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Role of field level extension officers in development interventions: Evidence from Sabaragamuwa Province in Sri Lanka

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Abstract: The government of Sri Lanka implemented a range of developmental interventions to eliminate poverty by enhancing agricultural productivity, income diversification and economic growth in rural areas. The "Divineguma" (Livelihood upliftment) program was one such massive-scale livelihood improvement program that had multiple interventions at different levels. The intermediaries who link the government and the beneficiaries are the field-level extension officers (EOs). The beneficiaries have severely criticized the field-level extension service, especially the assistance on agricultural interventions. This study was done to examine the roles of the field-level EOs and beneficiaries' perceptions regarding the knowledge, skills, and personal qualities of the EOs in the implementation of this rural development program, with special relevance to home gardens. A survey study was carried out in the Elapata Divisional Secretary division in Ratnapura district with a sample size of 150 beneficiaries. Beneficiaries perceived that the EO's were influential in the startup motives of the participants but in follow-up roles, which are the most important roles for the success of the home garden program, were not fulfilled by these EOs. The participants also perceived that the field-level EOs were not well prepared when communicating with the participants and always neglected the importance of feedback in the communication process and they were not fully committed to the activities related to the home garden program. This study reveals that policymakers should constantly review the performance of the EOs and assess their training requirements.

Keywords: *Agricultural extension, development intervention, impact evaluation, knowledge and information, rural development*

Introduction

Rural development programs have been the core of the development agenda of developing countries for many years (Gasperini, 2000; Scoones, 2009; Battersby, 2017). These programs are mostly linked to the livelihoods of rural people, predominantly to agriculture (Scoones, 2015; Martin and Lorenzen, 2016; Hall et al., 2017). This is common as agriculture occupies an iconic role in a country's development from feeding the people to providing employment opportunities (Oladele, 2015). Given this context, proper information

transfers are vital for agriculture and for the people who are based on agriculture. Agricultural Extension Officers (EO) serve as the bridge in this phase, taking scientific know-how to grass-root levels. Though Agricultural contribution to the gross domestic product in Sri Lanka is low (6.9%) about 27% of the labor force is directly involved in Agriculture (CBSL, 2021). Further, a significant proportion of the population is indirectly involved in agriculture. Thus, Agricultural extension is indeed very important for a considerable proportion of the country. The agricultural extension also has deep-rooted connections with farmers and the poverty-stricken populace of the country. This makes EOs to be a change agent who brings some developments to rural communities.

Development interventions have multiple objectives including agricultural productivity, diversifying the income of the beneficiaries, and economic empowerment in the target areas (Pandey et al., 2016; Patnaik and Das, 2017; Asfaw et al., 2018). Most of the interventions in developing countries target rural areas, and hence agriculture is one of the primary beneficiaries of the intervention. Considering the needs of rural Sri Lanka, the Government of Sri Lanka (GOSL) implemented a range of measures to eliminate poverty through empowering livelihood improvement projects. GOSL initiated a major program named "*divineguma*" (Livelihood upliftment) targeting rural development, alleviation of poverty and malnutrition, and empowerment of rural livelihoods in 2013. Our focus would be on the home garden interventions, thus hereinafter referred to as DNHG intervention. This was a succession of a development program named '*Samurdhi*' (the predecessor of *divineguma* program) that was initiated in 1995, which used to be a subsidy approach. *Divineguma* was a multidimensional development project that was based on three approaches: subsidy approach, eradication of poverty, and integrated development approach (Ministry of Social Empowerment and Welfare, 2016). This program was closely linked with agriculture due to the nature of the beneficiaries and other stakeholders. In Agriculture, the process from the selection of seeds to the distribution and training must be attended by officers of agriculture-related agencies and other social interventionists (Man et al., 2016). EOs mainly served as the intermediaries between the government and the participants, thus acting as vital facilitators to achieve the stated objectives of these rural development programs (Taylor and Van Grieken, 2015; Singh et al., 2016). In Sri Lanka, Agricultural extension is a public service that is provided to farmers for a long time, free of charge (Mahaliyanaarachchi, 2002). It has been serving as an agent of agricultural change, creating transformations across the country (Abate et al., 2015; Bachewe et al., 2018; Oyedokum et al., 2023). EOs' role in DNHG intervention was to provide improved agricultural extension services (Hunt et al., 2012; Fabregas et al., 2023) and training in new technology (Oladele, 2015; Passarelli et al., 2023), to provide agricultural inputs (Cafer and Rikon, 2017; Kos et al., 2023), and to link the farmers with markets for sustainability (Homann-Kee et al., 2016; Kelly and Swenson, 2017; Fabregas et al., 2023).

Though extension has contributed to Sri Lankan agriculture for a long time, the participants of the program criticized the role and activities of EOs. The main criticism was that EOs were not fully involved in guiding all the activities from planning to execution of the program. As a result, there has been a lag in accomplishing the objectives of these development interventions (Elias et al., 2016; Hauser et al., 2016). To assess this, the roles of these EOs had to be evaluated by the program participants, to study their perception of the contribution of the field-level EOs in this particular development intervention program (Dube, 1993).

This research aims to study the role and the performance of the field-level EOs in the success of the *DNHG* rural development program. The specific objectives were a) to identify how the farmers have been motivated to participate in the *DNHG* program, b) to identify the specific roles of the EO that affects the success of the *DNHG* program and c) to analyze the factors that affect the failure of the *DNHG* development program with respect to home gardens in *Elapatha* region. Though literature shows development interventions through

subsidies (Huchzermeyer, 2001; Sabot et al., 2009), training (Rowold, 2008; Latif, 2012), employment (Grimm and Paffhausen, 2014), and cash transfers (Adato and Hoddinott, 2007; MacAuslan and Riemenschneider, 2011), there is a dearth in the literature on role of the EOs or development officers on the success of development interventions. Even international development literature has paid little attention to the services rendered by the authorities. The agricultural extension literature has dealt with evaluations of extension models and systems, but only few studies have dealt with the performance evaluation of the extension officers themselves (Evenson, 2001; Mokotjo and Kalusopa, 2010) rather than personnel. However, Davis and Verma (1993) also highlighted the fact that job evaluations of EOs are limited. This study fills the gap by studying the role of EOs in the success of the intervention. The findings have cross-country level relevance as development interventions are a core of most of the development assistance programs. EOs role in training and awareness about the intervention would reveal how these interventions can be provided with greater adoption and efficiency.

There exists a gap between the new technology and the farmers. The extension service is the bridge to fill this gap. Effective extension provides the vehicle for increasing agricultural productivity because it links the farmer with the outside world- the scientist, the creditor, and the consumers of his product. The extension has a strong connection with agricultural research and brings these research findings into practice (Karbasioun et al., 2007). Similarly, the extension has also had a strong connection with rural community development, pedagogy, and communication. As the know-how has to be passed to the farmers, who are mostly illiterate in rural areas, extension is crucial for knowledge dissemination.

As Rivera (2011) highlights Agricultural extension is also a type of intervention, primarily through communication to bridge the gap between the real community and the new technology in agriculture. Evenson (2001) extends this role to a broader description. According to Evenson (2001) Agricultural extension also involves the implementation of rural development projects while providing knowledge and information for the community. Further, this broader definition provides an avenue for interaction among the community to come up with their own solutions for the problems identified by them. At the same time, they also generate opportunities hitherto not seen by the community. For this agricultural extension to succeed, the people who are very important, particularly the EOs. They are the pillars of the success of agricultural extension. EO is an officer who is deployed in the field and directly communicates with farmers (Dube, 1993). But over the years, the role of EO is not just to communicate, but also to be a leader in the community. The extension then is much related to a leadership function in the community (Valente and Davis, 1999; Ladewig and Rohs, 2000; Judge et al., 2009). EO is not merely a person who motivates farmers to use the new technology, but he places a wider role than just a human capital developer. He supports in team building and helps the community in mobilizing the needed resources (Khalil et al., 2008). This is one reason why EO has a good rapport with the other village officials and organizations.

As it is mundanely common in developing countries to see most of the farmers engaged in subsistence farming, the role of EO is of paramount importance in bringing economic change among rural communities (Anaeto et al., 2012; Oyedokum et al., 2023). This intervention is needed not only for knowledge dissemination of technology to farmers but also to bring them out of poverty. For these reasons, EO's are seen as change agents with a great deal of responsibility (Valente and Davis, 1999; Anaeto et al. 2012; Oyedokum et al., 2023).

So, one of the main roles that the EO should possess is leadership. This leadership role of EO has been an important aspect of successful extension programs (Radhakrishna et al., 1994). Further, the EO leadership role is divided into four depending on the type of

leadership roles they perform: 'catalyst, solution giver, process helper, and resource linker' (Havlock and Havlock, 1973). EOs should have personal skills as well. These skills are hard to be gauged and hard to be inculcated. Thus, it is a difficult task to determine the level of personal skills that the EO should possess in order to do his task effectively (FAO 2000). This aspect is not covered in the specific knowledge training for EOs. FAO (2000) has suggested a vast range of such skills which are grouped to represent the main aspect of skills an EO should possess to perform his role effectively (Table 1).

Table 1 – Role of Eos

Skill	Description
Organization and planning	Plan and organize extension services, knowledge transfer, implement extension programs, manage an extension office and be accountable for extension activities
Communication	EO be an effective communicator (verbal and non-verbal); one of the key aspects of extension service; use of appropriate communication aids
Analysis and diagnosis	EO should possess the skill of analysis and diagnose the issues in the field, understand the issues and propose the solutions
Leadership	Leading in the field, builds trust and inspire confidence among farmers (if this is not achieved, knowledge dissemination would not be effective)
Initiative	Ability to take initiative, and mobilize resources in the field; EO has to work independently without supervision; thus should possess the skill to take initiation and mobilize the rural resources to achieve the targets

Source: FAO, 2000

When it comes to the performance evaluation of the staff, an accurate, continuous evaluation is important. This would improve the agricultural EOs performance and productivity (McCaslin and Mwnagi, 1994). This has been also highlighted in the recent studies of Oladele, 2015; Umeh et al., 2015; Bitzer, 2016; Debanath et al.,2016; Man et al., 2016; Saleh et al., 2016). The literature suggests that there is a necessity for performance appraisal of EOs and identifying the factors that affect the EOs performance is important as well as it needs to be done often in rural intervention programs.

Methodology

In the view of this study description-exploratory approach was used as the research approach (Dube, 1993; Oladele, 2015). The survey was identified as the most suitable research strategy to collect the primary data. Elapatha Divisional Secretariat, of the Rathnapura district was selected as the case study area. Fifteen *grama niladhari* (Village office) divisions of the Elapatha Divisional Secretariat were randomly selected for the study. A list of the participants of the DNHG Program was obtained from the Elapatha Divisional Secretariat and a sample of 150 participants was selected by random sampling.

The data were collected with the support of a structured questionnaire through face-to-face interviews with the respondents. The questionnaire included sections on the socioeconomic background of the participants or the beneficiaries, their perception of the different roles of the EOs, and their perception of the knowledge level, skills, and personal qualities of the extension officer. A 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree) was used to measure the perceptions of beneficiaries regarding the roles of these intermediary officers between the government and the farmers. The statements on the different roles of the EOs were developed concerning the job description of the EOs and with the consultation of the officers in the divisional secretariat. Another section with 23 statements was used to measure the knowledge, skills, and personal qualities of the Field

EOs with the same Likert scale. Figure 1, depicts the conceptual framework that was used for the study.

Non-parametric techniques such as Kruskal Wallis Test, Factor analysis, and Chi-squared tests were used as analytical tools. A Kruskal Wallis test was done to see whether there is an effect between the statements used for identifying the roles of the EOs (Variables for the roles). A Factor Analysis test by the varimax rotation method was done to reduce those variables. Loadings were the correlation coefficients between variables and factors. The success or the failure of the *DNHG* program was measured by the change in the income level of the participants after participating in the *DNHG* program i.e. whether the income has increased or not changed. It is common to target income increments as the goal of poverty alleviation programs, especially for the marginalized community in the development process (Kumari, 2013).

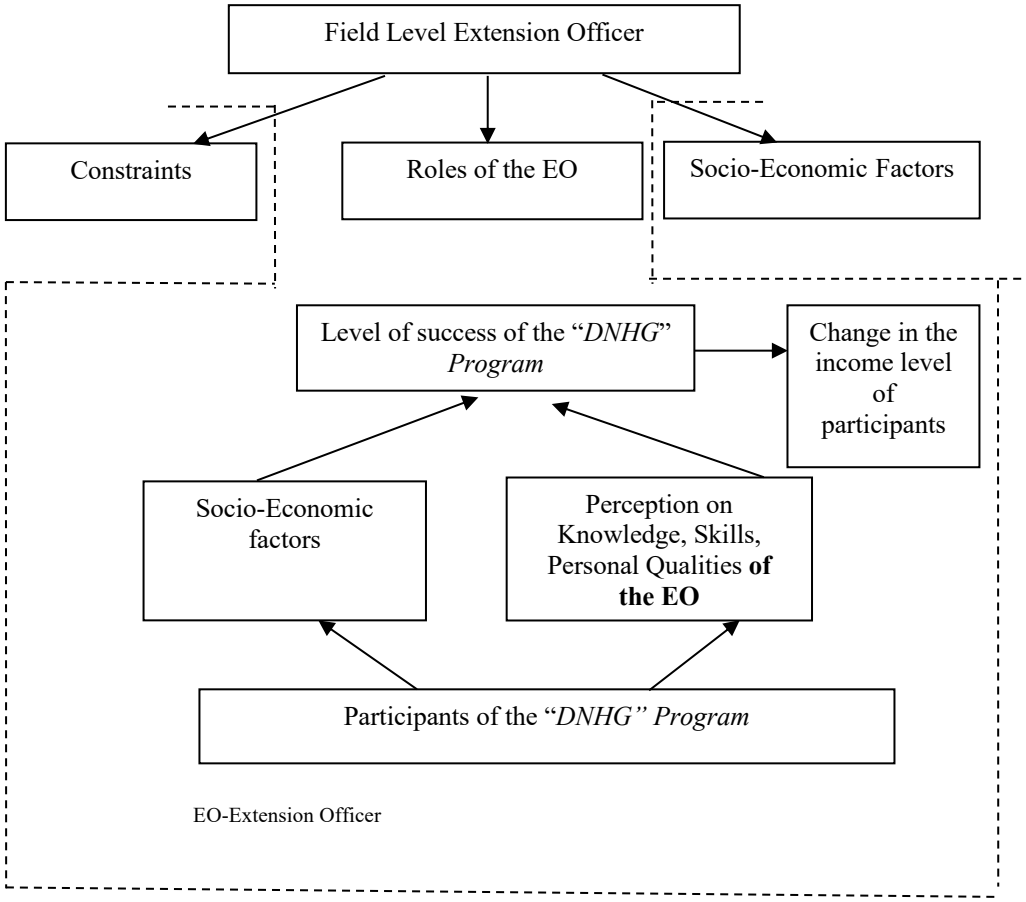

Figure 1 – Conceptual framework

Results and discussion

Socio-demographic factors

The profile of the sampled respondents is depicted in Table 2. The table shows that the majority of the participants were males (63%) and the majority of them were around the age category between 31-40 years (33%). Most of the participants have a household size of around 3 to 5 (35%). About half of the sample (51%) was earning a monthly income between Rs. 10,000 and Rs. 15,000 (i.e USD 55-83). This is much lower than the national median household income of Rs. 42,133 per month (USD 233) in rural areas, i.e. (CBSL, 2018). But this is plausible as this is a rural community, which predominantly depends on subsistent agriculture.

Table 2 - Socio-demographic characteristics of respondents

Variables	Category	Participants (N=150)
		Percentage (%)
Gender	Male	63
	Female	37
Age	21-30	21
	31-40	33
	41-50	25
	51<	21
Educational Level	No formal Education	2
	Up to Grade 5	38
	Grade 6 - Grade 11	38
	Grade 12 - Grade 13	19
	Diploma Holder	2
	Graduate	1
Household Size	Less than or equal to 2	6
	3-5 members	75
	More than or equal to 6 members	19
Monthly Income	Less than Rs 10,000	34
	Rs.10,000-Rs.15,000	51
	Rs.15,000-Rs.20,000	14
	Rs.20,000-Rs.25,000	1
	More than Rs.25,000	0

Motivation for Participation in the DNHG Rural Development Program

The participants were inquired to disclose the means of their motivation to engage in the "*DNHG*" rural development program. It was revealed that the majority (55%) of the participants have engaged in the *DNHG* program due to the request of the extension officer in the area, followed by the self-interest group (36%) and around 9% due to the spillover effects.

Specific roles of the EO towards the success of the DNHG program

Table 3 below shows the number of field-level EOs involved in the *DNHG* program. The government officials involved at the grass-root level of the *DNHG* program are the '*Grama niladhari officers'(Village officers)*, field-level agriculture EOs, officers from the Department of Animal Production and Health*, Samurdhi* development officer, and medical health officer.

The majority of the participants (60%) participated in the home garden section of the *DNHG* program rather than the other two sections i.e., Livestock and Small-Scale Industries as shown in Figure 2. This indicates that the majority of the participants mainly focus on home gardening, which is a dimension of agriculture towards food security (Krishnal et al., 2012). However it is seen that there are only 2 Agriculture EOs to cater to the participants on home gardening under the *DNHG* program in the 20 G/N divisions of the Elapatha D/S division. This indicates that there is a deficit of Agriculture EOs.

Table 3 - The total number of field-level EOs in the Elapatha D/S Division

Field Level EOs	Count
Grama niladhari officers	20
Field Level Agriculture EOs.	2
Officer from the Department of Animal Health and Production.	1
Samurdhi Development Officer	1
Medical Health Officer	1

Source: FAO, 2000

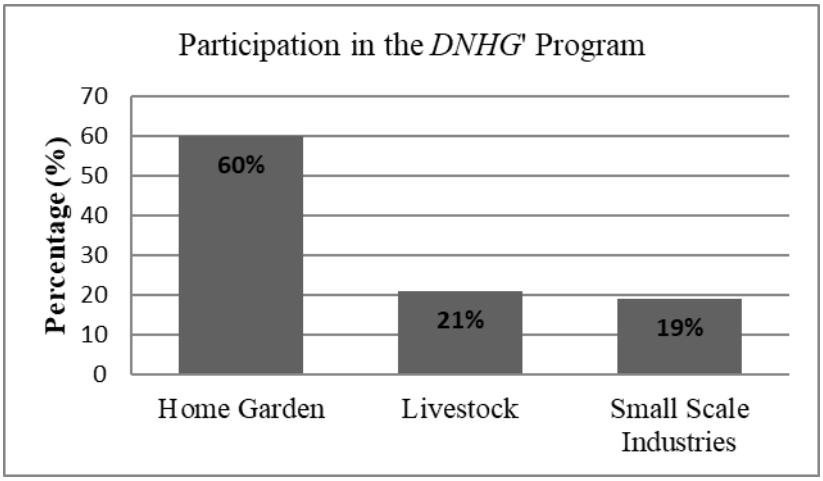

Figure 2 - Respondents participation in the "DNHG" program

Table 4 depicts the summary statistics on the roles of the EOs as perceived by the beneficiaries. It suggests that to a certain extent, EOs have succeeded in their roles. Participants were linked with the sources of supply of farms and other inputs related to cultivation. This has enabled a lot of participants who were hitherto deprived of information on obtaining farm inputs. Information regarding supplies is one of the crucial issues that affect the sustainability of agricultural ventures in remote areas. EOs have also succeeded in explaining the importance and the benefits of participating in the DNHG development program and distribution of supporting materials has also occurred to a certain extent. On the other hand, certain aspects were not properly handled by the EOs. After the initiation of these interventions, officers have failed to monitor and evaluate the steps after the inception of these programs. Further, they have not conducted discussion programs and failed to provide solutions for the problems faced by the participants. In addition, officers have not linked the participants to proper credit facilities on time exacerbating the problems already faced by farmers. Table 4, reveals that though EO was influential in the startup motives of the participants in the programs, the follow-up roles were not fulfilled by the officers as

perceived by the farmers. Studies highlight the fact that EO should not only target production but also assist in post-harvest processing (Wehmeyer et al., 2022; Oyedokum et al., 2023).

Table 4 - Descriptive statistics on the role of the field EOs

VARIABLE	FREQUENCY	PERCENTAGE (%)
Income has increased	57	38
No change in the income	93	62

A Kruskal Wallis test was done to see whether there is an effect, between the different roles of the EO on the success of the DNHG development program. The results indicated that there was a significant difference between the different roles of the EOs. Factor analysis was done to reduce the variables (the nine roles of the Field level EO). Figure 3, represents the scree plot obtained, graphed Eigen value against the factor number/component number. The graph indicates two factors above the Eigen value=1 i.e. Factor 1 and Factor 2.

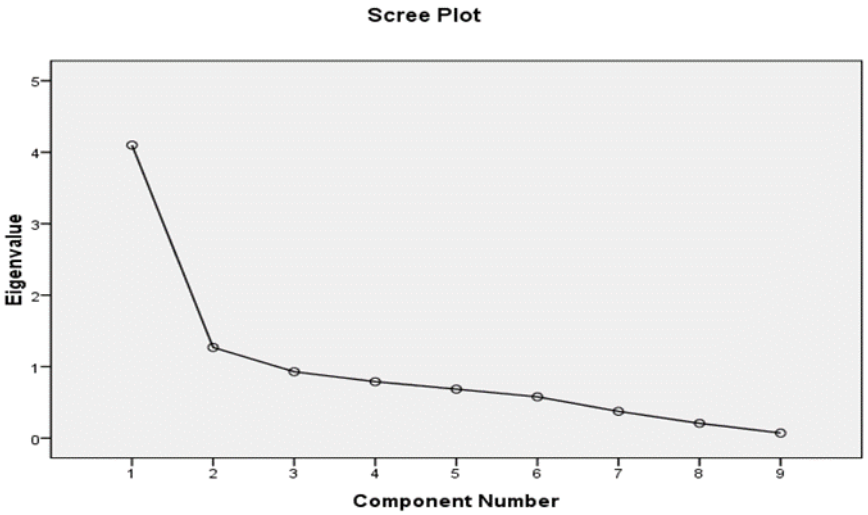

Figure 3 - Scree plot for different roles played by EOs

Table 6, contains the rotated factor loadings (factor pattern matrix), which represent both how the variables are weighted for each factor and the correlation between the variables and the factor. The correlation coefficients above 0.4 were selected. According to the results statements 1, 2, 3, 4, and 5 (in Table 6) is loaded onto factor 1 and statements 6,7,8,9 are loaded to factor 2. The roles loaded onto Factor 1 relate to the follow-up roles of the extension officer and the roles loaded onto Factor 2 resemble the startup motives of the extension officer. Hence the 2 factors were labeled as follows; Factor 1 was labeled as the follow-up roles of the extension officer and factor 1 was labeled as the startup motives of the extension officer.

Table 6: Rotated factors loadings

No.	Statements	Component	
		Factor1	Factor 2
1	EO monitored each step of the activities of the participants in relation to the Program.	0.916	0.178
2	EO appreciated the good work of the participant.	0.902	0.126
3	EO evaluated every step of the activities of the farmers.	0.879	0.193
4	EO identified the problems and gave necessary solutions to those problems.	0.789	0.201
5	EO conducted discussion programs.	0.690	0.139
6	EO linked the participants with farm inputs and other inputs.	-0.108	0.806
7	EO distributed the handouts and leaflets	0.162	0.582
8	EO explained the importance and the benefits of the program.	0.323	0.544
9	EO linked the participants with credit facilities in due time	0.197	0.483

Both from factor 1 (i.e., Follow up roles) and factor 2 (i.e., Startup motives), it can be inferred that the follow-up roles of the extension officers are more important for the success of the DNHG program than the startup motives in relation to home gardening.

Factors affecting the failure of the DNHG rural development program

A chi-square test was done to see the association between the changes in the income level of the participants after participating in the DNHG program with the demographic factors of the participants (Table 7). However there exists no association between the changes in income level and the demographic factors of the participants.

Table 7 - Chi-square results change in income level of the "DVHG" program and the demographic factors.

Variable	Demographic Factors	Chi-square Value	DF	P value
Change in income	Age	7.938	6	0.243
	Gender	2.754	2	0.252
	Household size	3.512	4	0.476
	Educational Level	4.483	10	0.923
	Monthly income	11.254	6	0.081

As observed, irrespective of these demographic factors, the participants expressed their views on the change in their income level after participation in the DNHG program. Table 8 shows the association between the change in the income level of the participants after the participation to the DNHG Program with the knowledge level, skills and personal qualities of the EO. The results show that there exists a relationship between the change in the income level of the participants and the knowledge, skills and personal qualities of the extension officer as perceived by the beneficiaries. Performance depends on many factors. As EOs, are the focal point, they need to be updated and should have the necessary technical knowledge and skills. These would largely determine the performance at field level. Needless to say, communication and social skills are also very crucial (Ladewig and Rohs, 2000; Thach et al., 2007; Rasanjali et al., 2021). Thus knowledge, skills, and personal qualities of the EO influence their performance, which in turn has affected the success of the DNHG program.

Ultimately, it has increased the income of the participants. This points out that if the EOs had performed their roles well after the inception of the program at the latter stages, it would have improved the income further. So, attention is needed on what made these officers perform less in certain roles, though they had the knowledge, skills, and personal qualities.

Table 8 - Chi-square results on the change in income level and the knowledge level, skills, and personal qualities of the EOs

Variable	Grouping variable	Chi-Square Value	DF	P value
Change in income level of the participants	Knowledge	60.218	8	0.000*
	Skills	76.624	8	0.000*
	Personal Qualities	51.971	8	0.000*

Table 9 shows the descriptive statistics on the participants' perception of knowledge, skills, and personal qualities of EOs. The results show that the majority of the participants disagree with the fact that the EOs possess the necessary practical knowledge.

Table 9 - Descriptive statistics on the participants' perception on knowledge, skills, and personal qualities of the EO

Skills	Statements	Mean	SD
Knowledge	Possessed technical knowledge	3.333	0.999
	Used appropriate practical examples	2.433	0.772
	Knowledge of rural life of the target group	2.926	0.977
Organizing skills	Conducted the activities in an organized manner	2.547	1.000
Communication skills	Used simple language	3.020	1.058
	Well-prepared and interesting delivery	2.444	0.945
	Used appropriate verbal and non-verbal cues.	3.540	0.931
	Allowed to give their feedback	2.457	0.899
	Good listener	3.167	1.064
Analyzing skills	Identified the issues of the participants	2.727	1.009
	Proposed the course of action for the issues	2.440	0.901
Leadership skills	Inspired the confidence and trust	2.840	0.997
	Took the lead in initiating activities at the field level	2.887	0.855
Personal qualities	Showed commitment	2.453	0.909
	Trustworthy	3.013	0.803
	Respect to the traditions and beliefs and ideologies	3.187	0.806
	Listened to the problem of the participants.	3.207	1.057
	Dealt very softly and politely with the farmers.	3.607	1.111
	Had confidence in his abilities.	2.933	0.748
	Punctual	2.893	0.706
	Active and energetic	2.913	0.802
	Good personality	3.000	0.602

Regarding communication skills, most participants disagreed that the EO communicated in an interesting manner and allowed the participants to give feedback. In the communication process, feedback is very important because the sender can get an idea of whether the message has been disseminated properly or not (Mahaliyanaarachchi, 2003, Khalil et al., 2008). Most of the participants disagreed with the fact that the extension officers were able to propose a course of action to the issues that arose to the participants on the activities of the DNHG program. Out of the personal qualities, the majority believed that the extension officer was not fully committed to his work. In contradictory to this, Negatu (2019), finds Agriculture EOs have shown little knowledge of pesticide hazards at small-scale horticulture set up in Ethiopia and recommends capacity improvement through training. Further, Laval et al., (2017) recommend female EO's training in Nigeria for rural women. This applies to Sri Lanka too, in this case, as most of the home gardens are maintained by women.

Mahaliyanaarachchi (2002), highlights that the restructuring happened in 1990 when grass-level agricultural EOs were transferred to the Ministry of public administration as village officers led to a deterioration of the Sri Lankan agricultural extension services. Thus, the limited number of EOs is not enough to cope with the needs of the farmers and the number of farmers. The field level EO as mentioned earlier is the officer who is in direct contact with the farmers/participants, therefore they should possess adequate knowledge of both technical and rural life, as it influences the role of the field level EOs. The EOs must be trained in technical aspects of agricultural systems and technology, the relevant agribusinesses, and the rural sociology of the context where EO is working. This includes both the scientific approach as well as the traditions and customs of the people he is serving. Thus, it does not limit the learning to the farmer but the greater rural society including the religious leaders and village administration, other government and private stakeholders in the area (Zwane, 2012).

The commitment of the EO is essential, at times, in isolated rural areas. Dedication and determination are needed to carry out the planned extension activities successfully and should be prepared to face unexpected problems as well. Reliability of the extension worker both in terms of carrying out extension work and also in maintaining relationships with farmers or the participants of rural development programs is another factor. Amidst these issues in public extension services, there have been preferences for the privatization of extension services among the farmers as a fee-based service (Malkanthi and Mahaliyanaarachchi, 2001) but when it comes to the payment, farmers are still reluctant (Yapa and Ariyawardena, 2005), even for commercial crops. So, this will not open an avenue for fee-based services for home gardens. However, as the results reveal, EOs are performing well in terms of startup motives and initial knowledge dissemination, but they fail to address the issues of linking the farmers with markets for sustainability. So, the latter must be addressed.

Some literature also highlights the fact that farmers' knowledge is also important. Because a knowledgeable farmer would be in a better position to receive and process information than a non-knowledgeable farmer (Kountis et al., 2018; Perera et al., 2021; Rasanjali et al., 2021). This can be related to technology or simple business processes. A new intervention or technology adoption depends both on the sender as well as the receiver. So, for the communication channel to be very effective, it's important to know the level of the farmer. In Sri Lanka, these pre-assessments of farmers are not done, and the intervention is very generic. EOs are overloaded with coverage of many farmers and the output efficiency goes down when EO tries to cover more farmers than targeting efficiency. Another issue with farmers in developing countries is the lack of record keeping and use of technology, even mobile phones. A significant number of problems can be overcome by proper use of record keeping including accounts. In some cases, this record-keeping can be made simple by using software and apps on mobile phones (Mpoutakidis et al., 2015; Perera et al., 2021).

So, the records are always available for the farmers, including any information on demonstrations. Thus, development interventions can be made more effective with the appropriate use of supplementary interventions and training. But this must come from the planning stage. It should also be noted that most of the government-backed development interventions have political motives other than welfare motives. So, there is a tendency to overlook some important aspects that are crucial for the proper success of interventions (Wehmeyer et al., 2022).

Conclusion

Majority of the participants have engaged in the '*DNHG'* program due to the motivation by the EO, which indicates that the EO can make an impact on the decision-making of the rural people and in the improvement of their livelihoods. The EO's role was only limited to directing the inputs needed for the participants of the *DNHG* development program but failed to perform the other important roles present in their job description, such as identifying the issues of the participants and proposing an appropriate course of action to overcome the issues, program monitoring and evaluating. The follow-up roles of the EO is more important for the success of the *DNHG* program than the startup motives. The EOs also were not well prepared when communicating with the participants and always neglected the importance of feedback in the communication process. EOs were not fully committed to the activities related to the *DNHG* program. This study reveals that policymakers should constantly review the performance of the EOs and assess their training requirements. If this can be improved, development interventions like the *DNHG* program will be a success in most of the vulnerable groups. As this multidimensional program spends a colossal sum of money, training of personnel is important, to achieve the objectives of the programs.

It is recommended that more EOs be employed to improve the ratio between field-level EOs and farmers. Further, should ensure that the field-level EOs are always given proper training on developing their communication, leadership skills, etc. Because training has been identified as important for rural development workers. Also, relevant authorities should constantly review the objectives, and principles of the proposed development programs by holding collaborative review meetings and discussions with the field officers, EOs, and participants. This practice will help these development programs to be more focused and even detect any problems that could have an impact on the success of these development programs. It should be noted that it is a fact that bureaucracy in the public sector, is also a factor limiting the efficient service of public servants in general.

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