

Full Length Research Paper

Factors influencing work motivation of development agents: The case of Agarfa and Sinana Districts, Bale Zone, Oromia Regional State, Ethiopia

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This study sets out to investigate the work motivation level of Development Agents (DAs) in Agarfa and Sinana Districts, Bale Zone, Oromia Regional State, Ethiopia and the factors that influence their motivation to work. For this study, all the Development Agents (a census of DAs) of the two districts with a total size of 135 DAs (Agarfa district, 67 and Sinana district, 68) were included as the sample respondents. Work motivation level of DAs was measured with a self-evaluation questionnaire. For the study, a structured survey questionnaire, focus group discussion and key informant interview were used to collect quantitative and qualitative data. In analyzing the data, both descriptive and inferential statistics were employed. The study found that a large majority of DAs (46.7%) belonged to medium level of work motivation, followed by 28.1% and 25.2% belonging to low and high level of work motivation, respectively. The findings thus highlight the importance of the investigation of the determinant factors contributing to the poor current work motivation status of DAs in the study area. Results of the descriptive statistics showed that of the total eighteen variables considered in the descriptive analysis, seventeen predictor variables, except age, were found to be of significance in explaining work motivation level of DAs. Based on the results of the study, relevant recommendations are forwarded in this report. Therefore, concerned agricultural extension managers, process owners, extension officers and supervisors should conduct periodic assessments to determine the level of work motivation of DAs and have to plan for improvement.

Key words: Work motivation, development agents.

INTRODUCTION

Agriculture remains as the mainstay of the economy contributing on average about 45% of Gross Domestic Product (GDP) and 85-90% of export earnings of Ethiopia. The dynamics of population growth, low productivity, compounded with some other factors have remained major bottlenecks to economic growth and poverty reduction for the country (FAO, 2008). In general, the livelihood of more than 85% of the work force in the country is based on agriculture. Although the main source of the national earnings is obtained from this sector, the sector is dominated by traditional, subsistence and fragmented type small holder farmers (Alene et al., 2000). In this regard, improving the performance of the agricultural sector is crucial for fast development of the country's economy.

Among many problems that confront human kind today, hunger is the greatest of all problems. Now with the changing agricultural scenario and perspectives in the world, the time is ripe for making the need based appropriate extension strategy by which information on agricultural production technology may be transmitted to all the potential users who can adopt those and produce food for their consumption and make available for others (Samanta, 1991). For national progress to occur, change in

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agriculture is essential. Substantial change in agriculture is needed if diets are to be improved, if a surplus is to be produced for sale and if agriculture is to enter a phase of self sustained growth. A great deal of responsibility for bringing about this change rests on the Ministry of Agriculture (MoA), and thereby on the shoulders of Development Agents (DAs), who are at the front-line of the struggle for progressive change in agriculture in Ethiopia (Birhanu et al., 2006).

Development Agents (DAs) are implementers of these policies and strategies with well defined and pre determinant roles. So, they are expected to hear the heart beats of the farmers in terms of agriculture and rural development. They are major implementers of the policies and strategies at the proximity for the farmers above all other actors. DAs will effectively and efficiently discharge these responsibilities if, and only if, they are motivated in their job. In the same way, the awaking of humanism and humanization all over the world has enlarged the scope of applying principles of human resource management in any organization. More and more attention is being paid to motivational aspects of human resource, particularly the need for self-esteem, group belonging and self-actualization (Pareek and Rao, 1992).

In order to make employees motivated and committed to their jobs in agricultural and rural development activities, there is a need for strong and effective motivation at the grass root level, sphere head workers in the front line who are DAs (Ayeni and Popoola, 2007). Generally in agricultural organizations, especially at lower levels, administration and management skill, if acquired at all, are learned by trial and error. As it is seen in different firms they train managers for different position of authorities, in addition to the subject of management that has been taught in colleges and universities. An important objective of management should be to motivate staff to make the effort necessary for the achievement of the goals of the organization, or to put it another way, it is their job to make it rational for staff to do what is required of them. Managers have to devote considerable attention to the understanding of the motivation process. Employees work harder and perform better if motivated with their jobs (Beder, 1990; Wantanabe, 1991). But, extension officials at the District level of the MoARD office in the study area lack or ignore management techniques and practices which heighten or improve the work environment. In addition, they are unable to utilize those inspiration tools to keep employees motivational level constantly at a higher level, high productivity and moral among the employees. Under such circumstances, rural communities may not get an appropriate advice and technical assistance in case of building their capacity to solve the challenges they face in their effort, to raise their income and improve their lives by using their resources with their own will and to develop local management skills. Farmers may not also get an appropriate technical assistance to enable them to increase their agricultural production and productivity and to

contribute for the growth of economy of the country.

The objectives of this paper are, therefore, to determine the level of work motivation of development agents and to identify factors influencing work motivation of development agents in the study area.

CONCEPTUAL FRAMEWORK OF THE STUDY

In this study, efforts were made to assess DAs work motivation level in their work places. Based on review of literature, and field observations and interactions, potential factors which were assumed important in affecting DAs work motivation were assumed as: personal characteristics, work related environment factors, institutional factors and psychological factors. Therefore, this study tried to analyze these relationships and influences on the two major issues under inquiry.

The conceptual frame work of the study which is presented in Figure 1 tells us the potential explanatory variables which are identified and categorized into four; according to their group similarity to which the variables generated affect the motivation of DAs in the work place. And with this potential explanatory variables the work motivation of DAs in the study area were assumed to be influenced at a given significant level.

RESEARCH METHODOLOGY

Sample size and sampling procedure

The data needed for the study were collected from Agarfa and Sinana Districts and they were selected purposely. The districts were purposely selected as per the interest of the research sponsor, existence of DAs motivational problem and accessibility of the two districts. All the development agents of the two districts with a total size of 135 DAs were included as the sample respondents for the study.

Types and sources of data

The data collected for this research were both quantitative and qualitative in nature. For this purpose, both primary and secondary sources of data were used to answer the objectives of the study. Primary data were collected from different categories of respondents; development agents, management body, extension officers, supervisors, development agent's representatives and farmers in the study area by using questionnaire, discussions and key informant interview data collection instruments. To collect other relevant background information, secondary data were obtained from various sources.

Methods of data collection

The instruments used in this research for data collection were questionnaire, discussions and key informant interview. The questionnaire was prepared and pre-tested

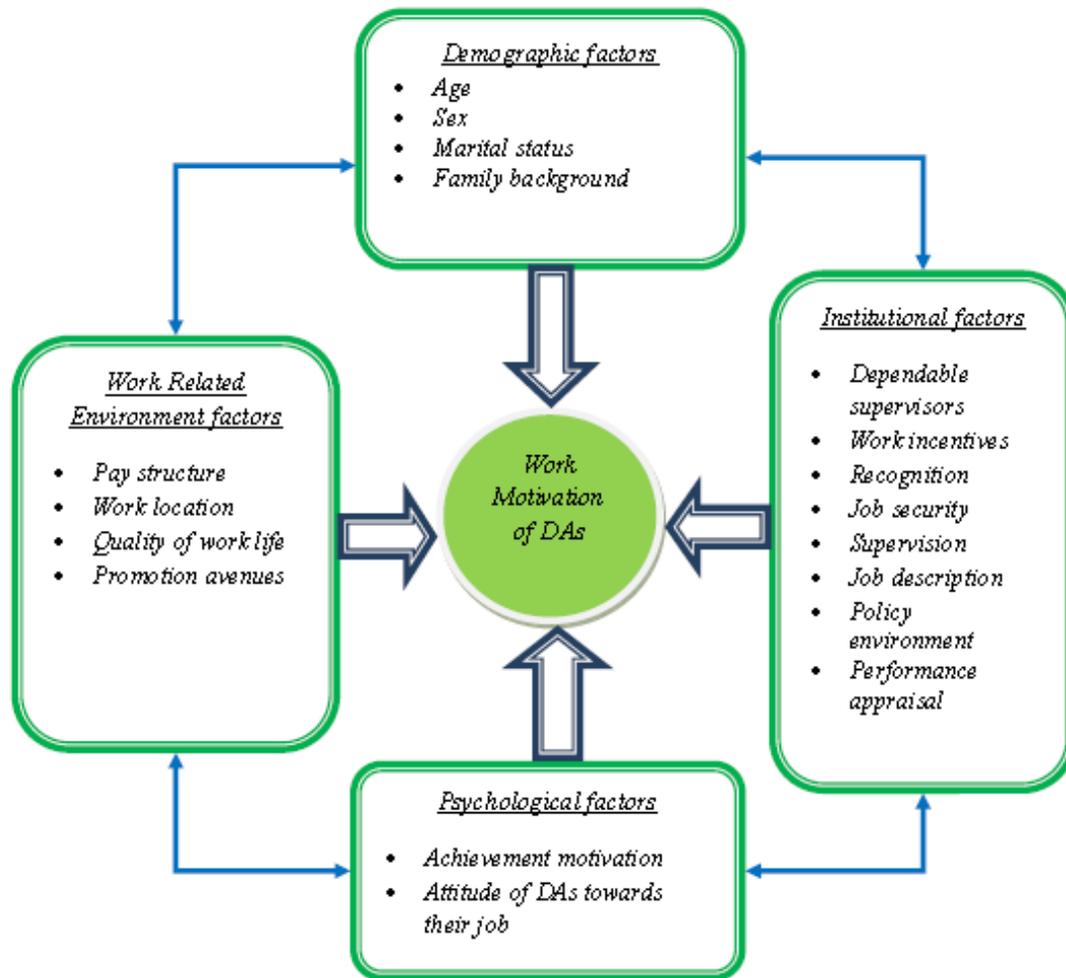


Figure 1. Conceptual framework.
Source: Own design.

with the non-sampled respondents with matching characteristics before they were distributed and used for data collection. Based on the result of pre-test, necessary modifications/adjustments were made and finally, the modified questionnaire had been distributed to all DAs in the sample districts to be filled.

Methods of data analysis

In measuring quantitative data of the study variables, a five point continuum Likert-type scale was used except for variables such as: age, sex, marital status, family background, and work location whereas work motivation variables were measured by using the scale suggested by Pareek and Rao (1992) with slight modifications. The variables were also measured using a five point continuum Likert-type scale as suggested by Thurstone (1976). The scale or categories used to measure work motivation variables were 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree. The scoring was given in

ascending order from 1 to 5 for positive responses, whereas for negative items, the scoring patterns were reversed (Appendix 1).

A study by Castillo and Cano (2004) as cited in Zelalem (2011) and Tesfaye (2012) suggested that by utilizing one item/single item measure than multi item measure for the factors of work motivation would have practical advantages. Thus, the space on an instrument, cost and face validity are among the practical limitations which supported the use of single item measurement. Therefore, for this study a single item measure for the selected variables were applied to analyze the work motivational factors.

Generally, demographic, work related environment, institutional and psychological factors of the study were analyzed by using descriptive statistics like mean, standard deviations, frequencies, percentages and cross-tabulations. Furthermore, they were tested for statistical difference using F-test (one-way ANOVA) and chi-square (χ^2) tests. Pearson's product moment correlation analysis was also

Table 1. The level of work motivation among DAs in the study area.

Work motivation category	Score	f	%	Actual mean score	Actual SD	F-value	Overall	
							Mean	SD
Lower work motivation	14-20	38	28.1	18.68	2.29			
Medium work motivation	21-37	63	46.7	28.46	3.02			
Higher work motivation	38-49	34	25.2	40.06	3.27			
Total		135	100	28.63	8.34	486.91***	2.61	0.8

Note: f = Frequency, ***Significant at less than 1% level.

Scale: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly agree.

Source: Survey data (2013).

applied to summarize the data.

The F-test (one-way ANOVA) was used to test the significance of the mean value differences of the continuous variables among DAs. Similarly, potential dummy and categorical variables were tested using the chi-square (χ^2) distribution.

Among the measures of correlation, Pearson’s product moment correlation was applied to measure the quantitative data, the degree of correlation between two variables (Gomez and Gomez, 1984; Kothari, 2003). The technique was applied to test the direction and strength of the relationship between each variable where the values of the correlation coefficient range from -1 to 1. The sign of the correlation coefficient indicates the direction of the relationship (positive or negative). Positive values of Pearson’s correlation indicate positive correlation between the two variables (that is, changes in both variables take place in the same direction), whereas negative values of Pearson’s correlation indicate negative correlation (that is, changes in the two variables take place in the opposite directions). A zero value of Pearson’s correlation indicates no correlation between the two variables. The absolute value of the correlation coefficient indicates the strength, with larger absolute values indicating stronger correlations.

The significance level (p-value) is the probability of obtaining results as extreme as the one observed. If the significance level is very small (less than 0.05), then the correlation is significant and the two variables are linearly related; if the significance level is relatively large (for example, 0.70) then the correlation is not significant and the two variables are not linearly related (Kothari, 2003).

RESULTS AND DISCUSSION

Work motivation level of DAs

Objective one was sought to determine DAs work motivational levels. In order to reveal the level of work motivation of DAs, aspects of DAs intensity, direction and persistence of efforts towards better performance to attaining organizational goals have been emphasized. Hence eleven items were used to construct general work motivation aspects. Each items/questions had a five point Likert scale (Thurstone, 1976): 1=strongly disagree,

2=disagree, 3=neutral, 4=agree, 5=strongly agree. These items/questions were given weighted scores as per the responses/answers given by DAs and summed up, that gave score of the dependent variable.

The researcher hoped to gain insight into work motivation of DAs to determine the level of their work motivation, since lack of work motivation can lead to poor extension service towards the farm community. Therefore, the researcher wanted to investigate the motivation levels with an intention to a change in work motivation for the individuals and the organizational performance.

The items/questions prepared for work motivation measure were given weighted scores as per the responses given by the DAs and summed up, that gave score of the dependent variable. The distribution of DA respondents by level of work motivation categories are presented in Table 1.

As indicated in Table 1, the obtained score of work motivation ranges from 14 to 49. The actual mean score of work motivation is 28.63 with the standard deviation of 8.34 with the minimum and the maximum scores of 14 and 49. The overall mean of motivational score was 2.61 on a scale of 1 to 5 (“strongly disagree – strongly agree”). This indicates that almost a half of the work motivation level of DAs was medium and need efforts to improve the condition. The result agrees with the study conducted by Mwangi and McCaslin (1995) that the agent’s motivational level was above the midpoint (2.5), on the positive side of the scale of 5.

The data obtained categorized DAs into low, medium and high work motivation levels. The categorization of the DAs into these levels reflects the base for their deviations from the actual mean score distribution (that is, Actual mean \pm Standard deviation =28.63 \pm 8.34) which was used by Yohannes (2009), Zelalem (2011) and Tesfaye (2012). The result of this study shows that 28.1% (n=38), 46.7% (n=63) and 25.2% (n=34) of DAs were low, medium and highly motivated, respectively. A large majority of the DAs who were identified to be below the desired higher level of work motivation were 74.8% (n=101).

In addition to the survey among the DAs using structured questionnaire, FGDs and informal discussions with DAs and supervisors were conducted regarding the work motivation of DAs in the study area. The information obtained in these qualitative data collection process confirmed that lower

Table 2. The association of dummy variables with work motivation level of the DAs.

Work motivation categories									
Demographic factors	Low		Medium		High		Total		χ^2
	f	%	f	%	f	%	f	%	
Sex									
Male	23	17	55	40.7	27	20	105	77.8	9.902***
Female	15	11.1	8	5.9	7	5.2	30	22.2	
Marital status									
Married	15	11.1	40	29.6	28	20.7	83	61.5	14.134***
Unmarried	23	17	23	17	6	4.4	52	38.5	
Background									
Rural	18	13.3	45	33.3	23	17	86	63.7	6.240**
Urban	20	14.8	18	13.3	11	8.1	49	36.3	

Note: f = Frequencies, ***, ** Significant at 1% and 5% level respectively.

Source: Survey data (2013).

salary, lack of professional development and training, asked to work long and irregular hours that include nights and weekends without appropriate incentive mechanism, absence of “carrier structure” where by employees can benefit from promotion and salary increments based on the living situation in different agro-ecological zones, less recognition from supervisors and farming community for the good work done, challenging working condition, inadequate technical support of SMS, large workloads, irrelevant duties and responsibilities to the profession, shortage of work independence, poor infrastructural facilities such as residential house and transport have influenced the job dissatisfaction, low work motivation and more frequent turnover of DAs.

From the above analysis, it can be considered that work motivation of DAs in the study area is more likely to be at the medium level. Hence majority of the DAs were identified as below the desired level of work motivation, turnover was high and employees become frustrated and unproductive. It is therefore, interesting to discover the factors which are contributing to the current undesirable or poor level of work motivation of the DAs that needs efforts to improve the current condition in the study area.

Description and associations of dummy and continuous explanatory variables with DAs' level of work motivation

Several factors contribute to work motivation of employees in any job field. This study looked at demographic characteristics and other explanatory variables including age, sex, marital status, work location as well as family background of DAs in order to get a clear picture of the respondents and to be able to compare the results with the motivational level of the DAs.

The results of the associations between DAs work motivation levels as dummy and continuous variables are considered in Tables 2 and 3.

Sex

As it can be seen in Table 2 from the respondents, 77.8% (n=105) of them were male and only 22.2% (n=30) were female.

The result of this study shows that being male is strongly associated with work motivation. The probable reasons for lower work motivation of female DAs in the study districts are: in addition to adapt to harsh environment and difficult working conditions, there are many other social and cultural factors that inhibit female extensionists in their work. FGD and key informants information confirmed that many of them experienced problems of being accepted or respected by male beneficiaries initially. In addition, they were given the work load beyond their capacity, hoping opportunities to transfer in an urban based offices because of their family cases, absence of accommodation and no rented house especially in the remote rural ‘kebeles’ of the study district affected their motivation. All productive and non-productive works also made female agents busier than their male counterparts and this decreased their work motivation. Therefore, it is the result of work load and other social and cultural factors leading to diminish their work motivation. This conclusion is the same as the study conducted by Zelalem (2011) and Tesfaye (2012). In contrast, other studies have shown that gender is not associated to work motivation of DAs (Cano and Miller, 1992).

Marital status

The significance test was undertaken to see the difference between married and unmarried DAs. It was hypothesized to indicate the relationship with work motivation of DAs in favor of married DAs. The result indicates in Table 2 that the chi-square test shows a significant difference among the DAs' work motivation and their marital status at 1% level. FGD and informal discussion with respondents indicate that due to the demand and expansion of extension work, the

Table 3. The association among continuous variables and work motivation level of the DAs.

Variable		Work motivation categories			Total	F-test
		Low	Medium	High		
Age	Mean	28.26	27.75	26.35	27.54	2.113 (NS)
	SD	5.20	3.98	2.57	4.12	
Work location	Mean	42.58	32.65	26.74	33.96	12.567***
	SD	13.76	15.07	10.49	14.82	

Note: *** Significant at 1% level, NS = Not significant.

Source: Survey data (2013).

work load in extension organization increased as compared to the last three-four years back. This demand and expansion of extension work in one way helped the DAs to enter the newly created jobs and on the other hand the one who do not have interest in doing this work by giving all his/her effort and the time tried to leave the job since it makes them busy. As such, DAs who have tried to leave their jobs in relation to the current extension work load are more in the unmarried category of DAs than their married counterparts who are more responsible and committed to extension work. This conclusion is inconsistent with several studies which have shown the association between work motivation and marital status, indicating that married agents are more motivated than unmarried agents (Bowen et al., 1994; Fetsch and Kennington, 1997; Tesfaye, 2011). In contrast to this, other studies have shown no significance among married and unmarried DAs (Herzberg et al., 1967; Zelalem, 2011).

Background (rural/urban)

One important factor which motivates or diminishes agricultural extension work is the agents' family background. It is believed that DAs with rural background have first-hand experience and understanding of farmers' problems and management constraints (Belay and Deginet, 2004). In the study area, the majority of the respondents (63.7%, n=86) have a rural background and 36.3% (n=49) have urban background. The rural background of DAs was hypothesized to have a positive relationship with the work motivation of DAs. The result from the chi-square test on Table 2 confirmed that there is a relationship between DAs background and work motivation at 5% significance level. This is probably because the DAs are usually placed in challenging areas with difficulties such as: no quality and amount of equipments needed for their work, placed in location which needs higher labor and inaccessible remote areas, and carrying out extension work by convincing non-educated rural communities. All these issues affect DAs in general but those with rural background have adaptation and experience for such challenging situations than their urban background counter parts. This conclusion is consistent with study that has shown the association between work motivation and agents' family back ground,

indicating that the rural back ground agents are more motivated than agents with urban background (Tefaye, 2012).

Age

Older agents were assumed to have higher work motivation than younger ones. The result from one-way ANOVA (F-test) test shows age was not related to work motivation of the DAs. FGD with extension managers, process owners, extension officers and supervisors confirmed that since the working environment of DAs is challenging, most of the aged DAs are fed-up on their own work, some of them are out of the job and even some of the aged DAs are living in conditions similar with the farming community they serve as a professional. Because of such reasons, older agents in the study area have less work motivation than the younger DAs. This conclusion is consistent with a study by Zelalem (2011) and Tesfaye (2012). However, several studies have shown a relationship between age and work motivation, indicating that the elder workers are more motivated in their work than younger workers (Paynter, 2004).

Home distance from the work area/ work location

The proximity of the DAs from their residence to their place of duty is believed to decrease stress. Thus it was hypothesized that the long distance from their homes affects the work motivation of DAs negatively. The result from one-way ANOVA (F-test) test confirmed that there is significant relationship at 1% level between DAs work motivation and the work location. This finding is similar to a study by Yohannes (2009), Zelalem (2011) and Tesfaye (2012).

Association of the study explanatory variables with development agents' level of work motivation

Here, the results of the association of DAs' work motivation levels with each of the 13 explanatory variables under study are presented in the study area.

The factors considered are: work related environment factors (pay structure, work location, quality of work life and promotion avenue), institutional factors (dependable supervisors, work incentives, recognition, job security,

supervision, job description, policy environment and performance appraisal) and psychological factors (achievement motivation and attitude of DAs towards their job).

Perceived pay structure

From Herzberg's motivational theory factors, salary was the most important factor influencing work motivation of employees in the work place. As Marsland et al. (1999) pointed out, the extension of employees may be satisfied with their work. However, they may still be dissatisfied with their monthly pay package.

The relationship of pay structure with work motivation was also addressed by using cross tabulation, chi-square and Pearson's product moment correlation. The results are presented in Table 4.

Statistical data in Table 4 shows the greater percentage of the DAs (68.9%, n=93) were discouraged by the salary they get from their organization. The analysis result also shows there is a significant and positive relationship at 1% level between pay structure and work motivation of DAs.

This finding is in agreement with other studies like Moris (1987) which indicated that low work motivation among extension workers was aggravated by their poor pay structure (less pay and allowances) of the extension organizations as compared to their peers working in the private sector, even in research and management positions. Mowbray (2002) found that insufficient pay is the leading organizational factor contributing to an extension agent's decision to leave his/her position.

Furthermore, Weibel et al. (2010) found that Pay-For-Performance (PFP) can successfully motivate public employees who are less likely to find their work interesting. Low level employees of public administration often find their job not intrinsically rewarding, and in that case PFP can augment extrinsic motivation without endangering a great amount of intrinsic motivation. These types of jobs are usually also easier to measure, and thus a pay-for-outcome mechanism can be established.

Quality of work life

Improving the quality of work life through making the job more satisfying and productive has been considered an important factor in motivating employees at work initiated for better performance. Factors such as the nature of the job or the role and involvement of employees in work decisions are important for improving the quality of work life. The methods used to do so are job enrichment, job design and role interventions (Pareek, 1993). This measure assesses the availability of these methods and their application in extension organizations to make the job more satisfying to DAs. Bavendam (2000) concluded that employees who have high job satisfaction care more about the quality of their work and are committed to their organization.

Statistical data in Table 5 shows that more than a half of

the respondents (54.1%, n=73) expressed the quality of work life of DAs as discouraging in their work, while only 31.9% (n=43) of them were encouraged. The result from the analysis confirmed that there is association among quality of work life and work motivation levels of DAs at 1% significant level. This indicates that there was less quality of work life in extension organization of the study area. This finding is similar to a study by Tesfaye (2012). In contrast to this, Zelalem (2011) found that there was better quality of work life in an extension organization of BenishangulGumuz Regional State, Ethiopia.

Promotion avenues

This study also looked at the association among the promotional avenues used in extension organization and the perception of DAs on the promotional system and their motivation at work. The results were analyzed using cross tabulation, chi-square and Pearson's product moment correlation.

Data in Table 6 indicate that the majority of the DAs (70.4%, n=94) were highly discouraged and only 20% (n=27) were encouraged with the existing promotion criteria of their organization. It was also found that there is significant and positive association between promotion avenue and work motivation of DAs at 1% level.

FGD and informal discussion with agents identified promotion system which considers individual performance in addition to the years of service as selection criteria for promotion along with extra training would be more likely to promote higher work motivation. This finding is similar to a study by McCaslin and Mwangi (1994) on extension agents from Kenya's rift valley who reported that promotion led to frustration because the extension agents felt promotion was more on the basis of years of service and not on individual performance. In contrast with this, Van Wart et al. (2008) observed that to get a better career advancement along with career services, managers should hold timely, structured and thorough interviews with employees to understand their needs and aspirations. Next, managers should provide career advice and fit a career plan to the employee.

Dependable supervisors

The result as depicted in Table 7 presents the association between dependable supervisor and the level of work motivation for the DAs which was analyzed using cross tabulation, chi-square and Pearson's product moment correlation.

As indicated in Table 7, 34.8% (n=47) of DAs were motivated and they performed their tasks with the availability of dependable supervisors, whereas about 8.9% (n=12) described their feeling as neutral but a large proportion of 56.3% (n=76) of the respondents described their feeling as below neutral range. The result from the analysis also revealed that there is strong and significant association at 1% significant level between dependable supervisors and

Table 4. The association between perceived pay structure and work motivation levels of the DAs.

Perceived pay structure	Work motivation level categories								χ^2	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	9	6.7	24	17.8	4	3	37	27.4		
Discouraging	24	17.8	27	20	5	3.7	56	41.5		
Neutral	5	3.7	7	5.2	9	6.7	21	15.6		
Motivating	0	0	5	3.7	11	8.1	16	11.9		
Highly motivating	0	0	0	0	5	3.7	5	3.7		
Total	38	28.1	63	46.7	34	25.2	135	100	51.836***	0.438***

Note: f = Frequencies, r = Pearson correlation *** Significant at 1% level.
Source: Survey data (2013).

Table 5. The association between quality of work life and work motivation levels of the DAs.

Quality of work life	Work motivation level categories								χ^2	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	8	5.9	10	7.4	1	0.7	19	14.1		
Discouraging	19	14.1	29	21.5	6	4.4	54	40		
Neutral	6	4.4	6	4.4	7	5.2	19	14.1		
Motivating	5	3.7	10	7.4	12	8.9	27	20		
Highly motivating	0	0	8	5.9	8	5.9	16	11.9		
Total	38	28.1	63	46.7	34	25.2	135	100	26.112***	0.396***

Note: f = Frequencies, r = Pearson correlation. *** Significant at 1% level.
Source: Survey data (2013).

Table 6. The association between promotion avenues and work motivation levels of the DAs.

Promotion avenues	Work motivation level categories								χ^2	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	18	13.3	16	11.9	5	3.7	39	28.9		
Discouraging	16	11.9	27	20	13	9.6	56	41.5		
Neutral	3	2.2	7	5.2	3	2.2	13	9.6		
Motivating	1	0.7	8	5.9	10	7.4	19	14.1		
Highly motivating	0	0	5	3.7	3	2.2	8	5.9		
Total	38	28.1	63	46.7	34	25.2	135	100	19.996***	0.351***

Note: f = Frequencies, r = Pearson correlation. *** Significant at 1% level.
Source: Survey data (2013).

Table 7. The association between dependable supervisors and work motivation levels of the DAs.

Dependable supervisors	Work motivation level categories								χ^2	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	19	14.1	17	12.6	3	2.2	39	28.9		
Discouraging	11	8.1	17	12.6	9	6.7	37	27.4		
Neutral	5	3.7	5	3.7	2	1.5	12	8.9		
Motivating	2	1.5	16	11.9	9	6.7	27	20		
Highly motivating	1	0.7	8	5.9	11	8.1	20	14.8		
Total	38	28.1	63	46.7	34	25.2	135	100	28.729***	0.418***

Note: f = Frequencies, r = Pearson correlation. *** Significant at 1% level.
Source: Survey data (2013).

work motivation level of DAs.

According to Herzberg's (1966) findings regarding the importance of relationships with one's supervisors, administrative support, and equal treatment for all employees and showing concern with personal problems of agents should increase work motivation. Van Wart (2008) also pointed out that the managers are recommended to listen to subordinates' personal problems which affect their work, and take the time to counsel them. It is also the task of managers to provide special opportunities for their subordinates to prepare for a future position. That is, managers can allow people to take additional training, allow the subordinates to represent the division in meetings, attend conferences, and gain vital experience as well as self-confidence. Managers can also prepare employees by exposing them to the overall picture, that is, subordinates can be introduced to other significant people inside and outside the organization, and can be given assignments with visibility.

In line with this, the result of this survey showed that this issue needs high concern of the extension managers, process owners, extension officers and supervisors of the District Agricultural Development Office of the study area.

Therefore, it can be concluded that the DAs seemed to demonstrate higher work motivation with the availability of extension organization concerned management, extension officers, and supervisors who are worthy of being trusted to provide motivational and job related supports.

Work incentives

Naturally, a human being is motivated to fulfill his/her internal unsatisfied needs, which requires the establishment and operation of effective incentive system. Basically, putting effective incentive system within the extension system on one hand will highly encourage strong staff performance to achieve his/her goal. When incentive is appropriately implemented, it will motivate staff to improve their performance to deliver their services. When incentive is implemented in an unexpected way, it will have serious damage on the achievement of the goal of extension service. In consistence with this, Ajila (2007) found out that workers who received incentives performed better than those who did not. Thus, it is critically important to establish effective incentive mechanism by extension organization in order to create a motivated staff. To examine the importance of work incentives to DAs' work motivation, cross tabulation, chi-square and Pearson's product moment correlation were used. The results of the analysis are presented in Table 8.

Table 8 indicates that of the total respondents 53.3% (n=72) of them expressed that inadequate work incentive factor was discouraging and 20.7% (n=28) of them expressed their opinion as highly discouraging. The statistical results have shown a significant and positive association at 1% level between work incentives and work motivation of DAs. Agents in the study area were dissatisfied by the current incentive system of their

organization. The assumption of this study was that these incentives would serve as motivators and the general advice is to implement proper incentive systems in an organization.

In consistence with this, Moris (1987) found out how hard it is for extension organization to serve its clients well without adequate staff incentives. In Kenya, McCaslin and Mwangi (1994) found that these incentives include housing, transportation, pay health insurance, subsistence allowances while on official duty, and working under well trained extension supervisors with personnel management skills needed to motivate their staff and for relatively performance improvement. Moreover, Agents' need should be identified regularly in order to provide meaningful motivational incentives. This is because, as times and conditions change, past motivational strategies become ineffective (Kreitner, 1995).

Therefore, the first task of extension organization managers, process owners, extension officers and supervisors could be to identify what motivates agents and make a match between agents' desires and the available work incentives to motivate their employees for better performance.

Recognition

Recognition pertains to both informal and formal intangible incentives by showing appreciation and provides praise. Recognition always has a positive connotation and it acknowledges good behavior or actions. Recognition generally costs nothing and is immensely motivating, yet it is underutilized (Van et al., 2008). For example, managers can intersperse informal recognition while managing by walking around. They can also offer a good word, a short written comment on paper, a celebration toast, a pat on the back, or just a warm handshake.

In this study, effective recognition system of extension organizations comprises both formal recognition (such as award, sermons and bonus schemes) and informal recognition (such as words of appreciation, giving of gifts and awards outside any formal recognition system based on perception of DAs).

Table 9 presents that 50.3% (n=68) of the DAs were discouraged by the existing recognition system in their organization while 43% (n=58) were motivated. The rest 6.7% (n=9) fell in the middle position. Pearson correlation (0.417) showed significant and strong correlation between the recognition system of the extension organizations and the work motivation of the DAs in the study area. This result supports the studies undertaken by Yohannes (2009), Zelalem (2011) and Tesfaye (2012) regarding factors influencing work motivation of DAs in SNNPR, Benishangul Gumuz Regional State and Bule Hora District, Borana Zone respectively. These studies confirmed that there is association between work motivation of DAs and the recognition system of extension organizations.

In conclusion, the statement that can be drawn is DAs appear to be committed to their organizations and responsive to the farming community by recognition and

Table 8. The association between work incentives and work motivation levels of the DAs.

Work incentive	Work motivation level categories								χ^2	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	8	5.9	15	11.1	5	3.7	28	20.7	22.701***	0.332***
Discouraging	26	19.3	34	25.2	12	8.9	72	53.3		
Neutral	3	2.2	5	3.7	2	1.5	10	7.4		
Motivating	1	0.7	5	3.7	9	6.7	15	11.1		
Highly motivating	0	0	4	3	6	4.4	10	7.4		
Total	38	28.1	63	46.7	34	25.2	135	100		

Note: f = Frequencies, r = Pearson correlation. *** Significant at 1% level.
Source: Survey data, 2013.

Table 9. The association between recognition and work motivation levels of the DAs.

Recognition	Work motivation level categories								χ^2	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	8	5.9	14	10.4	1	0.7	23	17	28.641***	0.417***
Discouraging	20	14.8	20	14.8	5	3.7	45	33.3		
Neutral	2	1.5	5	3.7	2	1.5	9	6.7		
Motivating	7	5.2	15	11.1	15	11.1	37	27.4		
Highly motivating	1	0.7	9	6.7	11	8.1	21	15.6		
Total	38	28.1	63	46.7	34	25.2	135	100		

Note: f = Frequencies, r = Pearson correlation. *** Significant at 1% level.
Source: Survey data (2013).

Table 10. The association between perceived job security and work motivation levels of the DAs.

Perceived job security	Work motivation level categories								χ^2	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	10	7.4	11	8.1	3	2.2	24	17.8	20.382***	0.310***
Discouraging	16	11.9	18	13.3	6	4.4	40	29.6		
Neutral	4	3	18	13.3	8	5.9	30	22.2		
Motivating	7	5.2	15	11.1	12	8.9	34	25.2		
Highly motivating	1	0.7	1	0.7	5	3.7	7	5.2		
Total	38	28.1	63	46.7	34	25.2	135	100		

Note: f = Frequencies, r = Pearson correlation. *** Significant at 1% level.
Source: Survey data (2013).

respect they receive from their organization management, colleagues and from the farming community which they assist.

Perceived job security

Associations among job security and work motivation levels of DAs were analyzed using cross tabulation, chi-square and Pearson’s product moment correlation. Table 10 shows the results on perception of extension workers regarding job security and its effect on their work motivation.

The data revealed that the larger number of DAs (47.4%, n=64) were highly discouraged, discouraged and frustrated

by the job security factors; and also there is good future of the organization related to the job, organizational effort to keep employees fulltime, etc., in their working environment. The analysis result also indicated that the job security and work motivation are positively correlated at 1% significance level. In consistence with this, Harpaz (1990) found that there is a strong relationship between motivation and job security.

Supervision

Herzberg’s theory for motivation at the workplace distinguishes between motivating factors or ‘satisfiers’ and

Table 11. The association between supervision and work motivation levels of the DAs.

Supervision	Work motivation level categories								χ ²	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	13	9.6	15	11.1	5	3.7	33	24.4	18.92**	0.253***
Discouraging	14	10.4	25	18.5	14	10.4	53	39.3		
Neutral	11	8.1	15	11.1	5	3.7	31	23		
Motivating	0	0	8	5.9	8	5.9	16	11.9		
Highly motivating	0	0	0	0	2	1.5	2	1.5		
Total	38	28.1	63	46.7	34	25.2	135	100		

Note: f = Frequencies, r = Pearson correlation. ***, ** significant at 1% and 5% level respectively.
Source: Survey data (2013).

Table 12. The association between job description and work motivation levels of the DAs.

Job description	Work motivation level categories								χ ²	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	12	8.9	9	6.7	0	0	21	15.6	23.567***	0.280***
Discouraging	7	5.2	17	12.6	8	5.9	32	23.7		
Neutral	11	8.1	9	6.7	12	8.9	32	23.7		
Motivating	8	5.9	24	17.8	10	7.4	42	31.1		
Highly motivating	0	0	4	3	4	3	8	5.9		
Total	38	28.1	63	46.7	34	25.2	135	100		

Note: f = Frequencies, r = Pearson correlation. *** Significant at 1% level.
Source: Survey data (2013).

dissatisfiers which Herzberg also calls ‘hygiene factors’, the primary causes for job dissatisfaction or “unhappiness on the job”. He found supervision as one of the dissatisfiers which has a small effect on job satisfaction level but creates dissatisfaction. According to him, attending to such factors will primarily reduce job dissatisfaction and increase staff retention. Table 11 presents data on the perception of DAs on the supervision system of their organization in association to their work motivation.

As shown in Table 11, a significant number of DAs (63.7%, n=88) were discouraged, whereas only 13.4% (n=18) of them were encouraged to perform their work by the current supervision system of their organization. The result also indicates that there is a significant association between supervision and work motivation of DAs in the study district at 5% level of significance.

Job description

For this study, job description was operationalized as to whether there is a clearly defined job description available for the DAs as well as the relevancy of duties and responsibilities given as per their profession by reflecting its association with the work motivation of DAs. The association of job description with work motivation level of DAs was analyzed using cross tabulation, chi-square and Pearson’s product moment correlation. The results are

presented in Table 12.

Table 12 illustrates that 23.7% (n=32) of respondents have indicated neutral perception to the availability of job description and relevancy in association to work motivation. From the respondents, 37.3% (n=50) of them were highly motivated, whereas 39.3% (n=53) of the DAs were demotivated by the existing job description. The result from the chi-square analysis also indicates that the significance association among job description and work motivation of the DAs at 1% level. This implies that the DAs perception regarding availability of job description and its relevancy to their qualification has implication to the current work motivation levels of DAs.

In consistence with this, Wright and Bradley (2001) found that what a person does at work, that is, the nature of the job or fulfilled tasks, can influence work motivation. In other words, it is not the sector itself that determines motivational patterns, but rather the content and the type of the performed tasks (Buelens et al., 2007). For example, job characteristics like routineness and job specificity were found to affect the level of work motivation (ibid; Wright et al., 2003). Routineness concerns the degree to which employee’s daily tasks are varied and provide opportunities for new experiences; and job specificity deals with the clarity of the assigned tasks, their success indicators, and relative importance. In general, studies report that jobs, which are routine or have unclear tasks and goals, have a negative

Table 13. The association between perceived policy environment and work motivation level of the DAs.

Perceived policy environment	Work motivation level categories								χ^2	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	12	8.9	5	3.7	0	0	17	12.6		
Discouraging	15	11.1	34	25.2	6	4.4	55	40.7		
Neutral	6	4.4	14	10.4	5	3.7	25	18.5		
Motivating	4	3	7	5.2	8	5.9	19	14.1		
Highly motivating	1	0.7	3	2.2	15	11.1	19	14.1		
Total	38	28.1	63	46.7	34	25.2	135	100	56.417***	0.521***

Note: f = Frequencies, r = Pearson correlation. *** Significant at 1% level.

Source: Survey data (2013).

Table 14. The association between performance appraisal and work motivation levels of the DAs.

Performance appraisal	Work motivation level categories								χ^2	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	15	11.1	17	12.6	6	4.4	38	28.1		
Discouraging	11	8.1	18	13.3	5	3.7	34	25.2		
Neutral	8	5.9	16	11.9	8	5.9	32	23.7		
Motivating	4	3	9	6.7	11	8.1	24	17.8		
Highly motivating	0	0	3	2.2	4	3	7	5.2		
Total	38	28.1	63	46.7	34	25.2	135	100	15.716**	0.308***

Note: f = Frequencies, r = Pearson correlation. ***, ** significant at 1% and 5% level respectively.

Source: Survey data (2013).

effect on work motivation (Buelens et al., 2007).

Perceived policy environment

It refers to the availability of favorable and clearly defined policies mainly related to employees and organizational goals. The results of the association of policy environment of the extension organization in the study area with work motivation levels of DAs were analyzed using cross tabulation, chi-square and Pearson’s product moment correlation.

As shown in Table 13, majority of the respondents (40.7%, n=55) and 12.6% (n=17) found that the organization policy is not favorable or less favorable to work motivation, whereas 28.2% (n=38) of the DAs found it favorable. The statistical result also revealed that there is a significant and strong association among policy environment of the extension organization and work motivation of the DAs at 1% significant level.

In line with this, a study of Keiningham (2006) noted that among the aspects expected by employees in their organization policy is fair organization policy and systematic management style.

Perceived type of performance appraisal

Employees are better able to fully contribute to the

organization’s goals if they receive constructive feedback and support for development through various communication channels, including performance appraisals. Thus, this study assessed whether or not there are continuous, accurate and objective staff evaluation systems in an extension organization as perceived by the DAs. The association of performance appraisal and work motivation levels of DAs were analyzed using cross-tabulation, chi-square and Pearson’s product moment correlation. Results are presented in Table 14.

As indicated in Table 14, 53.3% (n=72) of the respondents perceived the type of performance appraisal system in their organization as discouraging whereas 23% (n=31) of DAs perceived it as encouraging. The statistical results also indicated the significant association among DAs performance appraisal with their work motivation at 5% level. In this regard, FGD with DAs representative and informal discussion with the agents confirmed that continuous, accurate and objective staff evaluation systems in a monthly, quarterly, half-a-year and annual basis were not accomplished, and the agents could not get the feedback whether they perform well or poorly. Rather, seasonal and biased performance assessment evaluation is done by extension managers and SMS in case of granting a chance for training, selection of model DAs and other awards for DAs at the district or zonal levels. This unfair performance appraisal system used by the extension organization in the

Table 15. The association between attitude of DAs and the levels of work motivation of the DAs.

Attitude of DAs towards their job	Work motivation level categories								χ^2	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	6	4.4	8	5.9	1	0.7	15	11.1	20.045***	0.289***
Discouraging	17	12.6	20	14.8	7	5.2	44	32.6		
Neutral	10	7.4	8	5.9	12	8.9	30	22.2		
Motivating	5	3.7	16	11.9	8	5.9	29	21.5		
Highly motivating	0	0	11	8.1	6	4.4	17	12.6		
Total	38	28.1	63	46.7	34	25.2	135	100		

Note: f = Frequencies, r = Pearson correlation. *** Significant at 1% level.

Source: Survey data (2013).

study area discouraged and reduced the efforts of hard and self-motivated extension workers and therefore raising equity questions amongst the employees.

Thus, extension organization managers, process owners, extension officers and supervisors of the study area are expected to improve the present performance appraisal system and motivate agents in the work place through: (1) evaluating them on the wide range of duties they perform using an appropriate evaluation form which is periodically reviewed; and (2) making the evaluation process promote personal and professional growth and competence, facilitate cooperation and communication between supervisors and agents, relate to the agent's plan of work, and provide evaluation feedback.

DAs' attitude towards their jobs

The respondents' attitude towards their job were assessed due to the significant impact of DAs attitude vis-à-vis his/her behavior in their work place. The researcher operationally defined attitude in this study as the degree of positive or negative attitude of the DAs towards their job. This variable was measured by a five point continuum Likert-type scale.

The results of the association of DAs attitude towards their job with their work motivation were analyzed using cross tabulation, chi-square and Pearson's product moment correlation and are presented in Table 15.

The data in Table 15 indicates that 43.7% (n=59) of the respondents were discouraged and 34.1% (n=46) of them were encouraged, while 22.2% (n=30) were neither encouraged nor discouraged by the job they are currently performing. A statistical result reveals that the attitude of DAs towards their job has positive associations with the DAs' work motivation at 1% level of significance.

In line with this, a study of Lowe et al. (2003) noted that workers who rated their work environments as "healthy" (task content, pay, work hours, career prospects, interpersonal relationships, security) reported higher job satisfaction, morale, and organizational commitment and lower absenteeism and intent to quit. Therefore, extension organization managers, process owners, extension officers and supervisors of the study area are expected to change

the behavior of DAs with negative attitude towards their jobs by making their work environment as healthy as possible at the district level.

Achievement motivation

One of the important needs present to some degree in all human beings is the "need for achievement" or the need to attain excellence and higher level of performance. People in whom the need for achievement is strong seek difficult work and improve their task performance. They are future oriented, aspire for higher goals and persist on the task chosen. They are task oriented and prefer to work on tasks that are challenging and on which their performance can be evaluated in some way. McClelland (1961) theory of motivation in his experiment on the effect of achievement on people's motivation expressed that while most people do not possess strong achievement-based motivation, those who do, display a consistent behavior in setting goals which they can influence with their efforts and ability, and as such the goal is considered to be achievable. The association of achievement on work motivation of DAs was analyzed using cross tabulation, chi-square and Pearson's product moment correlation. The results are presented in Table 16.

The data in Table 16 indicates a significant number (58.5%, n=86) of DAs who were highly motivated by the achievement in their work, whereas a small number (28.9%, n=32) of DAs were not motivated by the achievements in their work. The statistical result also indicates that there is association between achievement motivation with the work motivation at 10% significant level. From the results thus, achievement motivation seems to be an important factor for DAs motivation in their work.

In line with this, a study by Herzberg (1968) pointed out that to improve motivation and thereby increase staff performance, attention should be given to motivating factors by increasing the individual's sense of achievement and to demonstrate recognition of that achievement. Furthermore, McClelland's (1975) motivation theory pointed out that those employees who have high achievement motivation shows a strong need for feed back as to achievement and progress in their work. For such employees, achievement is more

Table 16. The association between achievement motivation and work motivation levels of the DAs.

Achievement motivation	Work motivation level categories								χ^2	r
	Low		Medium		High		Total			
	f	%	f	%	f	%	f	%		
Highly discouraging	4	3	10	7.4	0	0	14	13.3		
Discouraging	6	4.4	8	5.9	4	3	18	15.6		
Neutral	5	3.7	9	6.7	3	2.2	17	12.6		
Motivating	14	10.4	24	17.8	10	7.4	48	37.8		
Highly motivating	9	6.7	12	8.9	17	12.6	38	20.7		
Total	38	28.1	63	46.7	34	25.2	135	100	14.540*	0.190**

Note: f = Frequencies, r = Pearson correlation. **, * significant at 5% and 10% level respectively.

Source: Survey data (2013).

important for their motivation than material or financial reward.

Accordingly if DAs are highly motivated, they perform well and good performance is self rewarding. Absolutely, the current study confirmed that a well-trained extension worker must have higher work motivation if he/she is to accomplish his/her task satisfactorily.

Conclusion

The effects of DAs motivation do not stop with performance. In the group of motivated extension agents, there are fewer rates of ethical problems, less turnover and lower levels of absenteeism. Motivated agents feel less stress, enjoy their work, and as a result have better physical and mental strength. Furthermore, motivated agents are more committed to their extension organizations and show less insubordination and grievance. They are also more creative, innovative, and responsive to the farming community, thus indirectly contributing to the long-term success of the extension organization. In short, motivated agents are the greatest asset of extension organization.

For the above reason, knowledge of motivational factors need to be important for extension managers, process owners, extension officers, supervisors and other sectors that use DAs for their work to be accomplished in creating conducive work environment in extension organizations of the study area.

Therefore, the researcher concludes from the above summary that results of this study have shown that DAs demographic, work related environments, institutional and psychological factors in extension organization of the study area were equally responsible for the existing undesirable consequences of lower work motivation level of DAs. The key to motivate DAs in their work is having the knowledge of "What is motivation?", "How does one get motivated?", "What should be done to increase motivation?". Thus, every concerned organization and personnel has to design motivational program that improves the work motivation of DAs and form participatory management style.

RECOMMENDATIONS

Based on the results of this study, the following

recommendations are suggested so that they can be considered in future intervention strategies intended to promote higher work motivation among DAs in extension organizations of the study area:

- 1) The investigation of this study revealed that DAs work motivation increases when they are given relevant duties and responsibilities with clear guidelines. However, majority of DAs in the study districts expressed that lack of clearly defined job descriptions is among the challenges of working for extension services. Furthermore, duties which have no relation with their priority mandate, which is extension profession, and hence overloaded, have effect on lower work motivation. Therefore, efforts have to be made to improve work related problems (like role ambiguity, non professional activities and work overload) in extension organization of the study area.
- 2) A large majority of the DAs in the study districts expressed that besides the meager payment, harsh working conditions, inaccessible living condition and very high work load, agricultural extension work is not considered as a socially prestigious profession. For such reason, the DAs are not willing to work as an agent for a long period of time in an extension organization. Therefore, this issue calls for considerable efforts to be made by extension managers, process owners, extension officers and supervisors, so as to bring to focus how an appropriate motivational package can gear up or influence the DAs to develop positive attitude towards their job and thereby increase their productivity. Thus, the feasible recommendation in this regard would be:
 - Prepare a carrier structure where by employees can benefit from promotion and salary increments, based on the living situation in different agro-ecological zones.
 - Supply DAs with all the necessary materials like raincoats, umbrella, shoes and other durable and non-durable required materials.
 - Provide DAs with uniform work clothes and transportation facility. This is because whenever they visit urban based offices for official work, their transportation facility or clothing can easily be identified by the rural as well as urban community and the DAs will also respect their work clothes; as such, the DAs as well as their work will be known and respected.

- Materials given to the DAs for the purpose of their work annually should be good. Thus, instead of giving boots since they work in rural area, it is better to give special shoes.

3) Recognition that shows appreciation and provides praise for the extra work and fulfillment of job tasks was also found to be significantly affecting the DAs work motivation. In FGDs, it was pointed out that the working hours of the DAs are more compared to other civil servants at grass root level, even with an average of more than eight hours per day and sometimes on weekends. Therefore, the extension organization in the study area has to:

- Design additional incentive mechanism for the extra working hours and weekend tasks.
- Prepare a system whereby superior performance could be rewarded and motivated. These will attract, retain and motivate extension agents.

4) This study further indicated that favorable performance evaluation system could serve as a tool to motivate the DAs in extension organizations. Regarding this:

- Managers, process owners, extension officers and supervisors in extension organization would set consistent, definite and transparent promotion criteria, so as to facilitate the DAs to strive to fulfill them by better performance and time bound goals.
- Performance appraisal criteria should be made transparent and the feedback mechanism based on such appraisals should be strengthened.

5) The current promotional system in the study area is not suitable or poor in terms of selection criteria, availability and implementation of promotional systems and further training opportunities. Such a low quality of promotional system in the study area makes the DAs unproductive in their work. Therefore, the extension organization in the study area has to:

- Prepare and implement a comfortable promotional system whereby the DAs benefit from it, like DAs become a supervisor, subject matter specialist (SMS) and office worker.
- Prepare suitable promotion criteria which relate or consider individual performance than years of service.
- Involve extra trainings (long and short term) as a promotional system.

6) Logistics and facilities would create favorable working conditions for the DAs to be more motivated in their work. In relation to this, the current study confirmed that there is poor transport facility, poor and inadequate housing condition, inadequate availability of equipment in each field of profession. Thus, extension managers, process owners, extension officers and supervisors should make sure DAs have adequate housing condition, tools, transportation

facility (motor cycle, bicycle, horse or mule depending on the existing situation of the area), and materials they need for the job.

7) Adequacy of supervision was found to be one of the factors affecting work motivation of DAs. The study also indicated that there is poor scheduled supervisory visits, scheduled evaluation feedback, provision of current information on their profession through the supply of current bulletins, treatment as a colleague, partner and friend from supervisors in extension organizations of the study area. In this regard, extension organizations should be reminded that if their main engines, DAs, are affected by the above issues, their work motivation would be affected; consequently, it lessens the quality of their productivity. Therefore:

- DAs should get relevant, adequate and regular supervision from extension organizations.
- Supervisors are required to be fair and accessible to DAs. Their technical capabilities were also important in helping DAs on practical aspects of their work.
- Supervision should not only focus on monitoring the DAs, but also to support and guide them to discharge their duties smoothly and effectively.

8) The extension organization must have good training programme. This will give the DAs opportunities for self-improvement and development to meet the challenges and requirements of new equipment and new techniques of performing a task, especially for those who are found in medium and low levels of work motivation. Therefore:

- Regular short term in-service training and scholarship programs are to be organized to enhance their professional and technical knowledge and skills.
- Professional competence enhancement in terms of communication and interpersonal skills, organizing and coordination skills, extension teaching methods, and other areas of professional competence are to be separately considered from technical competence trainings.
- Performance appraisal reports should be considered as needs assessments to fill the knowledge and skill gaps in selection of participants to such trainings. These trainings should not be incentive opportunities for good performers, but opportunities to enhance capacity for those who are deficient in such aspects.

Finally, agricultural extension organization managers, process owners, extension officers and supervisors as leaders should understand the importance of development agents in achieving the goals of the extension services, and that motivating these workers is of paramount importance in effectively fulfilling the missions of extension organizations.

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Appendix 1. Work motivation level scales.

S/N	General work motivation indicators	Stonly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
1	I am given opportunity to take part in decisions related to extension and other assignments					
2	I am given opportunity to improve competences through training					
3	I receive monetary reward other than my salary					
4	I receive non-monetary gifts from time to time					
5	I receive appropriate recognition from my organization					
6	I am placed in an area of work of great interest					
7	I have necessary tools to effectively carry out work					
8	There is adequate transportation for my work					
9	I am provided with accommodation with enough facilities					
10	I am paid per diem and other allowances regularly					
11	I am promoted on time based on performance					