Agricultural Inspectors using 13 variables and using an average score of each variable. According to research findings, Agricultural Inspectors were able to save their time through less travel time and thus obtained time to improve their job roles through accessing new knowledge.

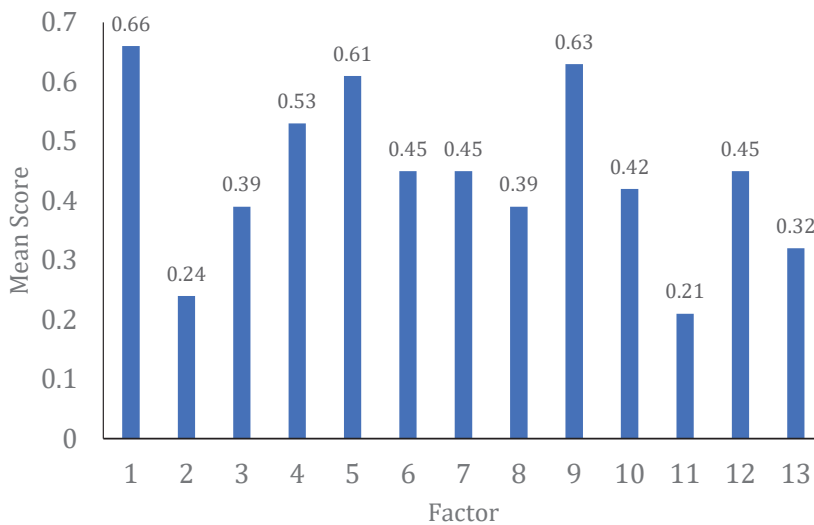


Figure 3: Mean scores of job performance factors. 1 – Improved job role, 2 – Job description not same, 3 – Improved job engagement, 4 – Covered extra area than previous, 5 - Cover few more farmers, 6 - Improved relationships with farmers, 7 - Feel more interesting, 8 - Built-up strong relationships, 9 - Time for knowledge enhancement, 10 - Inadequate transport reduce job performance, 11 – Effect of distance in job performance, 12 - Can perform well in short distance, 13 - Time for non-extension works. (Source: Survey data, 2020)

Table 2: Significance of job performance factors

Job performance factors	Sig. (p)	Test value	Decision
Improved job role	0.001	0.203	Subsidy has significantly impacted on the job improvement
Changing of the job description	0.113	0.002	Subsidy has not significantly impacted on any changes of the job description
Improved job performances	0.068	0.061	Subsidy has not significantly impacted on the improvement of job performances
Greater extent of area can be covered after the subsidy	0.011	0.482	Subsidy has significantly impacted on the extension covering area
Higher number of farmers can be accessed within a day after the subsidy	0.013	0.814	Subsidy has significantly impacted on no. of farmer visit
Improved the relationship with co-workers	0.040	0.600	Subsidy has significantly impacted to relationship improvement with co-workers

Significance at 5% level
(Source: Survey data, 2020)

Table 2: Continued

Job performance factors	Sig. (p)	Test value	Decision
Improved interest towards the job	0.033	0.520	Subsidy has significantly improved job interest
Improved the relationship with farmers	0.037	0.120	Subsidy has significantly help to improve relationship with farmers
Having sufficient time for knowledge dissemination	0.002	0.203	Subsidy has significantly impacted to save time for the knowledge dissemination process
Distance from home to workplace does not affect the job performance	0.315	0.402	Subsidy has significantly impacted to the workplace distance
Increase job performance if the distance between workplace and home is less	0.026	0.821	Subsidy has significantly improved job performances by saving traveling time
Time used for non-extension activities are less after having the subsidy	0.115	0.008	Subsidy has significantly saved time to engage non-extension activities.

Significance at 5% level
(Source: Survey data, 2020)

Table 3: Impact of motorcycle subsidy on the personal wellbeing of the Agricultural Inspectors

Well-being factors	Sig. (p)	Test value	Decision
Improved personal security when travelling	0.227	0.720	Subsidy has not significantly improved the personal security when travelling.
Balanced work-life	0.508	0.400	Subsidy has not significantly impacted on balanced work life.
Saving time for knowledge enhancement	0.267	0.208	Subsidy has not significantly impacted on saving time for knowledge enhancement
Use of leisure time for productive activities	0.372	0.177	Subsidy has not significantly impacted on saving time for leisure activities.
Time saving for social interactions	0.623	0.008	Subsidy has not significantly impacted on saving time for social interactions.
Impact of personal health status	0.010	0.710	Subsidy has significantly impacted personal health status.

Significance at 5% level
(Source: Survey data, 2020)

More importantly, they were able to visit a few more farmers due to less traveling time resulting from subsidy which shows the positive impact of these subsidy programs. Figure 3 shows the mean score of each variable. Furthermore, this study has used an independent sample t-test to analyze the statistically significant impact of motorcycle subsidy schemes on the job performances factors of Agricultural Inspectors.

Impact of motorcycle subsidy on the well-being of the Agricultural Inspectors

Other than the impact of the job performances, motorcycle subsidy scheme might have a similar impact on the well-being of the Agricultural inspectors. Therefore, this study has focused on analyzing the impact of the subsidy scheme on the different dimensions of wellbeing of the Agricultural Inspectors using the mean score of the 6 variables. Based on the research findings, motorcycle subsidy scheme has saved the time of the Agricultural Inspectors for their other activities and enhanced personal security to a greater extent (mean score: 0.21). Moreover, Table 3 shows the results of the independent sample t-test. Accordingly, the subsidy scheme has shown a significant impact only on the personal health status of the Agricultural Inspectors. These results can be justified as the time saved due to convenient travelling mode which has been used for the maintenance of personal health check-ups, exercises, and mental relaxation activities.

CONCLUSIONS

The main objective of the study is to analyze the impact of motorcycle subsidy schemes on the performances and personal wellbeing of the Agricultural Inspectors of the southern province. Accordingly, first, this study has identified the general constraints of extension officers' job performance and their knowledge dissemination. Accordingly, the study has found that the covering area of each Agricultural Inspectors assigned to be covered is about nearly or more than 10 km per day and this has been found to be a major constraint for the Agricultural Inspectors to cover such a large area within a single day. Moreover, the number of farmers to be covered within a day has been identified as a constraint. Even though the standard number of farmers covering per day is five, the majority of Agricultural Inspectors in this study has to visit more than ten farmers per day. Each Agricultural Inspectors has to spend the cost of greater than Rs.100 per day to travel this area which also leads to dissatisfaction

towards their job. This cost has to be covered using their personal budget and the government does not have any plan to pay this traveling cost to Agricultural Inspectors. In summary, Agricultural Inspectors in this study were not satisfied with their traveling time, infrastructure facilities in the working area. Therefore, the government later has decided to allocate this subsidy to minimize the aforementioned issues.

When considering the impact of motorcycle subsidy on the job performance, there was a significant impact on improved the job role, improved job performances, covering a greater land area, accessing a higher number of farmers, improved the relationship with co-workers, improved interest towards the job, improved the relationship with farmers, having sufficient time for knowledge dissemination and Increase job performance if the distance between workplace and home is less are significant. Moreover, the motorcycle subsidy has significantly impacted the personal health of the Agricultural Inspectors.

RECOMMENDATIONS

Although the government is trying to maintain the healthiest working environment for the Agricultural Inspector to improve their working efficiency through this subsidy scheme, data analysis indicates that Agricultural Inspectors were not much benefited and improved through the existing motorcycle subsidy provided by the government. Also, they are expecting more developments of their subsidies and facilities, and therefore, the government should try to maintain a good well-being program to enhance the Agricultural Inspectors' willingness to retain within the extension service. More importantly, the effectiveness of the motorcycle subsidy given by the government on agricultural extension service should be regularly and formally evaluated and decide whether this subsidy program to be continued with new recruiters also.

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DECLARATION OF CONFLICT OF INTEREST

Authors have no conflict of interest to declare.

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