

IDENTIFICATION OF FACTORS THAT INFLUENCE THE PERFORMANCE OF EXTENSION MANAGEMENT SYSTEMS IN KWENENG AND SOUTHERN DISTRICTS OF BOTSWANA

Ramorathudi, M. V.¹⁵, and Terblanché, S. E.¹⁶

Corresponding author: M. V. Ramorathudi, E-mail: masaramorathudi@gmail.com

ABSTRACT

Since 1999, the government of Botswana has implemented the Performance Management System (PMS) as a public service reform tool for all the ministries with the aim to improve and monitor performance of the public service including public extension. The general objective of the study was to identify factors that influence PMS in extension service delivery as perceived by the extension officers, supervisors, performance improvement coordinators, and the strategic office of the Ministry of Agriculture. Questionnaires were administered to the respondents in the Kweneng and Southern Districts of Botswana. The results revealed various factors that lead to failure of the PMS which include the use of a blueprint approach to implement the system, inadequate resources, and unfairness in individual performance appraisal. Therefore, rethinking the ministry structure and culture is recommended.

Keywords: Performance management, Performance management system, Extension, Extension officers

1. INTRODUCTION

There have been considerable scientific debates on how to ensure that the public-sector function efficiently, and in particular, there have been debates on the role of government, of regulatory institutions and of good governance in the developing world. With (great) power comes (great) responsibility, but how much and what form of state intervention (government regulation) is needed to achieve economic development, political accountability, poverty eradication and other objectives (Amundsen & Andrade, 2009:5)?

Agricultural extension has a tremendous potential to improve agricultural productivity and increase incomes through transfer and facilitation of knowledge, skills, and technologies (Feder, Anderson, Birner & Deiniger, 2010). Therefore, Feder et al. (2010) suggest the evaluation of extension systems and factors that influence their performance. The civil service is usually understood as a subset of the wider public service. The subset consists of government ministries, departments, agencies, advisors, programme and policy developers and implementers, and managers of daily activities. Thornhill (2006) identified the following as the reasons why the public sector is crucial:

- The public sector is a major employer;
- The public service is a major provider of services in the economy, particularly business services and social services; and
- The public sector is a consumer of tax resources.

¹⁵ Department of Agricultural Economics, Extension and Rural Development, University of Pretoria. E-mail: masaramorathudi@gmail.com or mramorathudi@gmail.com

¹⁶ Department of Agricultural Economics, Extension and Rural Development, University of Pretoria. Tel: 012-4204623. E-mail: fanie.terblanche@up.ac.za

Botswana is currently using the PMS as public service reform since 1999 across all the ministries. Performance management requires that managers ensure that employees' activities and outputs are congruent with the organisation's goals and consequently, help the organisation gain a competitive business advantage (Aguins, 2013:21). It is very important for the Ministry of Agriculture to evaluate PMS in order to modify or reinforce it where and when necessary. The Directorate of Public Service Management (DPSM), which oversees the formulation and implementation of productivity enhancement strategies, acknowledges the problem of productivity within the Botswana public service by stating that, "What started off as murmurs by the public about non-delivery of services by Ministries and Departments of Government has now become loud accusations of 'insensitivity' against the government at large" (Mothusi, 2008:46 quoting Republic of Botswana, 2002).

Agricultural extension operates within a broader knowledge system that includes research and agricultural education. Agricultural information systems for rural development link people and institutions to promote learning, generate, share and use agriculture-oriented technology (Rivera, Qamar & Crowder, 2001:7). Performance management system can lead to the success of an organisation. Jan, Israr, Haq & Jehangir (2014:83) conducted a study on the effect of performance management system on teachers' efficiency in Peshawar district of Pakistan and the results revealed that the teachers were very satisfied with performance management system since it has improved their productivity and performance. On the contrary, if PMS is not well formulated and implemented, it can lead to poor performance in an organisation. Macheng, Tsomele & Rammolai (2014:191) conducted a study on the implementation of PMS in schools in Botswana, and the teachers indicated that the way PMS was designed and implemented was poor. They were of the view that the system should be modified to fit well in the teaching profession since PMS is not a 'one size fits all' approach due to the differing disciplines in the government. The PMS used in Botswana follows this 'one size fits all' approach since the same is used for all ministries with different duties. Thus, this research on the identification of factors responsible for the success and failure of performance management system in extension service is vital.

1.1. Objectives of the study

- To explore the perceptions of the Ministry of Agriculture personnel regarding the implementation of the performance management system in the Kweneng and Southern Districts of Botswana.
- To determine how the performance management system influences the extension service delivery.
- To identify the methodology used to implement the performance management system in the extension sector.

2. METHODOLOGY

2.1. Data Collection

Two different data collection tools were used to answer the research questions drawn from the specific objectives. Firstly, the strategic and planning officer of the permanent secretary of the Ministry and the performance improvement coordinators of the departments were interviewed one on one. Secondly, two sets of structured questionnaires were used. The first questionnaire, containing open-ended questions, was administered to 97 randomly selected extension officers

for the Departments of Animal Production (DAP), Crop Production (DCP), Veterinary Services (DVS), and Agribusiness and Promotions (DABP) for Kweneng and Southern Districts. The second set of questionnaires was administered to the district heads of departments and supervisors of extension officers in the sub-districts.

2.2. Data Analysis

The data was analysed with a Statistical Package for Social Sciences (SPSS) for descriptive analysis and the results are presented in tables, graphs and figures.

3. RESULTS AND DISCUSSION

3.1. The culture of implementing PMS in the Ministry of Agriculture in Botswana

During the interview with the strategic and planning office of the ministry, it was outlined that the purpose of the PMS for the ministry is to monitor the fulfilment of the ministry's goals and reporting. It was further confirmed that a blueprint approach is used since the ministry draws its yearly goals from the National Development Plan, which makes the objectives of the permanent secretary. The subordinates then cascade their objectives with supervisors. In addition, the performance improvement coordinators of the departments explained that evaluations of performance management system are not done internally in the departments or within the ministry.

3.2. Correlations of the extension officers' age group, work experience and qualification

The results revealed a negative correlation (-0.496) of age group implying that the older the extension officers, the lower educational qualifications they possess. Furthermore, the negative correlation (-0.652) of work experience indicates that extension workers with more years of work experience have lower qualifications. Conversely, the results showed a positive correlation (0.492) between extension officers' age group and their work experience. The implications of the results are that the older the extension officers are, the more work experience they have. With rapid changes in technology, needs of farmers, market situation and competitive environment, the planning for human resources has become an important, challenging task for extension (Miller, Burack & Albrecht, 1980). There is a need for both highly qualified and experienced officers in the field.

3.3. Availability of resources for extension service delivery

Performance management entails systematic means to implement performance standards as a benchmark of improved productivity and efficiency. It is linked with perceived, desired and projected goals and outcomes that can be established to measure performance through standardised performance management system (Radebe, 2013:17). In this manner, it is very important to avail resources that would help in the attainment of the organisational goals. Table 1 shows the availability of resources in extension areas to execute the PMS and the organisational goals.

Table 1: Availability of resources for extension service delivery

Resources		Availability of resources in percentage				
		Animal	Crop	Veterinary	Agribusiness	Total
Office	Yes	91.3	97.4	78.6	100.0	90.7 (88)
	No	8.7	2.6	21.4	0.0	9.3 (9)
Internet	Yes	82.6	35.9	14.3	85.7	44.3 (43)
	No	17.4	64.1	85.7	14.3	55.7 (54)
Landline phone	Yes	91.3	38.5	57.1	85.7	59.8 (58)
	No	8.7	61.5	42.9	14.3	40.2 (39)
Cellular phone	Yes	91.3	79.5	71.4	100.0	81.4 (79)
	No	8.7	20.5	28.6	0.0	18.6 (18)
Vehicle	Yes	47.8	17.9	25.0	85.7	32.0 (31)
	No	52.2	82.1	75.0	14.3	68.0 (66)
Average total	Yes	80.8	53.8	49.3	91.4	68.8 (67)
	No	19.2	46.2	50.7	8.6	31.2 (30)
Request/control the vehicle	Request	100.0	100.0	82.1	100.0	94.8 (92)
	Control	0.0	0.0	17.9	0.0	5.2 (5)

As illustrated in Table 1, there is an inadequacy of transport and communications means such as internet in extension areas. The most disadvantaged departments in the resources in general are extension officers for the Departments of Veterinary Services (DVS), which indicates that only 49.3% of respondents stated that they have adequate resources and 53.8% for the Department of Crop Production (DCP). Moreover, most extension officers (91.4%) in the Department of Agribusiness and Promotions (DABP) showed that they are more equipped with almost all the resources followed by 80.8% of respondents from the Department of Animal Production (DAP). When looking specifically at the transport situation, most of the extension officers in all departments, except for DABP, indicated that they do not have vehicles in their extension areas (52.2% for DAP, 82.1% for DCP, and 75% DVS). Furthermore, there is an indication that 94.8% of these officers do not have any control over any vehicle, thus, they need to request the use a vehicle when in need of it.

3.4. The workload of Extension Officers

The extension officers' workload is one of the factors that affects the effectiveness of their service delivery. Most of the farmers in Botswana are subsistence farmers hence most of the methods appropriate for them to extend information is through frequent contact. The degree of contact between the farmers and the extension officers is mostly determined by the availability of transport and the number of farmers per extension officer. Haq (2013:321) found out that the more extension officers' visits to the farmer, the more productive that farmer becomes. The results of this study revealed that more than half of the extension officers for DCP (54.6%), DVS (59.2%) and DABP (85.8%) are responsible for farmers in the range of 1 to 500, while most of the extension officers of DAP (47.7%) are responsible for farmers in the range of 501 to 1000 in number. Williams, Mayson, Satge, Epstein & Semwayo (2008:12) considered a ratio of 1:8 as appropriate because it is within the global standards. Williams *et al.* (2008:12) further explained that the distance between farmers, client literacy, and the functioning of farmers' groups and associations are some of the factors that could affect extension service delivery.

Although the ratio of extension worker to farmers seems to be adequate, most of the extension officers (DAP: 60.5%; DCP: 43.7%; DVS: 53.6%; DABP: 57.2%) pointed out that they are

able to visit at least 1 to 25 farmers in a month followed by 26 to 50 farmers per month. This may be due to lack of transport as indicated by the previous results. More regular contact between extension and farmers is required for effective technology transfer and agricultural development (Stevens & Ntai, 2011:107).

3.5. Perceptions of extension officers on the usefulness of the Performance Management System

Abrudan (2008:1209) is of the view that gaining feedback from all the parties involved in PMS leads to the success of an organisation. This can only be done through monitoring and evaluation. A high number of extension officers are of the view that the current PMS is not a good communication tool. In total, 51.6% (15.5% strongly disagree and 36.1% disagree) of participating extension officers disagree that PMS provides useful feedback. Furthermore, a total of 76.3% (39.2% agreed and 37.1% strongly agree) agree that it does not recognise hard work. Moreover, 71.9% (31.3% strongly disagree and 40.6% disagree) of participating extension officers disagree that the performance management system currently used in the ministry be left as it is. Therefore, there is a need for the system to be changed.

In addition, the strategic officer for the ministry indicated that they never internally evaluate PMS since it is the responsibility of the National Strategy Office (NSO). NSO is a body coordinating the implementation of PMS for all the ministries of the country. If the ministry does not internally evaluate its implementation of PMS, the revealed problems will persist continuously, resulting in the failure of PMS since NSO may overlook some important factors for this specific ministry. The internal evaluation is carried out by someone from the actual project team. Clearly, such an evaluator has the advantage of fully understanding the thinking behind the development, together with the appreciation of any problems that may have arisen and should also command the trust and cooperation of the other members of the team (Earl, McConnel & Middleton, 1998:4). The ministry should evaluate the system before they identify challenges and strengths of the system.

3.6. The perceptions of extension workers on the influence of PMS on administrative effects

The results showed that in general, extension officers have varying degrees of disagreement about administrative benefits from the PMS. Just over half of the participating extension officers (53.6%) disagreed to some extent that they benefit fairly on promotions. Furthermore, 57.8% (28.9% strongly disagree and 28.9% disagree) of them disagree that PMS is fair as a rewarding system of the officers. In addition, 52.6% (23.7% strongly disagree and 28.9% disagree) of the extension officers disagree that PMS is used fairly for selecting the extension officers for further training. Nevertheless, the realisation that pay is not the only thing that people work for is equally important. That is why many organisations now think in terms of a total rewards package. Compared with a traditional reward system, total reward much more deeply reflects in what ways enterprises can attract, motivate and retain talents, in what ways employee performances which accord with corporate goals will appear, and in what ways the excellent employees should be motivated and praised (Jiang, Xiao, Qi & Xiao, 2009:178).

Furthermore, the extension officers indicated that they are not satisfied with the mentoring and coaching from their supervisors. The results revealed that the ministry does not use the PMS as a good communication tool, thus, they are not provided with feedback and are unable to take actions towards closing the gaps. Coaching and mentoring are very important in performance

management since, after appraisals and evaluations, it enables supervisors to identify problems, weaknesses and strengths of individual subordinates and could help them by providing direction and support as appropriate. Figure 1 shows the dissatisfaction of extension officers on the coaching and mentoring from their superiors.

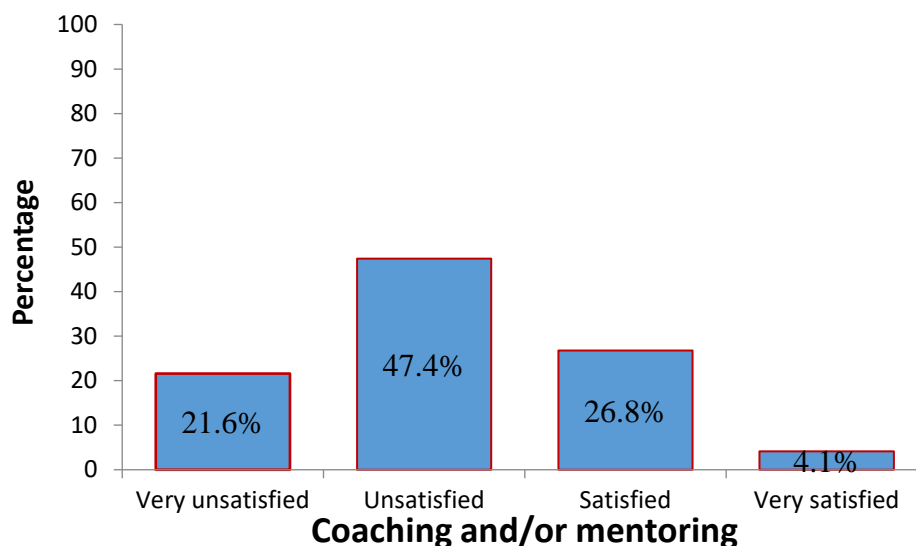


Figure 1: Satisfaction of extension officers on coaching and mentoring

The majority of extension officers (69%) perceived that they are not mentored and coached in order to improve their work. This may be due to the poor strategy used to implement the performance system or due to the fact that the system is never evaluated. AgriLife Extension (2008:2) noted that during the general mentoring process in extension, all the parties involved (the mentor, mentee and the extension worker) benefit from the process.

3.7. Implementation strategy of the performance management system

The current results revealed that 54.6% of the extension officers indicated that there is participation among the supervisors, extension officers and farmers in the implementation of the current PMS. Regardless of this, 70.6% of them have indicated that the participation is not carried out continuously, but only sometimes. On the contrary, 80.4% of participating extension officers confirmed that farmers are never consulted in the development of objectives in the beginning of the year and almost half (49.5%) of them indicated that needs are not considered when planning for the extension activities of the year. An effective extension service is based on certain fixed principles, namely that development should be needs based, and participation should be essential for all role players (Terblanche, 2008:58). Table 3 shows the responses of extension officers on the consequences of diverting from the set goals.

Table 3: Consequences of diverting from the set goals by extension officers

Penalised for diverting from set goals		Frequency in percentage (%)				
		Animal	Crop	Veterinary	Agribusiness	Total
Degree of agreement	Strongly disagree	17.4	15.4	17.9	28.6	17.5 (17)
	Disagree	39.1	41.0	39.3	57.1	41.2 (40)
	Agree	39.1	35.9	28.6	14.3	33.1 (32)
	Strongly agree	4.3	7.7	14.3	0	8.2 (8)

As can be seen in Table 3, 58.7% of extension officers indicated that they are not penalised for diverting from the set goals during the delivery of their services. Furthermore, Figure 2 displays the opinions of extension officers on meeting farmers’ needs through PMS.

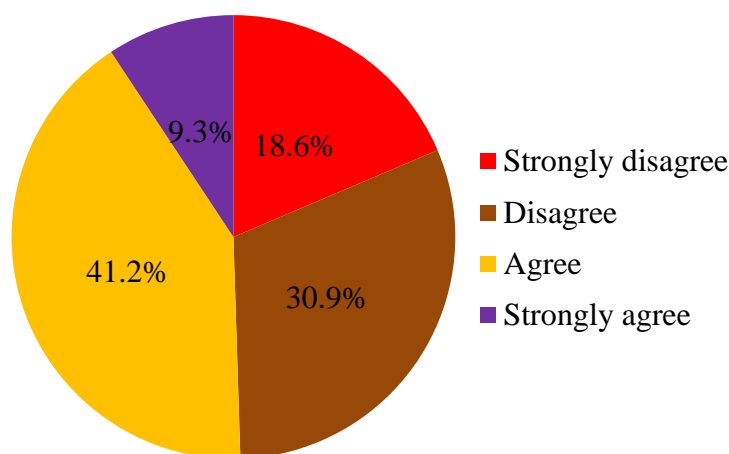


Figure 2: Perceptions of extension officers on meeting farmers’ needs through PMS

Figure 2 indicates that almost half (49.5%) of the extension workers disagreed to some extent that PMS helps them to meet farmers’ needs and 50.5% (41.2% agree and 9.3% strongly agree) agreed that it helps them to meet felt needs. These results depend on whether the extension officers really understand what farmers’ needs are and whether the right methods for farmers needs assessment and identification are used. The use of participatory methods for identification of farmers needs and reconciling them to the unmet needs leads to a valid general needs identification, which could lead to sustainable agriculture development.

The previously discussed results pointed out that farmers and extension workers are not involved in the initial stage of planning. Extension systems that fail to accurately assess the farmers’ needs will not be as successful in improving community sustainability as extension systems that do assess the needs of farmers. Improving the ability of extension systems to examine farmers’ needs benefits farmers, communities, and assists extension systems in accomplishing their organisational goals (Strong, 2011:1). Since extension deals with people, there is a need to understand these people’s perceptions about what the extension programmes deliver to them (Mwamakimbula, 2014:2). A needs identification and appraisal in the programming stage is important (Leagans, 1964:89). Leagans further explained that people react positively to programmes that are demand-driven, since they fill the gaps in the clients’ lives and they take ownership of the project.

The current results also showed that some of the department heads at district level align their objectives with both the district agricultural coordinator and the department director. Others align their objectives with either the director or the district agricultural coordinator. This may cause confusion and work overload for the different departments due to two supervisors with the same controlling powers but different job objectives. An organisational structure is a formal system of task and reporting relationships that controls, coordinates and motivates employees so that they work together to achieve organisational goals (Buchanan and Huczynski, 2004). Therefore, if it causes confusion to subordinates, they might be demotivated.

4. CONCLUSION

There are several factors identified that lead to failure of the performance management system in the extension sector, based on the perceptions of the heads of departments, supervisors and extension officers. It is evident that the system was implemented for good intentions, but the management failed to reinforce the support system for the subordinates to execute their plans accordingly. The bureaucratic approach of implementing the performance management system and the poor ministerial structure are some of the challenges that result in the failure of attaining the performance management system's good intentions. The approach used to implement the system is not compatible with the extension demand-driven approaches. The extension officers do not have a sense of ownership of the performance management system since they are not involved in most of the steps of the process, hence demotivating them.

From the identified factors that influence this extension performance management system, the following recommendations are drawn as possible ways forward:

- It seems appropriate to consider the use of participatory approaches where all the parties concerned be involved in planning for the system, hence it would be compatible with the extension service which focuses on fulfilling demands of the clientele. The ministerial structure also needs to be adjusted in such a manner that there would be no confusion on the flow of supervision which might hinder smooth implementation of the system.
- Like any other programme or system, the availability of resources to drive the system should be considered and availed to the officers, otherwise without the necessary resources the failure of the system would persist.
- A very well-planned strategy on training of all categories of officers on the importance of PMS should be devised to improve the understanding of the system and its implementation. This could help the management to follow all the steps of executing the system. There could be transparency in appraisals hence fairness in recognition and rewards, thus motivation of the subordinates. The subordinates would also have a sense of ownership of the system since they would clearly know the importance of the system and what is expected of them.
- It would be appropriate to consider the sectoral decentralisation. Decentralisation is very important in agriculture as each district will be able to tailor make its production measures considering the district's agro-ecology and resource management.
- PMS may be one of the interventions to improve extension service delivery, but there are other aspects to be considered to complement it. Like in other countries, Botswana has some several agricultural extension stakeholders either public, parastatal, private or NGOs. The main concern is their linkage structure and the degree of collaboration.

Multi-stakeholder is an arrangement of the role of agricultural parties to improve extension services through participation hence making a collective decision.

- A further study which looks into the development of a framework for linking extension stakeholders for better coordination of extension services as a reform for extension is recommended. This might lead to better coordination and dividing responsibilities accordingly hence wise use of the available resources thus improving extension service performance.

REFERENCES

- ABRUDAN, M. M. 2008. The importance of implementing performance management in Romanian Firms. *Annals of University of Craiova-Economic Sciences.*, 3(36):1204-1210.
- AGRILIFE EXTENSION. 2008. *Mentoring in extension*. Cooperative extension program. Prairie view, University of Texas.
- AGUINS, H. 2013. *Performance management*. Edinburgh business school, UK.
- AMUNDSEN, I. & ANDRADE, V. 2009. *Public sector ethics*. Compendium for teaching in Catholic university in Angola and the Chr. Michelson institute (CMI) in Bergen, Norway.
- BUCHANAN, D. A. & HUCZYNSKI, A. 2004. *Organisational behaviour: An introductory text*. Prentice-Hall.
- EARL, S., MCCONNEL, M. & MIDDLETON, I. 1998. *Evaluating effectiveness of teaching/learning process: Internal and external evaluation*. Centre for the enhancement of learning and teaching. The Robert Gordon University, Aberdeen.
- FEDER, G., ANDERSON, J.R., BIRNER, R. & DEININGER, K. 2010. Promises and realities of community based agricultural extension. IFPRI Discussion Paper.
- HAQ, A. Z. M. 2013. The impact of agricultural extension contact on crop income in Bangladesh. *Bangladesh J. Agril. Res.*, 38(2):321-334.
- JAN, S., ISRAR, M., HAQ, Z. U. I. & JEHANGIR, M. 2014. Performance management system on teachers' efficiency: A Case Study of private schools in district Peshawar. *Life Science Journal.*, 11(4):79-85.
- JIANG, Z., XIAO, Q., QI, H. & XIAO, L. 2009. Total reward system: Human resources management strategy going with the trend of the times. *International journal of business management.*, 4(11):77-183.
- LEAGANS, J. P. 1964. The concept of needs. *JOE.*, 2:89-96.
- MACHENG, B., TSOMELE, G. T. & RAMMOLAI, M. 2014. Implementation of performance management system in schools: Success factors. *IJRANSS.*, 2:189- 192.
- MILLER, E. D., BURACK, E. H. & ALBRECHT, M. H. 1980. *Management of human resources*. Prentice-Hall.
- MOTHUSI, B. 2008. *Public sector reforms and managing change in Botswana: The case of performance management system (PMS)*. PhD Dissertation, Cleveland State University.
- MWAMAKIMBULA, A. M. 2014. *Assessment of the factors affecting agricultural extension training programs in Tanzania: A descriptive study*. Graduate thesis and dissertations, IOWA state university digital repository.
- RADEBE, P. Q. 2013. The impact of a performance management system on service delivery in the city of Johannesburg metropolitan municipality. Doctor of philosophy dissertation.
- RIVERA, W. M., QAMAR, M. K. & CROWDER, L. V. 2001. *Agricultural and rural extension worldwide: Options for institutional reform in the developing countries*. Food and Agriculture Organisation of the United Nations, Rome.
- STEVENS, J. B. & NTAI, P. J. 2011. The role of extension support to irrigation farmers in Lesotho. *S. Afr. J. Agric. Ext.*, 39:104-112.

- S. Afr. J. Agric. Ext.,
Vol. 46, No. 2, 2018: 69 – 78
DOI: <http://dx.doi.org/10.17159/2413-3221/2018/v46n2a464>
- Ramorathudi &
Terblanché.
(License: CC BY 4.0)
- STRONG, R. 2011. *Developing and utilizing needs assessments to enhance farmer-driven extension systems*. MEAS training module. USAID, United States.
- TERBLANCHÉ, S. E. 2008. Towards an improved agricultural extension service as a key role player in the settlement of new farmers in South Africa. *S. Afr. J. Agric. Ext.*, 37:58-84
- THORNHILL, D. 2006. “Productivity Attainment in a Diverse Public Sector” paper presented at the Public Seminar on Promoting Productivity in a Diverse Public Sector, Dublin, 21st April
- VIJAYARAGAVAN, K. & SINGH, Y. P. 1997. *Managing human resources within extension. In improving agricultural extension: A reference manual*. Edited by Swanson B. E., Bentz R. P. and Sofranko A. J. Rome: FAO.
- WILLIAMS, B., MAYSON, D., SATGE, R., EPSTEIN, S. & SEMWAYO, T. 2008. *Extension and smallholder agriculture: Key issues from a review*. Phuhlisani Project, South Africa.