FACTORS INFLUENCING THE EXTENSION PERFORMANCE MANAGEMENT SYSTEMS IN KWNENG AND SOUTHERN DISTRICTS OF BOTSWANA

By

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DECLARATION

I declare that the research study hereby handed in for the qualification of Master of Agricultural Extension at the University of Pretoria is my own independent work and that I have not previously submitted it either as a whole or part for any qualification at another university.

Signature: ___________________________ Date: ___________________________

Masa Veronica Ramephuti

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The Author

Masa Veronica Ramephuti

Signature: ___________________________ Date: ___________________________

Masa Veronica Ramephuti
DEDICATION

I dedicate this research to my lovely parents, Babedí and Kemmonye Mogatusi, and my wonderful guardians, David and Dineo Lekgetho, who instilled in me the importance of education.
ACKNOWLEDGEMENTS

First of all, I would like to thank the Almighty God for giving me strength and good health to complete this study.

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I extend my gratitude to the Permanent Secretary of the Ministry of Agriculture for allowing his staff members to assist me with the necessary information. Special thanks go to the Ministry’s Strategic and Planning Office, Performance Improvement Coordinators of the Department of Animal Production, Crop Production, Veterinary Services, and Agricultural Business and Promotion, respectively, for providing me with valuable information during the interviews as well as secondary data. I would also like to acknowledge the district heads of department, the supervisors of the extension officers in the sub-districts as well as the extension officers in the concerned departments, for taking time out of their tight schedules to provide me with their knowledge and experience.

I am indebted to my sponsor and employer, the Botswana University of Agriculture and Natural Resources, for providing financial means for the whole of my studies at the University of Pretoria. I would have not made it without their support.

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God bless you all.
ABSTRACT

FACTORS INFLUENCING THE EXTENSION PERFORMANCE MANAGEMENT SYSTEMS IN KWENENG AND SOUTHERN DISTRICTS OF BOTSWANA

by

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Department: Agricultural Economics, Extension and Rural Development
University: University of Pretoria
Degree: Master of Agricultural Extension
Keywords: Extension, extension officer, performance management, performance management system

The study identified the factors responsible for the success and failure of extension performance management systems in extension service delivery in the Southern and Kweneng Districts of Botswana. Performance management is a notion of human resources that entails systematic planning of an organisation in order to guide and drive the employees to meet the organisational goals. In 1999, the Government of Botswana implemented a performance management system as a public service reform tool for all the ministries, with the aim to improve and monitor performance. The tool is such that the employees’ objectives are aligned with the goals of the ministry, which are derived from the National Development Plan. Despite the use of the performance management system, poor agricultural extension service delivery has contributed to the overall poor performance of the agricultural sector in the country. Much research has been conducted on how to improve extension service delivery, except for the evaluation of the performance management system in extension services. This gap in the literature created a need for this research.
The aim of the study was to analyse the factors that influence the extension performance management system on extension service delivery. The objectives of the study were: 1) to explore the perceptions of the agricultural extension personnel regarding the implementation of the extension performance management system; 2) to determine how the extension performance management system influences extension service delivery; and 3) to identify the methodology utilised to implement the extension performance management system.

Two data collection tools were employed to answer the research questions drawn from the specific objectives. Firstly, the strategic and planning officers 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 with some open-ended questions were administered to 97 randomly selected extension officers for the Departments of Animal Production, Crop Production, Veterinary Services, and Agricultural Business and Promotion, respectively. The second set of questionnaires was administered to the district heads of departments and supervisors of extension officers in the sub-districts. The data was analysed with the Statistical Package for the Social Sciences and the results were presented in tables and graphs.

The results revealed numerous factors that lead to the failure of the performance management system in extension service delivery. The extension officers were unsatisfied with the use of the performance management system as they received poor support from the ministry, especially in the availing of the necessary resources to help them drive the system and fulfil their objectives. According to the results, 85.7% of the sub-district supervisors of the extension officers indicated that lack of transport was the most pressing problem that restricted them from achieving the ministry’s goals. This was supported by extension officers from three departments; 52.2% from the Department of Animal Production; 82.1% from the Department of Crop Production; and 75% from the Department of Veterinary Services. Additionally, the results showed that the steps of implementing the performance management system were not followed accordingly; hence, it does not serve its purpose in the ministry. The extension officers opined that the current performance management
system is not an effective communication tool. Overall, 51.6% disagreed that the performance management system provides useful feedback; 76.3% agreed that it does not recognise hard work; and 71.9% suggested that the current performance management system needed to be changed. Furthermore, 70% of the extension officers pointed out that the assessments of their performance through the current performance management system are inconsistent, unfair, and biased; hence, the rewards and recognition that they receive is unfair.

An element that is disadvantageous in the use of the performance management tool in the extension sector is the bureaucratic system that complicates the administration of the system, hence its failure. The poor operational ministry structure also makes the cascading of objectives from the supervisors to subordinates difficult and confusing. Most of the extension officers (80.4%) confirmed that farmers are never consulted in drawing objectives at the beginning of the year and almost half (49.5%) opined that unfelt needs are not considered when planning the extension activities of the year. Additionally, 58.7% disagreed that the performance management system assists them in meeting the farmers’ needs.

Because of poor support system, poor leadership, inadequate resources, the top-down approach, and lack of transparency in the implementation of the performance management system, it is recommended that the Government restructure the ministry and utilise participatory approaches in implementing the system. It will make it compatible with the demand-driven methods recommended for improving extension service delivery. This could be supplemented by decentralising the Ministry of Agriculture.
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<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AIS</td>
<td>agricultural innovation system</td>
</tr>
<tr>
<td>AKIS</td>
<td>agricultural knowledge and information system</td>
</tr>
<tr>
<td>ARD</td>
<td>agricultural research and development</td>
</tr>
<tr>
<td>BIDPA</td>
<td>Botswana Institute for Development Policy Analysis</td>
</tr>
<tr>
<td>CBA</td>
<td>cost-benefit analysis</td>
</tr>
<tr>
<td>CSR</td>
<td>civil service reform</td>
</tr>
<tr>
<td>DABP</td>
<td>Department of Agricultural Business Promotion</td>
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<tr>
<td>DAC</td>
<td>district agricultural coordinator</td>
</tr>
<tr>
<td>DAFF</td>
<td>Department of Agriculture, Forestry and Fisheries</td>
</tr>
<tr>
<td>DAP</td>
<td>Department of Animal Production</td>
</tr>
<tr>
<td>DCEC</td>
<td>Directorate on Corruption and Economic Crime</td>
</tr>
<tr>
<td>DCP</td>
<td>Department of Crop Production</td>
</tr>
<tr>
<td>DPSM</td>
<td>Directorate of Public Service Management</td>
</tr>
<tr>
<td>DVS</td>
<td>Department of Veterinary Services</td>
</tr>
<tr>
<td>ELARD</td>
<td>European Leader Association for Rural Development</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization</td>
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<tr>
<td>FBO</td>
<td>farmer-based organisation</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>GICO</td>
<td>Government Implementation Coordinating Office</td>
</tr>
<tr>
<td>HOD</td>
<td>head of department</td>
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<tr>
<td>HR</td>
<td>Human Resources</td>
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<tr>
<td>HRM</td>
<td>Human Resource Management</td>
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<tr>
<td>ISPAAD</td>
<td>Integrated Support Programme for Arable Agriculture Development</td>
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<td>LIMID</td>
<td>Livestock Management and Infrastructure Development</td>
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<tr>
<td>MBO</td>
<td>management by objectives</td>
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<tr>
<td>MOA</td>
<td>Ministry of Agriculture</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>NARI</td>
<td>National Agricultural Research Institute</td>
</tr>
<tr>
<td>NARS</td>
<td>National Agricultural Research System</td>
</tr>
<tr>
<td>NDP</td>
<td>National Development Plan</td>
</tr>
<tr>
<td>NERAKIN-RAIS</td>
<td>Near East and North Rural and Agricultural Knowledge and Information Network-Regional Agricultural Information System</td>
</tr>
<tr>
<td>NGO</td>
<td>non-governmental organisation</td>
</tr>
<tr>
<td>NSO</td>
<td>National Strategy Office</td>
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<tr>
<td>NSP</td>
<td>National Strategic Plan</td>
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<tr>
<td>O&amp;M</td>
<td>Organisation and Methods</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OPM</td>
<td>U.S. Office of Personnel Management</td>
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<tr>
<td>PEA</td>
<td>participatory extension approach</td>
</tr>
<tr>
<td>PEEPA</td>
<td>Public Enterprises Evaluation and Privatisation Agency</td>
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<td>PIC</td>
<td>performance improvement coordinator</td>
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<td>PMS</td>
<td>performance management system</td>
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<tr>
<td>PRA</td>
<td>participatory rural appraisal</td>
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<tr>
<td>PS</td>
<td>permanent secretary</td>
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<tr>
<td>PTD</td>
<td>participatory technology development</td>
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<tr>
<td>R&amp;D</td>
<td>research and development</td>
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<tr>
<td>SMART</td>
<td>specific, measurable, achievable, relevant, time-bound</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<tr>
<td>T&amp;V</td>
<td>training and visit</td>
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<tr>
<td>TOT</td>
<td>transfer of technology</td>
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<tr>
<td>TQM</td>
<td>total quality management</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>WITS</td>
<td>Work Improvement Team</td>
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<tr>
<td>UNDP/MDGD</td>
<td>United Nations Development Programme/Management Development Governance Division</td>
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<tr>
<td>UNPAN</td>
<td>United Nations Public Administration Network</td>
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CHAPTER 1  INTRODUCTION

1.1  INTRODUCTION

As the Government’s executive arm, the public service is expected to render services effectively and efficiently. It is also expected to continually renew and improve its service delivery modalities to make them more accessible to segments of the community who have been marginalised from reaching services (Public Service Commission, 2007). There have been considerable scientific debates on how to improve the functioning of the public sector, and in particular, there has been a debate on the role of government, regulatory institutions, and good governance in the developing world. How much and what form of state intervention (government regulation) is needed to achieve economic development, political accountability, poverty eradication, and other objectives (Amundsen and Pinto de Andrade, 2009)?

Agricultural extension has tremendous potential to improve agricultural productivity and increase incomes through transfer and facilitation of knowledge, skills, and technologies (Feder, 2010). Therefore, Ragasa et al. (2015) 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 sector is a major provider of services in the economy, particularly business services (affecting costs of inputs) and social services (affecting labour quality).
- The public sector is a consumer of tax resources.

Since 1999, the Botswana Government has been utilising the performance management system (PMS) as public service reform across all 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 (Aguinis, 2013). A PMS typically includes performance appraisal and employee development (Pulakos, 2004), which are challenging features of human resources (HR) (Woyessa, 2015).

Public service reform is similar to a project; it faces many challenges during implementation; therefore, it is important to continuously review it in an organisation. The Management Development and Governance Division for the United Nations Development Plan (UNDP/MDGD, 1998:10) outlined the following as the importance of civil service reform (CSR):

- **Administrative reform and good governance**

  Initially, administrative reform and civil service reform were considered one and the same because they dealt with hiring, ensuring competence, and motivation of staff members. Currently, however, it includes the use of governance (which includes administration and CSR aiming to sustainably assist in policy and decision making) and ensuring the responsibility, participation, indisputable systems, and improved behavioural changes of the employees (UNDP/MDGD, 1998:10).

- **Sustainable economic and social development**

  The aim of CSR is to improve the largest and main activities of the civil service to ensure the efficiency and effectiveness of the service rendered to the public. This would result in the improvement of the country’s economy, well-planned investments, budgets, and expenditure programmes (UNDP/MDGD, 1998:10).
• **The promotion of pluralist governance and participatory democracy**

CSR is necessary to encourage the participation of people in politics for the purpose of transparency and meeting people’s needs (UNDP/MDGD, 1998:10).

• **Global trends and increasing interdependence**

It is important to reform public service in order to cater for the external factors from other countries (such as global markets, science and technology, corruption, and trade) which render countries dependent on each other (UNDP/MDGD, 1998:10).

Each country has its own vision, mission, goals, and a strategy to achieve these for the benefit of the citizens. Matankari (2009) indicated that sustainable development is a priority, especially in modern times when democracy, globalisation, technology, and modernisation reflect the difficulty in eradicating poverty and other factors that lead to poor development. Most developing countries such as Botswana face different challenges to restoring sustainable development in their countries and this differs from one country to another.

The civil service is facing enormous challenges today. Any prospects and framework for reforms should proactively and accurately take account of present-day realities and future trends (Shah, 2015). It is critical to consider factors such as clients’ needs, the private sector and linkages of the rightful parties in extension, new extension approaches, and resources when implementing reforms in extension service delivery.

Reforming the civil service is important in improving governance, service delivery, economic policy, and public financial management (Rao, 2013:1). The main aims of public reform are to:

• render the government more organised, affordable, honest and responsive;
• bring government closer to the grassroots; and
• improve government performance and service delivery (Rao, 2013:1).

Supporting effective public-sector reform is a major challenge that the World Bank and other agencies and stakeholders have been grappling with. It is increasingly recognised that political economy factors play a crucial role in public sector reform (Bunse and Fritz, 2012). Choosing reforms based on the political influence usually leads to failure. The government should identify the problem areas with the aid of experts and select an appropriate reform.

The public sector is the largest spender and employer in virtually every developing country and it sets the policy environment for the rest of the economy. In recent years, about one-sixth of the World Bank’s projects have supported public sector reform, because the quality of the public sector, accountability, effectiveness and efficiency in service delivery, transparency, and so forth is thought by many to contribute to development (World Bank, 2008). Civil service reform is one of the most intractable yet important challenges for governments and their supporters. However, civil service reform thus far has largely failed (Reppucci, 2014). Most developing countries attempt to improve civil service in order to improve performance and production, but some sectors such as the agricultural sector are still not performing well, hence the increase in food importation. As a result, the food prices increase, and many citizens can no longer afford food, leading to increased poverty rates and food insecurity.

Placing citizens first requires a special change in the mindset of public officials, which reforms are directed towards changing values and behaviours as much as enhancing administrative capability, based on efforts to strengthen motivation and instil public service ethos (Robinson, 2015). The Organisation for Economic Co-operation and Development (OECD) countries have implemented numerous institutional reforms (Curristine, Lonti and Joumard, 2007:2). It is evident that their impact on efficiency has been limited due to:
lack of resources to conduct evaluations;
- lack of pre-form measures of performance;
- complexities in measuring efficiency in the public sector; and
- isolating the effects of specific institutional reforms on efficiency from other external influences (Curristine et al., 2007:2).

These limitations can lead to the demotivation of public employees and thus poor service delivery by public sectors such as extension. Extension organisations in developing countries face professional incompetence and lack of motivation among their employees. Proper planning and management of human resources within extension organisations is essential to increase the capabilities, motivation, and overall effectiveness of extension personnel (Vijayaragavan and Singh, 1997).

According to Collion (2004:1), public sector extension services have come under increasing pressure to reform in the face of dramatic changes. Some of the changes that have affected public sector extension services include:

- The financial crises that led to a sharp decrease in overall public investments, leading to pressure to downsize and consider more cost-efficient extension methods away from the labour intensive training and visit (T&V) management approaches (2004:1).
- The increasing criticisms of poor performance of public services extension such as:
  - lack of accountability to clients;
  - lack of relevance and quality of programmes, due to poorly trained extension agents;
  - limited coverage, in terms of area and type of clients, as they insufficiently address the needs of the poor, women farmers, and farmers in disadvantaged areas; and
  - lack of sustainability (2004:1).
• The emergence of other actors and service providers that can disseminate agricultural knowledge and information, in particular: producer organisations, non-governmental organisations (NGOs), and the private sector (2004:1).

• The political forces linked to demonstration, liberalisation, and decentralisation. Decentralisation is in conjunction with financial constraints and emerging actors; it leads to redefining the role of public services and rethinking extension methods away from top-down, supply-driven approaches (2004:1).

• The revolution in information and communication technologies which provides new vehicles for supplying information (2004:1).

• The changes in agriculture and, therefore, the information needs of farmers. Extension must embrace a broadened mandate such as information on marketing. There is also growing public concern about environmental conservation and poverty reduction, which adds to the extension mandate (2004:1).

Hence, many countries opted to better the efficiency of extension service delivery by introducing the PMS, considering its advantages. Markus (2004:2) identified the design flaws and lack of credibility as obstacles to PMS.

• Design flaws

In most cases, the PMS is conducted annually by rating an individual’s performance objectives against the output. However, often the set objectives are not well aligned with those of the organisation (Markus, 2004). Another disadvantage of most systems is that many factors influence the performance of an organisation and are out of an employee’s control. Additionally, there is an element of subjectivity and bias since the system relies on the reviewers’ perceptions (Markus, 2004).
• **Lack of credibility**

A survey conducted in the United States (US) on employee perceptions of the PMS, found that more than 70% of the respondents were not satisfied with performance review as a tool to improve an individual’s performance (Markus, 2004). Furthermore, more than 60% of the respondents were of the view that the system was not an effective communication tool.

The two aforementioned problems could hinder extension services since it shows that the PMS may demoralise public servants. Qamar (2005) indicated that extension is the main pillar of research and development (R&D), even though extension is perceived by some as incapable and has weak ties to most research institutions. However, extension acts as an intermediary between research and farmers. Research focuses on the technical aspects of generating useful technologies, while extension focuses on ensuring the acceptance and adoption of those technologies by farmers (Qamar, 2005).

If the PMS is well administered, the extension can benefit from it. However, if the opposite is true, it can lead to inefficiency of public servants. Although it may be utilised as a communication and planning tool, there could be some subjectivity, conflicts, and negative attitudes amongst the managers and subordinates. People may be unfairly rewarded and evaluated thus demoralising them in their duties. It may also lead to subordinates not being creative and flexible since they would be focusing on driving the set and agreed upon goals between them and the supervisors. Some of the objectives are difficult to reach as some activities and resources are out of subordinates’ reach, while they are not receiving any support from their managers.

The demotivation of extension officers may not be the only factor that leads to poor performance. Supervisors’ involvement, actions, and responsibilities in PMS implementation may also affect the performance of the organisation. Ledford and Lawler (1994) identified the following problems that managers or supervisors experience during the process:
• Line managers are not committed. This is partly due to the bureaucracy as well as that the system is not sold well enough or supported by the wider management culture. Line managers therefore merely go through the motions (Ledford and Lawler, 1994).

• Managers do not have the skills to operate appraisals effectively, either in judging performance or in handling difficult conversations, especially with poor performers (Ledford and Lawler, 1994).

• Employees’ relative performance can never be measured objectively or fairly. Even if the manager’s judgement is careful and evidence-based, objectives are not equally hard to achieve and do not cover all aspects of the position. Putting more effort into “accurate” performance measurement is a delusion (Ledford and Lawler, 1994).

• The manager’s perception of employees’ performance may not be valid, simply because they do not have enough information and do not see all aspects of their performance. They may also be biased if they like or dislike an individual (Ledford and Lawler, 1994).

• Managers may not always be the best person to support an employee in exploring their own performance and development (Mayo, 1997). Performance appraisals have become increasingly difficult to administer because of management delays. If a manager has multiple subordinates, it becomes impossible for them to intimately know the performance and development needs of all their direct subordinates (Ledford and Lawler, 1994).

As already mentioned, the adoption of a PMS is of benefit to the public service if implemented with an effective and appropriate strategy. Woyessa (2015:83) suggested the following action plan as indicated in Table 1.1.
Table 1.1 Performance management system action plan.

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsible department</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Training and support</strong></td>
<td>HR</td>
<td>Staff members are well informed about the main purpose of the PMS.</td>
</tr>
<tr>
<td>A series of workshops and training for all staff at all levels is the purpose of the PMS.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Participation of staff in target setting</strong></td>
<td>Departments</td>
<td>Targets set with active participation of staff members.</td>
</tr>
<tr>
<td>Ensure active participation of staff in target setting for the PMS at departmental levels, depending on the job profiles, strengths of employees, and resource availability.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Training for managers and employees</strong></td>
<td>Academic and Support Division</td>
<td>Managers and employees know their responsibilities with regard to the PMS.</td>
</tr>
<tr>
<td>Training of both managers and employees on their roles and responsibilities in the performance feedback process.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Use of the PMS</strong></td>
<td>HR</td>
<td>PMS outcomes used for designing appropriate staff development initiatives.</td>
</tr>
<tr>
<td>Focus on the use of the PMS as a developmental tool.</td>
<td></td>
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</tr>
</tbody>
</table>

It is evident from the literature that a PMS can either be a success or a failure. The outcome depends on factors such as implementation strategy, leadership style, availability of resources, and culture and structure of the organisation. Hence, the aim of this study was to identify positive and negative factors that influence the implementation of PMS that could
assist in realising if the initial purpose of PMS as a driving force of improving the performance of the public service in Botswana is achievable.

1.2 BACKGROUND

Botswana is a development success story. A small, landlocked country of two million people, Botswana was one of the poorest countries in Africa with a per capita of $70 when it gained independence from Britain in 1966. In the years that followed, supported by the discovery of diamonds, Botswana has been one of the fastest growing economies in the world and moved up the ranks of upper-middle-income countries. In contrast to Botswana’s impressive economic growth, good governance and prudent macro-economic and fiscal management, the country faces high rates of poverty and inequality as well as low human development indicators (The World Bank, 2015). One of the causal factors is the poor performance of the public sector.

Botswana adopted several public reform initiatives for the public service to drive the national goals; the country has implemented several policies and strategies to achieve this. The Botswana Institute for Development Policy Analysis (BIDPA) (Kaunda, 2004) indicated that these reforms included, among others, the initiatives from national level undertaken by the government, such as decentralisation, creation of institutions such as the Ombudsman, Directorate on Corruption and Economic Crime (DCEC), and the Public Enterprises Evaluation and Privatisation Agency (PEEPA). The lower level comprises other initiatives such as Organisation and Methods (O&M) reviews, job evaluation, Work Improvement Teams (WITs), and the newly introduced PMS. It was further clarified that the reforms were put in place after the government realised that even though the country is performing well economically, the public-sector service remains poor (Kaunda, 2004).

A study on public service reform and managing change through PMS in Botswana found that the PMS changed the culture of public servants positively in that it ensured that officers plan
and do their work in a systematic and organised way (Mothusi, 2008). On the other hand, a top-down approach was utilised in the planning stage, indicating a lack of ownership by the subordinates. The concerns revealed were that: the industrial class was not involved; there was failure to provide promised resources; and inadequate understanding of the reform system by the officers responsible for implementation (Mothusi, 2008).

In the new era of extension, beneficiary or client participation in agricultural development is encouraged. All the projects and programmes that aim to improve performance and production in this sector must consider the use of participatory approaches. The reconciliation of felt and unfelt needs is very important and serves as a guide to devise best priorities for the ministry objectives. The same applies to the PMS; it must involve all the parties (the farmer and the extension officers) when utilising the blueprint approach. In doing so, all the participants in the development will have ownership of what is taking place, resulting in positive behavioural change. Isgren (2012) pointed out that participatory development focuses on involving focused people and beneficiaries in all the steps of the programme development, from the problem identification to evaluation stage as shown in Figure 1.1.

![Figure 1.1](image.png)  
**Figure 1.1** The role of the project life cycle in project management.
Similar to any other project or programme, reforms such as the PMS go through different stages (Isgren, 2012). In agriculture, the PMS is a government initiative that was adopted to overcome some concerns over productivity and performance in the public service. At the initiation stage, there must be some analysis and prioritisation of the problems that the government will utilise to formulate objectives to be driven in the ministry. For the PMS to be successful in agricultural extension, extension officers and farmers should be involved in the problem identification and prioritisation since they are at the grass root level. In a way, the PMS will fulfil the demand-driven concept in the country, resulting in improved performance by the extension officers and the ministry as a whole. If the ministry maintains the top-bottom approach in the implementation of the PMS, poor performance will prevail (Isgren, 2012).

1.2.1 The public service vision of Botswana

“We, the Botswana Public Service, will provide a world-class service that is efficient, effective and responsive to local and global challenges” (Directorate of Public Service Management [DPSM], 2002:4).

1.2.1.1 Performance management systems in Botswana

Performance management is a reform initiative introduced by the Botswana Public Service to facilitate delivery of the national vision goals. It is driven by a PSM strategy with the objectives to provide a planning and change management framework that is linked to the National Development Plan (NDP) and budgetary process; enhance the capacity of the government to achieve the desired level of socio-economic governance; improve the performance capacity of public officers; and focus the efforts of the Public Service towards the achievement of the national vision goals (Nkhwa, 2006:1).
1.2.1.2 The introduction of the performance management system in Botswana

The government introduced PMS in order to improve service delivery (DPSM, 2002). The implementation of PMS in government brought with it the realisation that service delivery is at the core of the government development efforts. The first major objective of the PMS is to improve individual and organisational performance in a systematic and sustainable way. Secondly, to provide a planning and change management framework which is linked to budgeting and funding processes. Thirdly, to enhance government capacity. Lastly, the PMS aims to inculcate the culture of performance and accountability to manage at high levels of productivity so as to provide efficient service delivery (United Nations Public Administration Network [UNPAN], 2003).

1.2.1.3 Performance management system utilised by the Ministry of Agriculture

The PMS that the Government of Botswana utilises in extension work is objective-based whereby the employer and the employee agree on the goals that the employer has to meet on scheduled timelines. The employer then reviews the employee as scheduled. Researchers and authors have categorised types of PMSs differentially. Lopez (2015) categorised the PMS according to four broad aspects:

- **Numerical rating**

Because of its simplicity, this is one of the most widely utilised systems and tends to be highly effective. It is also popular because it allows employers to measure employee performance in a plethora of areas such as teamwork, communication skills, and reliability. A numerical rating scale is beneficial because a business can customise the system to rate whatever employee traits it deems important. In turn, employers can utilise tangible data to determine if an employee’s performance is poor, average, good, or great (Lopez, 2015).
CHAPTER 1

INTRODUCTION

- Objective-based

This simplistic evaluation system is a clear-cut way to track progress. In an objective-based evaluation, an employer and employee will agree upon a specific goal for the employee to meet, coupled with a deadline. If the employee meets the objective, then it speaks highly of them and vice versa. This is perhaps the most black and white system and is a practical way to monitor the overall success of employees (Lopez, 2015).

- 360-degree appraisal

This type of appraisal provides comprehensive feedback on an employee’s performance to form in-depth insights. A 360-degree appraisal gathers feedback from multiple parties such as managers, co-workers, customers, and even vendors. The more information is collected, the more accurate the performance review becomes. Although this form of evaluation is somewhat laborious and time-consuming when compared to the first two techniques, many employers prefer it because of the unbiased data they receive and the multi-dimensional point of view it creates (Lopez, 2015).

- Critical incidents

This system is defined as “a method of performance appraisal involving, identifying and describing specific events where the employee did something really well or something requiring improvement” (Lopez, 2015). For example, one might record an instance of a stressful situation in which an employee shined and exceeded expectations. On the other hand, one might record a serious mistake an employee made that was detrimental to productivity and created many lingering problems. For a critical incidents evaluation to be effective, it is important to keep detailed records and consider implementing a rating system to ensure increased objectivity (Lopez, 2015).
1.2.1.4 Culture of performance management systems in the Ministry of Agriculture

A performance development plan is developed at the beginning of every financial year, which commences in March. The ministerial goals are drawn based on the sectoral mandate from the NDP. The directors of the departments then gather to extract respective goals from the broader ones, with the coordination of the strategic and planning office of the ministry. From there, it moves down the line to the subordinates of each department.

The strategic and planning officer for the Ministry of Agriculture (MOA) (2016) explained that the ministry depends on the NDP to draw the objectives of the ministry and these would be the objectives of the permanent secretary (PS). From there, other subordinates such as deputy PS, department directors, and district agricultural coordinators draw their objectives from the PS. All the subordinates cascade their objectives from their supervisors and so forth, down to the extension officers’ level as shown by the ministry functional structure (Appendix A). The following are brief explanations of the duties of the ministry personnel as indicated by the ministry structure in an extension line.

**Permanent secretary**

The PS of the ministry is based at the ministry and at the top of the hierarchy. He/she draws his/her development goals from the National Strategic Plan (NSP). The PS reports to the minister.

**Deputy permanent secretaries**

There are three deputy PSs based in the ministry, namely: support services; technical services; and coorporate services. The support services and technical services work hand in hand, while the corporate services section is entirely responsible for human resource management.
(HRM), public relations, financial management, and information and technology in the ministry. The deputy PSs align their objectives with that of the PS.

**Department directors**

Each department of the ministry has its own director. There are more than five departments with their directors based in the ministry and they draw their departmental development goals from that of the deputy PSs. Only four departments that deal directly with extension services were selected for this study, namely: the Department of Animal Production (DAP), Department of Crop Production (DCP), Department of Veterinary Services (DVS), and Department of Agricultural Business Promotion (DABP). The directors report the extension service issues directly to the deputy PS of technical services. The responsibilities of these departments are discussed in more detail in the sections that follow.

**Department of Animal Production**

The DAP is responsible for policy initiation, programme development and monitoring, and regulatory and advisory services. The department is responsible for the provision of strategic direction in livestock improvement and range management. The DAP has three divisions:

- **Ruminants:** The mandate of the division is to provide extension services in animal husbandry, farm management, and disease prevention. The sections in this division include beef, dairy, and small stock.

- **Non-ruminants:** The division comprises sections including equines, ostriches, piggery, poultry, and rabbits. The division is also responsible for animal husbandry and farm management.

- **Livestock Services:** There are four sections in this division, namely; hides and skins improvement; range and fodder production, and artificial insemination. The mandate
of the division is to provide services that promote production, animal feeds, and by-products.

**Department of Crop Production**

The DCP is responsible for policy initiation, programme development and monitoring, and regulatory and advisory services. The department is responsible for the provision of strategic direction in: land husbandry, land resources management, and crop disease control and prevention. The department’s sections include: land utilisation, plant protection, horticulture, beekeeping, and cereal crop and agricultural engineering.

**Department of Veterinary Services**

The DVS is responsible for policy initiation, programme development and monitoring, and regulatory and advisory services. The department is also responsible for the provision of strategic direction in: disease diagnostics, disease control and prevention, meat hygiene and quality control, livestock identification, and national brands registration.

**Department of Agricultural Business Promotion**

The DABP is responsible for policy initiation, programme development and monitoring, and regulatory and advisory services. The department is also responsible for the provision of strategic direction in: agricultural cooperatives, agricultural marketing, agricultural trade, and farm management.

**District agricultural coordinator**

According to the structure, the district agricultural coordinator (DAC) oversees all extension service activities of all the departments at the district level. The DAC reports directly to the
PS but works hand in hand with the department directors, although they are at the same level. The coordinator is based at the district and has heads of department (HODs) in the district.

- **District heads of department**
  According to the structure, the district HODs report directly to the DAC for their respective departments.

- **Sub-district supervisors of departments**
  The districts are subdivided into sub-districts for ease of management; extension officers are strategically placed in these sub-districts. The sub-district supervisors draw their objectives from the district HOD and report to him/her.

- **Extension officers**
  These officers are directly responsible for extension delivery for their respective departments. They report to their sub-district supervisors.

The subordinates set their goals based on the agreement with the supervisor (based on what is expected of the supervisors). The officer is then appraised quarterly on his/her achievements compared to the planned objectives (Appendix B). The appraisal should be conducted in the presence of the appraised and the average mark is given to the appraised at the end of the year.

The basic purpose of this instrument is to objectively assess the officer’s performance on the objectives for a given year. An accurate assessment will provide vital information for management decision making. More specifically, the assessment will influence decisions regarding:

- the officer’s performance rating;
• rewards;
• specific training and development needs of the officer to improve performance and productivity; and
• suitability of the officer for appointment to permanent service or potential advancement to a higher grade.

Since the introduction of the PMS, there have been some improvements in service delivery, although there is still an outcry that the Public Service is not meeting customer expectations. This is reflected in the Botswana Customer Survey for the Public Service which indicated that the customer satisfaction level was 25% (DPSM, 2002). The agricultural sector in Botswana is still performing poorly despite the implementation of the PMS. There could be some gaps in the process of implementing this reform or it may be incompatible with agricultural extension. This can only be answered after an analysis of the implementation of the PMS in the MOA.
1.3 PROBLEM STATEMENT

Performance management is regarded as one of the most troubling areas of HRM, with over 95% of organisations reporting considerable dissatisfaction with its implementation (Kuchinke, Correthers and Cecil, 2008). Management systems of sectors such as education, land boards, and magistrate courts in Botswana have been evaluated with different perspectives:

- Boipono, Tsomele and Magadime (2014) evaluated “The implementation of performance management system (PMS) in schools: Success factors”.
- Diane (2012) researched the “The relationship between leadership and performance management: A case of Kgatleng Land Board (Botswana)”.
- Bulawa (2011) studied the “Implementation of the performance management system in senior secondary schools in Botswana: The perspective of the junior management team”.
- Marobela and Mawere (2011) evaluated “PMS in the magistrates courts of Botswana: The unintended consequences of public service change”.
- Monnaesi (2011) studied “A description of whether the objectives of the performance management system of the Botswana Department of Tribal Administration are being realised”.
- Mothusi (2008) conducted a study on “Public sector reforms and managing change in Botswana: The case of performance management system”.

Identifying factors that influence performance of extension management systems in Botswana is important in order to identify the shortcomings of the management system in this sector. Little research has been conducted on the evaluation of extension management systems in Botswana. The PMS is the extension management system currently utilised by the Government of Botswana to improve performance in the Public Service. The chief concern is that the Ministry of Agriculture is still not providing enough for the country to sustain itself in
terms of poverty, importation of food, and unsustainability of the agricultural development-orientated projects. Mothusi (2008) indicated that the evaluation of policies and programmes in Botswana do not consider the effects of culture on fulfilling the goals and objectives of these policies and programmes. The same PMS is utilised in all ministries in the Botswana Government; a one-size-fits-all approach is therefore utilised.

This may not be the only problem which hinders the success of the PMS; there could be some problems in the implementation strategy of this intervention. Problems that may cause the PMS to fail include: poor leadership, failure to use participatory management, poor communication, and inadequate participatory evaluation of the intervention. These factors affect extension service delivery. The extension service in the country is most often blamed for poor service delivery, usually due to inadequate resources such as transport and understaffing. The PMS has never investigated extension services to determine if it poses hindrances to extension service delivery.

The structure of the ministry could also hinder the smooth implementation of this reform. The strategic and planning officer of the MOA (2016) confirmed that the ministry performed better in the past, when reviews of the districts were coordinated at ministerial level. Recently, however, there has been a decline in the performance of extension services since the plans are now coordinated at district level and following the introduction of DACs. The decline of the ministry performance is shown in Figure 1.2 MOA performance trend: 2012-2016.
The PMS provides a basic framework of policies and procedures for management and employees to use in setting goals and objectives for work to be accomplished within the organisation and the appraisal of outcomes on a consistent and regular basis (Application Performance Management, 2013). The following question therefore arises: Is the MOA taking this into consideration during the implementation process of the PMS in Botswana? Collaboration and involvement of senior management, district supervisors, and the subordinates or extension officers and farmers is very important, since they lead to motivation and ownership of responsibility. There is therefore a need to assess the implementation of the PMS in extension service delivery in order to realise factors that either lead to the success or failure of this performance management tool.

Keating (2001) attributes the adoption of public service reform by some governments to the effect of poor service delivery on economic and social development. Moreover, the OECD countries reformed their public services based on the economic performance, changing needs or demands of citizens and institutions, and a decline in confidence in government (Keating,
Hence, Keating (2001:142) identified the following main concerns of public management reforms:

- The level of taxation and the budget deficit and/or public debt was too high. The situation could worsen if no actions were taken.
- Government programmes too often failed to achieve their objectives and/or were not cost-effective (they did not represent value for money).
- The administrative machinery was not sufficiently responsive to the needs of clients, including ministers.
- Government was part of the problem, having become too large and intrusive.

Based on these concerns, the following questions then arise: Are developing countries such as Botswana utilising them as their drivers in the implementation strategy of the PMS? To what extent has the country addressed these concerns? The degree of success of the PMS as a reform in the MOA remains questionable; despite its implementation, the ministry’s performance is declining.

### 1.4 RESEARCH OBJECTIVES AND QUESTIONS

The aim of this study is to analyse the factors that influence the current extension management system utilised to improve performance in extension service delivery. The study focused on the views and opinions of agricultural employees, namely: strategic and planning officers, departments’ performance improvement coordinators, district HODs, sub-district supervisors, and extension officers. The study investigated the implementation of the PMS in their sector as well as how it affects their work and performance. Additionally, emphasis is placed on the implementation strategy and the problems encountered during the implementation of this intervention. All these assisted in identifying the factors that contribute to the success or failure of the PMS in the MOA. The objectives of the study are therefore:
• To explore the perceptions of the MOA personnel regarding the implementation of the extension PMS.
• To determine how the extension PMS influences extension service delivery.
• To identify the methodology utilised to implement the extension PMS.

The research questions are as follows:

• What implementation strategy is utilised during the PMS implementation?
• How does the PMS contribute to meeting the demands and needs of the farmers?
• How does the MOA utilise the PMS as an effective tool for communication, from senior management to the extension officers and the farmers?
• How fair and transparent is the PMS with regard to rewards, promotions, and training?
• To what extent is the current PMS compatible with extension services?

1.5 RESEARCH CONTRIBUTION

For a developing country to achieve sustainable development, a significant proportion of its development policies must be dedicated to the development of rural areas that are often anchored in agricultural development (Nji, 1993). Extension officers are the implementers of development agricultural projects in Botswana and their departments utilise the PMS with the aim of improving extension service delivery. In this manner, this study sought to assess the effects of PMS in extension service delivery in order to identify any gaps, reinforce success factors, and restructure where necessary. The study was restricted to the PMS since it is the public service reform currently implemented by the Botswana Government. The system is designed to be a permanent process in ministries and departments and may be enhanced by self-sustaining and self-reinforcing characteristics (DPSM, 2002:5). This study was therefore interested in the effect the PMS has on extension service delivery and how it is conducted from the planning stage onwards. Few studies have been conducted on the PMS in Botswana as alluded to in section 1.3. Hence, this study only focused on the influence of the PMS on
extension service delivery. The factors responsible for the success or failure of the PMS could assist the MOA in utilising the PMS more efficiently in future.

1.6 DELIMITATIONS

The study was conducted in the Kweneng and Southern Districts of Botswana. Only extension officers in these areas were included in the sample. A questionnaire was sent to 109 extension officers who were randomly selected from the two districts. Some extension officers selected were not available to respond to the questionnaires at the time of administration due to long fieldwork trips, district transfers, and vacation and sick leave. The other factor that delimited the scope of the research was limited research funds. The data collected during the study was collected from the respondents and the literature review.

1.7 ASSUMPTIONS

Reliable and valid information was attained from the respondents as they were considered relevant to the study. The sample included extension officers, district HODs, and sub-district supervisors who utilise the PMS.

1.8 DEFINITIONS OF KEYWORDS

1.8.1 Extension

Extension is considered the main source of information for small-scale and poor farmers; it creates opportunities for agricultural development through training, research, sources of input supplies, and possibly markets (Agricultural Policy of South Africa, 2004). Broadly defined, agricultural extension involved sharing findings and expertise with farmers and helping them capture a greater share of the value chain (Pye-Smith, 2012).
1.8.2 Extension officers

Extension officers act as mediators between research and farmers (Agricultural extension officer, 2015). They facilitate and communicate with farmers, ensuring that they have the correct knowledge to attain good production. Their responsibility is also described as working with communities to promote farming and programmes designed for reaching farmers who have limited access to information and extension services (Agricultural extension officer, 2015).

1.8.3 Performance management

Performance management is the process of creating a work environment or setting in which people are enabled to perform to the best of their abilities. Performance management is a work system that commences when a job is defined (Heathfield, 2016). Performance management is a system that encompasses different processes that are combined to create an effective workforce within a company that can effectively reach the business goals (The three most important aspects of performance management, 2015).

1.8.4 Performance management system

A PMS is a tool to communicate organisational goals and objectives, reinforce individual accountability for meeting those goals, and track and evaluate individual and organisational performance results. It reflects a partnership in which managers share responsibility for developing their employees in such a way that enables employees to contribute to the organisation (U.S. Department of Commerce, 2015).
CHAPTER 2  LITERATURE REVIEW

2.1  CHAPTER OBJECTIVES

A literature review compiles and evaluates the research available on a certain topic or issue that one is researching (APU Writing Centre, 2015). It enables the researcher to position his/her research in the broader academic community, synthesise existing ideas and arguments without adding one’s own and identify any gaps in the literature which the researcher’s study is attempting to address.

This chapter provides the following: the theoretical framework or literature review for this study; the review on the evolution of performance management; the rationale of the PMS; the factors that contribute to the failure or success of the PMS; the types of PMS; the effects of leadership styles in implementing PMS; and the general knowledge on the concept of agricultural extension. These sub-topics will provide an overview of the definition and roles of the PMS and its performance in various disciplines and countries. General extension approaches will also be discussed to highlight how they have been reformed over time to identify the most appropriate approaches in terms of developing and implementing innovations, programmes, and reforms to improve extension service delivery. This will assist in identifying the correct procedures or strategies and steps to be followed when developing and implementing a new reform approach. Finally, the type of reforms appropriate for extension services and therefore the implementation strategies of such reforms will also be elaborated upon.

2.2  BRIEF REVIEW OF THE PERFORMANCE MANAGEMENT EVOLUTION

Performance management is the framework for managing the execution of an organisation’s strategy; it is how plans are translated into results (Smither and London, 2009). Performance management is an umbrella concept that integrates familiar business improvement methodologies with technology. Over the past decade, the term “performance management”
has come to replace the phrase “performance appraisal” in many organisations (Smither and London, 2009). Whereas performance appraisal is the (usually annual) evaluation of an employee’s performance, performance management refers to an ongoing process that includes setting (and aligning) goals, coaching and developing employees, providing informal feedback, formally evaluating performance, and linking performance to recognition and rewards (Smither and London, 2009). At its outset, performance measures were concerned with inputs aspects, mainly financial resources, a practice that was later criticised and mostly abandoned. As such, the earliest roots of performance management can be traced back to the use of cost-benefit analysis (CBA) in the 1960s; to management by objectives (MBO) in the 1960s and 1970s; to output budgeting in the 1960s (Salem, 2003).

The existence of the PMS has been an important element of organisational life for thousands of years. The ancient Egyptians had to encourage their workers to build the great pyramids and unwittingly, they utilised the PMS to do so (Whittington-Jones, 2005:6). Armstrong (2009) further explained that the PMS started to be applied by organisations appropriately in the 1970s but gained popularity in the late 1980s. Literature has shown that over the past few decades, organisations worldwide had poor performance management tools that led to ineffectiveness, thereby HR departments had to come up with means to fill this gap (Kalashe, 2016). Performance management strategies such as the PMS emerged as a result. Performance management is essentially a Western development originating in the US (Locke and Latham, 1984).

Coetsee (2003:139) postulated that performance management is a concept that centres on fulfilling goals and expectations. This definition was formularised as (Coetsee, 2003:139):

\[ P = S \times M \times R \]

- \( P \): Performance
- \( S \): Skill
- \( M \): Motivation
- \( R \): Resources
The ultimate goal has been to enhance the performance of individuals, thereby resulting in a boost in the overall performance of the organisation. It is now recognised that there are both intrinsic and extrinsic factors affecting the performance of individuals within organisations and there has been a marked shift of reform from traditional focus on input to a focus on output measures of performance (OECD, 1993:4).

2.3 THE RATIONALE OF THE PERFORMANCE MANAGEMENT SYSTEM

Management is one of the oldest practices in the world (Gono, 2001). Originally, the Chinese developed a structure of management where the employees of organisations were grouped according to their disciplines, which did not encourage interdependence in organisations (Gono, 2001). Currently, there is an encouragement of the use of participatory management where top management and the subordinates work together in planning and decision making. The fundamental goal of performance management is to promote and improve employee effectiveness. It is a continuous process where managers and employees work together to plan, monitor, and review an employee’s work objectives or goals and his/her overall contribution to the organisation (Performance management: Keeping the right people, 2016).

According to Armstrong (2003), the PMS focuses on the controlling and development of institutions, human resources, participation, communication, and satisfaction of other parties. Dzimbiri (2008) added that there should be a participative and mutual agreement between the managers and subordinates on the objectives to be attained in order to improve their performance.

Performance management is the process of managing the execution of an organisation’s strategy. It is how plans are translated into results. It is beneficial in that it enhances broad cross-functional involvement in decision making (Adkins, 2006). Quality improvement is one way in which organisations can favourably compete in such a dynamic environment (Castka, Belehoubek, Bamber and Sharp, 2001:123). The PMS was introduced in Botswana with the
The aim of addressing problems which hindered the implementation of projects which were failing and therefore costly (Boipono et al., 2014).

The intention of any effective PMS is to support, assist, and encourage employees to achieve a high level of performance in all areas of their work – consistent with the direction of the organisation. Recognition and support of each person's achievements should affirm the individual and provide motivation to bring about further improvements (Northcross Intermediate School, 2005). Armstrong and Baron (1998) clarified the definition of a PMS by summarising its characteristics:

**Characteristics of a PMS (Armstrong and Baron, 1998):**

- It communicates a vision of its objectives to all its employees.
- It sets departmental, unit, team, and individual performance targets that are related to wider objectives.
- It conducts a formal review of progress towards these targets.
- It utilises the review process to identify training, development, and reward outcomes.
- It evaluates the entire process in order to improve effectiveness.
- It defines a managerial structure to look after all the aforementioned characteristics, so that individual staff and managers are assigned specific responsibilities to manage the PMS.
- In addition, performance management organisations:
  - Express performance targets in terms of measurable outputs, accountabilities, and training/learning targets.
  - Use formal appraisal procedures as ways of communicating performance requirements that are set on a regular basis.
  - Link performance requirements to salary, especially for senior managers.
The following performance management model (O'Callaghan, 2005:3) in Figure 2.1 supports the characteristics of a PMS:
2.3.1 Implementation steps of a performance management system

Markus (2004:6) further suggested the following phases to be utilised in executing a PMS.

2.3.1.1 Step 1: Check that the strategy and values are clear

The employer has to make the rules clear and understandable at the initial stage (Markus, 2004:6).

2.3.1.2 Step 2: Outline organisational objectives

The objectives of the organisation should be made clear to all staff members regardless of their positions and individual staff members have to know the importance of her/his
contribution (Markus, 2004:6).

**2.3.1.3 Step 3: Update job descriptions**

It is critical that the employer clarify to individuals their specific roles in the organisation to ensure smooth productivity and management (Markus, 2004:6).

**2.3.1.4 Step 4: Ensure everyone has a current job description**

The written roles of individuals should be made available to refer to whenever necessary to avoid diverting from what it is expected of them. Additionally, the employees should be appraised more than once annually to help assess if they are on the right track (Markus, 2004:6).

**2.3.1.5 Step 5: Performance planning**

Employees have to divide their objectives into milestones accompanied by timelines. This is done to explain how and when some activities will be carried out in order to fulfil major objectives (Markus, 2004:6).

**2.3.1.6 Step 6: Plan for feedback**

Supervisors have to provide the subordinates with frequent feedback on the progress of their work in order to direct where it should be reinforced or strengthened (Markus, 2004:6).
2.3.1.7 Step 7: Have a clear methodology to address poor performance

Without evaluation and reporting back, if there is weakness in the performance of workers it will persist (since there is no mentorship or guidance) (Markus, 2004:6).

2.3.1.8 Step 8: Plan to align the consequences

Recognition and rewarding hard work is very important for motivating and retaining employees. It should be done transparently and objectively so that it does not become a disincentive (Markus, 2004:6).

2.3.1.9 Step 9: Evaluation

Evaluation has to be formulated based on reliable information and an effective implementation strategy in order to instil fairness in rating (Markus, 2004:6).

2.3.1.10 Step 10: Evaluation process

A combination of frequent feedback and an annual review is reasonable, rather than a once-off evaluation without mini frequent assessment (Markus, 2004:6).

2.3.1.11 Step 11: Implementation

Despite the good intentions of the system, if it is not well understood by all the parties involved, it is useless. In this manner, all the employees have to be well trained on the necessity of the system and how they can benefit from it (Markus, 2004:6).
2.3.1.12 Step 12: Ensuring the integrity of the performance management process

It is important to continually assess the progress of the activities carried out, check their alignment to the set objectives, provide feedback, and ensure objective reviewing for improving the quality of the performance information for the workers (Markus, 2004:6).

2.3.2 Types of performance management or leadership

The three most common management styles are: autocratic, paternalistic, and democratic management style (Ogunsina, 2014). Their descriptions are summarised in Table 2.1 (Riley, 2012:1).
Table 2.1 Summary of management styles.

<table>
<thead>
<tr>
<th>Styles</th>
<th>Description</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
</table>
| Autocratic   | Senior managers make all the important decisions with no involvement from workers. | • Quick decision making.  
• Effective when employing many low-skilled workers. | • No two-way communication, which can be demotivating.  
• Creates a “them and us” attitude between managers and workers. |
| Paternalistic| Managers make decisions based on the best interests of workers after consultation. | • More two-way communication, which is motivating.  
• Workers feel their social needs are being met. | • Slows down decision making.  
• Dictatorial or autocratic style of management. |
| Democratic   | Workers are allowed to make their own decisions. Some businesses run on the basis of majority decisions. | • Authority is delegated to workers, which is motivating.  
• Useful when complex decisions are required that need specialist skills. | • Errors can be made if workers are not skilled or experienced enough. |

Source: Riley (2012:1)
2.3.2.1 Autocratic management style

The autocratic leadership process generally entails one person making all the strategic decisions for subordinates. Although it has fallen out of favour in recent decades, the autocratic leadership is still prevalent (Gill, 2014). Workers under an autocratic leader may be viewed as working under pressure and fear the majority of the time. They often show dissatisfaction with this form of leadership by various means such as indulging in eye service, tardiness, reduction of work output, sabotaging their work, seeking a transfer, or voluntarily resigning from the establishment (Akor, 2014:149). Nayab (2011:3) pointed out the criticisms of autocratic leadership:

- Contrary to claims of close supervision with detailed instructions to reduce stress and improve productivity, research suggests that such actions actually demotivate employees and leads to them being tense, fearful, or resentful (Nayab, 2011:3).
- Lack of involvement from the employee in the decision-making process leads to employees not assuming ownership of their work, contributing to low morale, lack of commitment, and manifesting in high turnover, absenteeism, and work stoppage (Nayab, 2011:3).
- The heavily centralised command of the autocratic leadership style ensures that the system depends entirely on the leader. If the leader is strong, capable, competent, and just, the organisation functions smoothly. However, if the leader is weak, incompetent, or has low ethical and moral standards, the entire organisation suffers for the sake of a single leader (Nayab, 2011:3).
- All power vested with the leader leads to risk of leaders with low moral fibre exploiting employees, indulging in favouritism, and discrimination (Nayab, 2011:3).
- Weak autocratic leaders tend to make decisions based on ego rather than sound management principles and punish employees who disagree with such decisions (Nayab, 2011:3).
• The leader reserving the right to make all decisions leads to subordinates becoming heavily dependent on the leader. The team thereby becomes useless in running operations if they lose contact with their leader, and absence of the leader leads to total collapse and shutdown of operations (Nayab, 2011:3).

• The one-sided communication flow in an autocratic leadership style restricts the creative and leadership skills of the employees and prevents their development. This harms the organisation as well, as the employees remain incapable of assuming greater responsibilities or to perform anything outside their routine (Nayab, 2011:3).

• The autocratic leader, by taking all responsibility and being heavily involved in day-to-day operations, remains forced to work at full capacity, leading to stress and other health problems (Nayab, 2011:3).

An autocratic management style has disadvantages which outweigh the advantages and therefore is considered traditional and outdated. However, it may be beneficial in some cases where there is a need for immediate decision making and when employees are considered lazy.

2.3.2.2 Paternalistic management style

Paternalistic leadership is characterised by a patriarchal and hierarchical authoritarian style of management. It is strongly characterised by absolute guidance, the protection of subordinates, harmony, and moral leadership (Irawanto, 2011:1). The paternalistic leader looks after, nurtures, guides, protects, and generally behaves as a father would behave towards his children. This type of leader exhibits concern for the subordinates’ general well-being. By the same token, they tend not to defer the subordinates’ wishes, but instead maintain a sense of hierarchy and expect obedience (Oner, 2012:302). A boss is essentially a mutated replica of one’s original authority figure (Bing, 2004). Rehman and Afsar (2012:149)
listed three features of leadership which characterise a paternalistic leadership style, namely: benevolence, morale, and authoritarianism.

2.3.2.3 Laissez-faire management style

Laissez-faire leadership, also known as delegative leadership, is a type of leadership style in which leaders are hands-off and allow group members to make the decisions. Research has found that this is generally the leadership style that leads to the lowest productivity among group members (Cherry, 2016:5). Laissez-faire leaders give the least possible guidance to subordinates and attempt to achieve control through less obvious means. They believe that people excel when they are left alone to respond to their responsibilities and obligations in their own ways (Laissez-faire leadership: Definition, 2018).

Laissez-faire leadership may either be the best or worst of leadership styles. If the leader follows the normally understood definition and standard practice of noninterference and being hands-off when supposedly leading his/her followers, the worst leadership is manifested (Ronald, 2004:820). This is sometimes categorised as avoidant leadership, leading to a less-than-ideal employee and team performance (Cunningham, Salomone and Weilgus, 2015:34).

2.3.2.4 Participative or democratic management style

Participative (or participatory) management, otherwise known as employee involvement or participative decision making, encourages the involvement of stakeholders at all levels of an organisation in the analysis of problems, development of strategies, and implementation of solutions (Encyclopaedia of Management, 2016). Participative management has been broadly adopted as a strategy in organisational development. This is because most people believe that participative management not only encourages workers to identify with their duties but also
improves their own performance as well as organisational performance (Huang, 1997). Participative leaders encourage group members to participate, but they retain the final say over the decision-making process. Group members feel engaged in the process and are more motivated and creative (Khan, Qureshi, Ismail, Rauf, Latif and Tahir, 2015:89).

2.3.3 Benefits of participatory management

Participative management does not only increase the degree of ownership by the subordinates. This management style has other advantages such as increased productivity, job satisfaction, motivation, improved quality, and reduced costs (Management study guide, 2016). A number of researchers have indicated that participative management has four potential benefits, namely: decision quality; decision-acceptance; satisfaction with the decision process; and development of participant skills (Yuki, 2010:89). The potential benefits are outlined in the sections that follow.

2.3.3.1 Decision quality

Involving other people in decision making will likely increase the quality of a decision when participants have information and knowledge the leader lacks and are willing to cooperate in finding a good solution to a problem. Cooperation and sharing of knowledge will depend on the extent to which participants trust the leader and view the process as legitimate and beneficial. If participants and the leader have incompatible goals, cooperation is unlikely to occur. In the absence of cooperation, participation may reduce rather than increase decision quality. A high level of cooperation does not guarantee that participation will result in a better decision. The decision-making process utilised by the group will determine whether members are able to reach an agreement, and it will determine the extent to which any decision incorporates the members’ expertise and knowledge (Yuki, 2010:89).
2.3.3.2 Decision acceptance

People who have considerable influence in decision making tend to identify with it and perceive it to be their decision. This feeling of ownership increases their motivation to implement it successfully. Participation also provides a better understanding of the nature of the problem and the reasons why a particular alternative was accepted while others were rejected. Participants gain a better understanding of how they will be affected by a decision, which is likely to reduce any unwarranted fears and anxieties about it. When adverse consequences are likely, participation allows people an opportunity to express their concerns and help to find a solution that deals with these concerns. Finally, a participative process is considered legitimate when most members make a decision; then the group is likely to apply social pressure on any reluctant members to do their part in implementing the decision (Yuki, 2010:89).

2.3.3.3 Satisfaction with the decision-making process

The opportunity to express or “voice” opinions and preferences before a decision is made can have beneficial effects regardless of the amount of actual influence participants have over the final decision or “choice”. People are more likely to perceive that they are being treated with dignity and respect when they have an opportunity to express opinions and preferences about a decision that will affect them. The likely result is a perception of procedural justice and stronger satisfaction with the decision-making process (Earley and Lind, 1987; Lind and Tyler, 1988; Roberson, Moye and Locke, 1999). In the absence of real influence over a decision, voice alone might not result in strong commitment to implement the decision. Furthermore, the process may reduce rather than increase satisfaction if participants perceive that the leader is attempting to manipulate them into supporting an undesirable decision (Yuki, 2010:89).
2.3.3.4 Development of participant skills

The experience of assisting in making a complex decision can result in the development of participants’ skills and confidence. Whether the potential benefits are realised depends on how much involvement participants actually have in the process of diagnosing the cause of the problem, generating feasible solutions, evaluating solutions to identify the best option, and planning how to implement it. Participants who are involved in all aspects of the decision-making process learn more than participants who merely contribute to one aspect. For participants with little experience in making complex decisions, learning also depends on the extent to which participants receive coaching and encouragement from the leader during difficult stages of the decision-making process (Yuki, 2010:89).

2.3.4 Requirements of participatory management

Jaime (2001:27) indicated that there are some prerequisites that have to be taken into consideration when implementing the participatory management system. The consideration of these requirements may lead to some changes in the organisational culture. These changes are discussed in the sections that follow.

2.3.4.1 Respect for individuals

Regardless of the person’s hierarchical ranking or academic qualification, he/she must be respected and must respect the other team members (Jaime, 2001:27).

2.3.4.2 Confidence in the capabilities of the other team members

Confidence must be placed in each person’s capabilities and in what he/she is able to and undertakes to contribute (Jaime, 2001:27).
2.3.4.3 Sharing of skills and knowledge

Since the team is multidisciplinary, each team member has to share his/her own knowledge and skills and learn from others (Jaime, 2001:27).

2.3.4.4 Active participation

The group has to create a working dynamic in such a manner that everyone is able to take active part (Jaime, 2001:27).

2.3.4.5 The knowledge that everyone depends on the group and that the group depends on everyone

Everyone has to learn that success or failure does not depend on him/her alone, but on every individual in the team. Everyone needs to learn to rely on everyone else (Jaime, 2001:27).

2.3.4.6 A sense of responsibility for doing his/her part

If success or failure depends on each member of the team, each must possess a sense of responsibility to do his/her part and not to detract from the group’s performance (Jaime, 2001:27).

2.3.4.7 Appropriate leadership

Any group, no matter how self-managed it may be, needs a leader who can serve as a guide, who can coordinate all the aforementioned areas, and who can serve as the link between the team and the top management (Jaime, 2001:27).
2.4 TRENDS IN PERFORMANCE MANAGEMENT

The shift to the next generation of performance management will require organisations to evolve existing practices, rather than revolutionise their approach. There are fundamental changes that need to be made if organisations are to foster a high-performance culture and remain an attractive value proposition to current and prospective employees (Yasoda, 2016:551). Yasoda (2016) further identified 360-degree appraisal, team performance appraisal, and the “rank” and “yank” strategy as global trends of performance management. These are discussed in the sections that follow.

2.4.1 360-degree appraisal

This type of appraisal is a multiple-impact approach to performance assessment that utilises a variety of rating resources, which include superiors, peers on the same level, subordinates, customers, and the self. It is an upward, downward, and lateral assessment approach that brings about a complete view (Rokendro, 2010). In his evaluation of the effectiveness of the 360-degree performance appraisal and feedback, Lithakong (2014) realised that the use of this system led to employee motivation since it supported the focus on defend, comprehend, and the drive to bond. On the other hand, a 360-degree appraisal is an expensive system due to the use of different tools and raters. The system may also lead to dissimilar feedback from multiple rankers, which may lead superiors to focus on the negative performance of the subordinates (Kanaslan and Iyem, 2016 citing Nickols, 2007; Rohan-Jones, 2004; Ward, 2004).

2.4.2 Team performance appraisal

This strategy focuses on appraising a team as a whole (Yasoda, 2016). The disadvantage of this system is that it is difficult to identify individual performance. Some organisations opted to use the team appraisal and individual appraisal by including team-based objectives in the individual performance goals.
2.4.3 Rank and yank strategy

“Rank” and “yank” are terms used to describe a process by which a company ranks its employees against each other and terminates (yanks) the employment of the people at the lowest end of the ranking. The purported purpose of rank and yank is that by terminating the worst performers and replacing them, the company will end up with a better workforce (Performance management for this century, 2016). The system exists more commonly by setting targets for proportions of employees to be rated as, for example, “must improve”, “satisfactory”, or “good” (Gifford, 2016).

2.5 NEW MODEL OF PERFORMANCE MANAGEMENT

In order to improve the performance of organisations, it is important to consider a new performance management strategy that is accommodating and adaptable to situations at hand. These are characterised by (Yasoda, 2016):

2.5.1 Real-time feedback

Good communication and transparency is crucial since it assists in attending to different performers accordingly (Yasoda, 2016).

2.5.2 Tailored approach

Setting well-understood goals in a PMS usually leads to success because an employee should be coached and mentored to reinforce his/her strengths towards achieving the goals (Yasoda, 2016).
CHAPTER 2

LITERATURE REVIEW

2.5.3 Team-centric goals

The models of performance management encourage collaboration and participation of all the role-players of the organisation in goal setting (Yasoda, 2016).

2.5.4 Integration

Performance management is not an individual HR aspect; it concerns everyone in the organisation. The supervisors and subordinates meet in a timely manner as scheduled, to assess if the goals are well driven, on the right track, and then advise accordingly (Yasoda, 2016).

2.6 CATEGORISATION

The importance of team force is emphasised and this is supported by the aforementioned characteristics. The stages of how the characteristics of the traditional performance management have to change in order to meet the new model of performance management are demonstrated in the following summary (Martinez, 2000):
TRADITIONAL PERFORMANCE MANAGEMENT CHANGES REQUIRED TO FULFIL THE NEW MODEL OF PERFORMANCE MANAGEMENT

From tools to system, from system to process
Initially, a PMS was viewed as a stand-alone process by which objectives were assigned to individual staff members and then reviewed periodically. The most common approach to performance management in public sector organisations was staff appraisal. From the use of individual tools, performance management adopted a more systemic approach in the 1980s by integrating it with other planning and management systems. This required breaking walls that had long separated HR and other organisation functions, and their respective departments over the years. Hence, performance management became a process.

From individual appraisal to joint review
Although personal interaction is highly desirable in any PMS, it does not facilitate the necessary integration and matching between individual and service or organisational objectives. Today, performance management is viewed as an open process where the teams rather than individuals set and openly discuss the set objectives and targets, and where staff and line managers participate equally in such discussions. The modern PMS places greater emphasis on teamwork, and on an established planning review process than an individual review. Nevertheless, Armstrong and Baron (1998) indicated that a few organisations adopted this system.

From “outputs” to “outputs and inputs”
Initially, the emphasis of performance management and of quality approaches was on setting objectives and on the appraisal of results against goals (outputs). However, there is now a realisation that a fully rounded view of performance must embrace how people achieve tasks as well as outputs (Armstrong and Baron, 1998; LSTM, 2000). In any
organisation, staff members may be unable to meet targets because they lack adequate skills or because work processes are not effectively streamlined.

**From reward orientation to staff development**

Although many PMSs still include some form of individual or team reward (in cash or in kind), most analysts agree that rewards are not central to the notion of performance management as used to be considered. From what little evidence is available, performance-related pay presents managers with a number of practical problems and can act as a serious disincentive for staff.

In conclusion, performance management can be a way to reward good performers. Its focus has changed towards a staff development orientation that should enable staff and managers to identify and act on staff development needs. Ensuring staff are competent and motivated in their jobs is therefore a central feature of performance management (Donaldson et al., 1989; Giuffrida et al., 1997).

**From “ratings” to “less ratings”, and from “monolithic” to “flexible”**

Initially, performance management consisted of assigning scores against agreed targets and indicators. This proved labour intensive to HR managers and did not always lead to expected improvements in individual performance. It was soon realised that performance rating was only meaningful when broader, overarching objectives had been defined against which individual merits could be compared. Hence the shift from individual assessment to joint review.

Assigning indicators to jobs that rely heavily on group work was an additional problem in basing performance management on the measurement of indicators. The initial focus on rating soon gave way to other considerations that put the characteristics of each service at the core of its PMS. The emphasis of performance management therefore soon shifted
towards checking whether, for instance, staff possessed the required individual abilities and were able to work effectively in teams so as to provide a predefined set of services along agreed quality standards.

**From “top-down” to “360-degrees feedback”, and from “directive to supportive”**

In the 1980s and early 1990s, many organisations still attempted to improve performance and service quality by ensuring staff compliance to objectives set at the top that then cascaded down various organisational layers. The rationale was “managers know best” and that quality and performance management were largely managerial responsibilities. There has been a realisation that quality and performance management must become part of organisational culture, and that achieving such culture requires managers and staff to work closely together and identify bottlenecks and act on them. This, in turn, led to looking closely at staff needs and ensuring that staff members receive all the necessary support and feel valued for what they contribute.

**From “owned by HR managers” to “owned by users”**

For many years, performance management has been viewed as the primary responsibility of HR managers who had the responsibility of undertaking performance appraisal as part of their personnel functions. Today, performance-orientated organisations have upgraded the personnel function and placed it within strategic management levels, while devolving responsibility of performance and quality management to line managers and staff. HR managers are still critical to the implementation of performance management.

**From “professional-based” to “service-based” performance management**

Many staff appraisals have been traditionally linked to individual professions and occupational groups. The rationale was that doctors appraise doctors, only nurses appraise nurses, and so forth. Performance management clearly exceeds the boundaries of professional or occupational groups. The team and service focus of performance
management requires that various staff categories are equally important at the time of delivering user-friendly, quality service. Performance management has become a practical means of enabling flexibility in service provision, respecting the distinct characteristics of different professions, while aligning these within a single service delivery strategy. The cross-sectional nature of performance management must not be equated with a one-size-fits-all approach.

Source: Martinez (2000:8-9)

2.7 THEORETICAL PERSPECTIVES ON PERFORMANCE MANAGEMENT

Many organisations have what is labelled a “performance management” system. However, a distinction can be made between performance management and performance appraisal. A system that involves employee evaluations once a year without an ongoing effort to provide feedback and coaching so that performance can be improved is not a true performance management system. Instead, it is a performance appraisal system (Aguinis, 2013:8). If a PMS is not well implemented it may lead to the following (Aguinis, 2013:8):

- **Increased turnover:** If the process is not seen as fair, employees may become upset and leave the organisation.
- **Use of misleading information:** If a standardised system is not in place, there are multiple opportunities for fabricating information about employees’ performance.
- **Lowered self-esteem:** Self-esteem may be lowered if feedback is provided in an inappropriate and inaccurate way.
- **Wasted time and money:** Resources and time are wasted when systems are poorly designed and implemented.
- **Damaged relationships:** As a consequence of a deficient system, the relationship among the individuals involved may be permanently damaged.
• **Decreased motivation to perform:** Motivation may be lowered for many reasons, including the feeling that superior performance is not translated into tangible or intangible rewards.

• **Employee burnout and job dissatisfaction.**

• **Increased risk of litigation:** Expensive lawsuits may be filed by individuals who feel they have been appraised unfairly.

• **Unjustified demands on managers’ and employees’ resources.**

• **Varying and unfair standards and ratings.**

• **Emerging biases:** Personal values, biases, and relationships are likely to replace organisational standards.

• **Unclear rating systems:** Because of poor communication, employees may not know how their ratings are generated and how the ratings are translated.

In the management, management control, and accounting literature, there is more of a debate on the nature of a PMS. A PMS goes beyond the measurement of performance, to the management of performance (Broadbent and Laughlin, 2009:284; Otley, 1999:364). Therefore, for an organisation to make effective use of the results of performance management, it must be able to make the transition from measurement to management. It must also be able to anticipate needed changes in the strategic direction of the organisation and have a methodology in place for effecting strategic change. Successful accomplishment of these two tasks represents the foundation of effective performance management (Amaratunga and Baldry, 2002:217).

The public sector provides a leading edge on issues of performance management. However, PMSs have too many as well as incorrect facets, primarily due to pressures in public sector organisations to meet the information needs of numerous stakeholders (Bringnall and Modell, 2000 quoting Atkinson et al., 1997; Sicotte et al., 1998).
Nevertheless, in considering the measurement of performance, numerous issues can be identified. Performance is not a static entity but rather a fluid process. There are multiple levels at which practitioners measure performance: (1) the practitioners measure input (performance evaluation), (2) outcomes (task and task completion), (3) and employees are assessed in terms of input, outcome, and the way in which the transformative process takes place (Stannack, 1996). The leadership style of the managers has a great impact on the performance management that an organisation utilises (Ukko, Tenhunen and Rantanen, 2007). Firstly, the employees have to have a clear description of the system and how the set goals for an individual employee would benefit the organisation, hence instilling focus and motivation (Ukko et al., 2007).

Moreover, PMSs have traditionally been utilized to reinforce superior-subordinate ties and to centralise and standardise decision-making processes; the introduction of a new PMS is used to support and enable lateral relations between subsidiaries without direct hierarchical ties (Ukko et al., 2007). In attempting to integrate strategies and organisation structures, PMS can be utilised to bind together – within a new organisational space – geographically and organisationally diverse entities (Busco, Giovannoni and Scapens, 2008:122).

In hopes of increasing individual production and contribution, managers resorted to various approaches. The MBO approach, in the sense that it requires all managers to set specific objectives to be achieved in the future and encourages them to continually ask what more can be done, is offered as a partial answer to the question of organisational vitality and creativity (Thomson, 1998). Lynch (1977) argues that MBO should not exclude the daily milestones of the organisation and should involve all the role-players in the organisation. De-Nisi and Kluger (2000:129) found that management systems such as 360-degrees feedback have characteristics that reduce the effectiveness of feedback. The authors therefore recommend reviewing such systems as the assumption that the provision of feedback to subordinates is effective, is incorrect.
With regard to team appraisal, the pervasive use of teams in organisations makes performance appraisal more challenging than in the past. Teams differ in their membership configuration, the complexity of their tasks, and level of interdependence from other organisational units. Performance-appraisal characteristics include target (individual or team), type (outcome-, behavioural-, or competency-based), and data source (manager or multi-rater) (Scott and Einstein, 2001:107).

The contingency theory of management accounting suggests that there is no universally applicable system of management control but that the choice of appropriate control techniques will depend upon the circumstances surrounding a specific organisation. A central contingent variable is the strategy and objectives that an organisation decides to pursue (Otley, 1999:367). Umit, Turner and Begemann (2000) studied the dynamics of performance measurement systems and reviewed the different systems of management such as balanced scorecard, SMART (specific, measurable, achievable, relevant, time-bound), and the performance measurement questionnaire. The authors found that these performance measurement systems were not well structured. Therefore, Umit et al. (2000:696) developed an integrated performance measurement system which is characterised by the following:

- An external monitoring system, which continuously monitors developments and changes in the external environment.
- An internal monitoring system, which continuously monitors developments and changes in the internal environment and raises warning and action signals when certain performance limits and thresholds are reached.
- A review system, which uses the information provided by internal and external monitors as well as the objectives and priorities.
- An internal development system to deploy the revised objectives and priorities to critical parts of the system.
2.8 THE SUCCESS FACTORS OF PERFORMANCE MANAGEMENT SYSTEMS

The uses of a PMS influences the entities involved (individuals, services, organisations, programmes, and society), particularly in a technical, economic, or cultural way (Helden, Johnsen and Valkuri, 2012). Performance management of an organisation is directly linked to the performance of employees. Achievement of high-level performance by employees is necessary to continuously achieve the organisation’s goals (Mustafa, 2013). Kaplan and Norton (2002) opined that the outdated methods that organisations have been using in HR have not been working well in the changing corporate world. To overcome this, Saudi (2014) indicated that some of the organisations in Malaysia had to adopt a PMS. Performance management has been introduced in the African public service with the intentions of monitoring, reviewing, assessing performance, and recognising good performance. However, the PMS in Africa has not been able to achieve the expected level of performance to improve productivity (Fatile, 2014:77). In an interview with HRM magazine (Tyler, 2005), Robert J. Greene, the CEO of Reward Systems Inc. said that: “Performance management is the single largest contributor to organisational effectiveness. If you ignore performance management, you fail.” Instead of using the familiar “check the box, write a comment” ritual, organisations need to integrate the company mission, vision, and values into their PMS (Mondy, 2012:236).

Jan, Israr, Haq and Jehangir (2014) conducted a study on the effect of performance management system on teachers’ efficiency in the Peshawar District of Pakistan. The results revealed that the teachers were very satisfied with the PMS, since it improved their productivity and performance (Jan et al., 2014:83). The literature suggests that organisations with an effective PMS are likely to have highly motivated employees with high levels of job satisfaction. Although a satisfied employee is not necessarily a good performer, a dissatisfied employee can cause irreparable damage to the organisational effectiveness (Baloyi, Van Waveren and Chan, 2014:86).
In addition, Ngcamu (2015:321) found that the PMS has improved the performance of university employees in South Africa. During appraisal, there would be a productive discussion between the supervisor and the appraiser (Ngcamu, 2015:321). Elliot (2011) indicated that effective communication in performance management is a powerful tool, since it minimises misunderstandings and lack of information, yet it increases employees’ performance and the organisation’s productivity. Moreover, the performance communication process encourages continuous feedback between the management and subordinates (New York University [NYU], 2012:5). The purposes of the performance communication process are therefore that it:

- creates a shared understanding of goals, competencies, and other expectations;
- fosters an environment of continuous feedback and professional development;
- provides opportunity to assess one’s own performance; and
- assists in improving what to do and how to do it, thus providing greater support to achieve the goals (NYU, 2012:5).

Diane (2012) found that the PMS in the Kgatleng Land Board of Botswana was successful because the supervisors possessed positive qualities such as being knowledgeable about what their subordinates do, and they are supportive. Jungert (2012) explored the meaning of support from co-workers and managers in teams working in selected Swedish companies. The results showed that the support that the subordinates received from their superiors improved their performance as a result of motivation (Jungert, 2012). An employee who works at taking initiative until he finds areas where it is welcome can feel free to make suggestions that will fit in with his/her aspirations without fear of being blocked (Neilsen and Gypen, 1979).

Generally, an organisation’s success is not entirely reliant on having the correct strategy and resources. It is also reliant on the ability of its management to harness, direct, and support teams and individuals to engage in delivering the organisation’s mission and objectives (Chartered Management Institute, 2010).
Moreover, Bulawa (2011) conducted a study on the implementation of the PMS in secondary schools of Botswana. The management teams of the schools opined that since the implementation of the PMS, their accountability had improved because the set of goals and targets bind them to achieve the goals. The managers of the schools perceived that these set goals guide them to plan, and it was made possible primarily by the collective planning, which they had recently introduced (Bulawa, 2011). When comparing the blueprint and bottom-up management approaches, the top-down management style leads to poor performance, while the bottom-up approaches motivate subordinates leading to an improvement in performance (Filev, 2008). Despite this, Filev (2008) suggests the strategic use of the two approaches to attain improved performance in the organisation.

In a study on the impact of participatory management on productivity, quality, and employees’ morale in the US, Gono (2001) found that more than 80% of the organisations included in the sample realised an increase in productivity, quality, and staff morale. In the 1980s, traditional accounting-based measurement systems were called into question. They have been heavily criticised for being backwards-looking, encouraging short-termism, lacking strategic and external focus, encouraging minimisation of variance rather than continuous improvement, as well as not taking all necessary performance levels into account (Kleindienst and Biedermann, 2016). Kleindienst and Biedermann (2016) therefore designed a model that utilises participatory approaches to implement performance management strategies. By encouraging participatory decision making, managers are in effect decentralising authority within their organisations. This leads to improved decision quality, increased commitment of employees to decision outcomes which they have influenced, and it enhances job satisfaction and motivation (Mutai, Cherniyit and Kirui, 2015:54).

Mazandarani and Abedini (2015) found a mutual correlation between the participatory management and efficiency of the staff as well as the change in organisational components in the Free Zone of Qeshm in Iran. Giving a voice to all employees by including them in the
decision-making process is a simple yet powerful tool to increase motivation and performance. On a fundamental level, participatory management is a matter of approach and it is up to the direct managers to change their habits (Smith, 2014). Kuye and Sulaimon (2011:2) indicated that in modern times, for the performance of an organisation to improve, managers have to involve subordinates in decision-making processes since the old method of “command and control” is useless in performance management. Furthermore, employee participation triggers creativity and motivation among the employees, leading to improved performance (Noah, 2008).

Stefanovska-Petkovska, Bojadziev and Stefanovska (2014) researched the role of participatory management in fostering job satisfaction among public administration in the US. The authors concluded that participatory management, participative strategic planning, and Supervisory communication might yield happiness in workers in an organisation (Stefanovska-Petkovska et al., 2014) Exploring the concept of empowerment includes defining the reasons for management to empower the workers, needs analysis, and techniques for empowerment. Empowerment means that all employees feel that they have the responsibility and authority to participate in decision making and problem solving in their appropriate operating levels. It is obvious that an entire organisation of skilled and capable problem solvers will have a distinct competitive advantage over an organisation with few key contributors and an army of drones (Apostolou, 2000).

2.9 FACTORS CONTRIBUTING TO THE FAILURE OF A PERFORMANCE MANAGEMENT SYSTEM

For some time now, performance management has been viewed as an increasingly bureaucratic process under the control of HR, which is no longer adding value to organisations. It might be managing performance, but it is not improving performance (Zsolt, 2014). Larbi (2006) argued that the reforms in Ghana focus more on what should be done and neglect the implementation strategy. Larbi (2006) further noted that there are inconsistencies
in the implementation of reforms due to bottlenecks in the ability of implementers. This view is supported by Karuhanga (2010), who found that the implementation strategy in Uganda was faced with challenges such as lack of motivation and morale, leadership problems, a highly bureaucratic system, and limited employee commitment.

The extent to which members of an organisation contribute to harnessing the resources of the organisation equally depends on how well the managers of the organisation understand and adopt an appropriate leadership style in performing their roles as leaders. Thus, the efficiency of resources mobilisation, utilisation, and enhancement of organisational structure depends largely on leadership style, among other factors (Obiwuru, Okwu, Akpa and Nwankwere, 2011:101). Tran (2016) argued that there are different ways of developing and implementing projects, either using top-down or bottom-up approaches to management. Tran (2016) therefore advises that the best way to reconcile the two approaches is to strike a balance between the approaches and not only utilising one approach throughout.

The level or degree of the PMS standards depends on how it was established (Madjoski, 2015). It needs to be done gradually, as with any other project (Madjoski, 2015). According to Frost (2007:1-2), the elements of a life cycle of performance management comprises reliable measures, clear goals, performance monitoring, rewards and recognition, initiatives, and corrective action. Frost (2007:1-2) therefore postulates that for the PMS to avoid failure, the organisation should consider three principles, namely: to involve people; go slow; and communicate. Considering these principles will make people aware of what performance management is, its purpose and excitation will therefore motivate them to participate in the entire process (Frost, 2007:1-2).

In addition, Paile (2012) conducted a study on staff perceptions of the PMS implementation in South Africa. The results showed that supervisors and subordinates view the PMS differently; supervisors utilise it to control the code of conduct of the subordinates, while the subordinates utilise it as a tool to earn extra money through PMS rewards. Furthermore,
Sehoa (2015) conducted a study in the Limpopo Province and realised that the main problems that lead to the failure of a PMS included that: the personnel were not interested; there were no employees who understood the system (due to poor training of the staff members); and there was no strategy in place to recognise excellent employees. Munzhedzi (2011) conducted research on the PMS and improved productivity in the Limpopo Province, and found it is crucial to thoroughly train staff on PMS before its implementation.

The purposes of a PMS should be determined by considering business needs, organisational culture, and the system’s integration with other HRM systems (Pulakos, 2004). Extension service providers should be saddled with the responsibility of ensuring that farmers are continually satisfied with service delivery. Customer satisfaction surveys remain an essential tool for measuring the quality of services and the outcome of programmes (Agholor, Monde, Obi and Sunday, 2013:204). Scholtes (1993:349) indicated that tools such as total quality management (TQM) have been widely adopted in the US. TQM is defined as a management approach that attempts to achieve and sustain long-term organisational success by encouraging employee feedback and participation, satisfying customer needs and expectations, respecting societal values and beliefs, and obeying governmental statutes and regulations (Riebe’re and Khorramshahgol, 2004). On the contrary, numerical performance management systems do not take into account how work is done, and conventional rating systems inhibit collaboration, making a business less customer-focused and agile (Rock and Jones, 2015:2). By keeping one’s team engaged with the wider business goals and with what skills they can develop, one would achieve alignment and satisfaction across the board. Therefore, there is a growing trend for the PMS to be termed “employee performance engagement” (McDowell, 2017). It is recommended that in order to improve the performance of agricultural extension workers, the MOA should take into account the status of extension workers, specifically their competencies, skills, and commitment to work with rural communities (Kalil, Ismail, Suandi and Silong, 2008:383).
An evaluation of the Department of Tribal Administration’s PMS in Botswana attributed its failure to a lack of feedback, poor leadership, and difficulties in implementing the system (Monnaesi, 2011). Similarly, Boipono et al. (2014) conducted a study on the implementation of the PMS in schools. The teachers indicated that the design and implementation of the PMS was poor. They opined that the system should be modified to suit the teaching profession; the PMS should not be a one-size-fits-all approach, as there are different disciplines in government. In addition, they determined that for the PMS to be successful, factors such as design and the implementation of the system, effective communication and feedback, motivation, and clear management should be effectively considered (Boipono et al., 2014). A study on the effect of the PMS on employee performance at the Food and Agriculture Organization (FAO) found that the employees appreciate the use the PMS but their main concern was the poor implementation strategy, since there was no transparency and poor communication (Maina, 2015). Maina (2015) therefore recommended the use of 360-feedback as an alternative feedback approach.

Excellent communication skills are essential to effective performance management. To communicate effectively with employees, performance managers must:

- establish strong working relationships with employees;
- promote easy access to information and feedback;
- promote employee involvement in the planning and development activities; and
- recognise and praise top performers (U.S. Office of Personnel Management [OPM], 2015:1).

A study conducted by Marobela and Mawere (2011:5317) on the PMS in the magistrate courts of Botswana found that the unintended consequences of public service change indicated that a reform should not degrade or disadvantage service delivery. The researchers added that the advantages, as well as disadvantages, should be considered before implementing a public-
sector reform. Public service extension has long been characterised by dissatisfaction of clients (International Bank for Reconstruction and Development/The World Bank, 2010). Bitzer (2016) proposes that the reason for this is due to centralised administration of the extension sector, poor recognition strategies of extension officers’ recognition, and inadequate resources, which leads to staff demoralisation. Ohemeng (2009) further argued that a PMS would never be a success in developing countries without careful examination and evaluation of factors such as institutional culture, fragmentation, and leadership support.

Performance management aims to establish attainable objectives of individuals aligned with the organisational goals (Advantages and disadvantages of participative management, n.d.). The overall lack of management skills and expertise often makes it non-viable for developing countries to develop complex structures such as a sophisticated PMS. They therefore concentrate more on introducing and copying tools and systems from the Western world, which are not always best suited to local circumstances (De Waal, 2007:72).

The causes of PMS failure include (Nalini and Luckeenarain, 1997):

- not knowing what the outcome of an appraisal is being used for;
- superiors that are not trained to manage and appraise performance;
- superiors and employees do not understand the purpose of performance management;
- no feedback is provided to the employees;
- the is no clear link with the receiving of rewards;
- an instrument or system that is difficult to use;
- lack of performance standards; and
- lack of management commitment.
2.10 THE CONCEPT OF EXTENSION

2.10.1 Definition of extension

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 and to generate, share, and utilise agriculture-orientated technology (Rivera, Qamar and Crowder, 2001). Furthermore, there are three broad categories of extension approaches (Agriculture for Impact, 2016):

- **Transfer of technology (TOT):** The traditional model of the transfer of advice, knowledge, and information in a linear manner.
- **Advisory:** Using a cadre of experts as a source of advice in relation to specific problems faced by farmers.
- **Facilitation:** The aims of this model are to assist farmers in defining their own problems and develop their own solutions.

Blum (2007) compared extension approaches as shown in Table 2.2.
Table 2.2 Comparison of extension approaches.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Extension models/approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Linear</td>
</tr>
<tr>
<td>Purpose</td>
<td>Production increase through TOT government policy</td>
</tr>
<tr>
<td>Source of innovation</td>
<td>Outside innovations</td>
</tr>
<tr>
<td>Promoter’s role</td>
<td>Extending knowledge</td>
</tr>
<tr>
<td>Farmer’s role</td>
<td>Passive: Others know what is best Adopting recommended technologies</td>
</tr>
<tr>
<td>Assumptions</td>
<td>Research corresponds to farmer’s problems</td>
</tr>
</tbody>
</table>
Practical extension work can be described by simply listing its aims, principles, structure, or methods. It can only be described based on the interaction between individual elements. An approach to extension consists of a series of procedures for planning, organising, and managing the extension institution as well as for implementing practical extension work (Agricultural extension: Guidelines for extension workers in rural areas, 1994).

The Secretariat of the Pacific Community Land Resources Division (2008) indicated that most organisations are aware that spoon-feeding beneficiaries does not lead to sustainable development. The main reason for this is that the Pacific countries are still utilising the blueprint approach in agricultural research and extension. Moreover, Ison and Russel (1999)
noted that there is a call for participatory approaches due to the failure of the top-down or linear approach. On the other hand, the bottom-up approach should not be utilised as a replacement for the top-down approach, but rather be utilised in combination to attain the best results (European Leader Association for Rural Development [ELARD], 2016).

Government and non-government institutions are increasingly recognising the need to move away from instructions and blueprint solutions, towards more participatory approaches which support communities in their capacity to set and fulfil their own development goals (Hangmann, Chuma, Murwira and Connolly, 1999). Additionally, Chambers (1993:68) summarised the differences between TOT (blueprint approach) and participatory extension as shown in Table 2.3.
Table 2.3 Comparison of transfer of technology and participatory extension.

<table>
<thead>
<tr>
<th>Description</th>
<th>TOT</th>
<th>Farmers first or participatory extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main objective</td>
<td>TOT</td>
<td>Empower farmers</td>
</tr>
<tr>
<td>Analysis of the needs and priorities</td>
<td>Outsiders</td>
<td>Farmers facilitated by outsiders</td>
</tr>
<tr>
<td>Transferred by outsiders to farmers</td>
<td>Precepts, messages, package of practices</td>
<td>Principle, methods, basket of choices</td>
</tr>
<tr>
<td>Menu</td>
<td>Fixed</td>
<td>According to choice</td>
</tr>
<tr>
<td>Farmers’ behaviour</td>
<td>Hear messages, act on precepts, adapt, adopt or reject package</td>
<td>Utilise methods, apply principles, choose from basket, and experiment</td>
</tr>
<tr>
<td>Outsiders’ desired outcomes emphasised</td>
<td>Widespread adoption of package</td>
<td>Wider choices for farmers, farmers’ enhanced adaptability</td>
</tr>
<tr>
<td>Main mode of extension</td>
<td>Extension worker to farmer</td>
<td>Farmer-to-farmer</td>
</tr>
<tr>
<td>Roles of extension agent</td>
<td>Teacher, trainer</td>
<td>Facilitator, teacher and provider of choice</td>
</tr>
</tbody>
</table>
2.10.2 Transfer of technology in extension: Top-down approach

Terblanche (2008) views the top-down approach as the traditional extension approach of agricultural extension whereby agricultural information is extended from the research to extension and eventually to farmers as shown below:

Research → Extension → Farmer

Over time, the meaning of extension changed into TOT whereby the farmer had the power to provide feedback to extension, and extension forwarded it to research.

Research ← Extension ← Farmer

2.10.2.1 Training and visit system

The T&V system is an example of the blueprint approach, which was executed in the 1960s and 1970s. In the late 1960s and early 1970s, agriculture TOT and adoption was on the top priority list in the extension system. This was because research had released high yielding grain varieties, while extension services showed poor results (Anderson, Feder and Ganguly, 2006). Lipton and Longhurst (1989) also revealed that by then there was also food price hikes. The T&V system designed by Benor et al. (1984) therefore recommends the following:

- Removal of non-extension duties (supply of inputs and collection of agricultural statistics) so that village-level extension agents can focus on information transfer.
- Increased extension farmer contact through a well-programmed schedule of fortnightly visits, often accompanied by an increase in the ratio of extension workers to farmers.
• Use of “contact farmers” with close links to extension and who are responsible for passing extension messages to other farmers.
• Increased training of village extension workers through regular courses.
• Close links between extension and research to ensure the relevance of extension messages to farmers’ needs.

Ilyas (2014) clarified that the nature of planning for T&V was top-down as the decisions were taken from the top; the production recommendations were sent from the top managers down to the farmers to adopt. Rural people were therefore not usually involved. This led to the failure of the system since the experts were considered know-it-alls. It was also criticised for being too rigid in terms of fortnightly visits, especially during the slack seasons. The other disadvantages of the system included that its focus was on procedural aspects rather than other essential aspects such as the message and its dissemination, and that the system was too expensive as it involved a high level of recurrent expenditures in developing countries (Ilyas, 2014). Additionally, the approach did not utilise mass media effectively. On the other hand, the selection of contact farmers was biased, as they were not representative of the resource-poor farmers (Ilyas, 2014).

2.10.3 Participatory extension: Bottom-up approach

Participatory extension can be defined as the joint actions of local people and project staff with the objective of formulating development plans and selecting the best available alternatives for their implementation (Oltheten, 1995). Düvel (2003) explained that the current use of participatory approaches encourages the consideration of needs. Needs are the key factor to sustainable development. Wood (1981) supports this view by indicating that the development projects are made for the people, especially in the rural areas and for the development of the country at large. It is important that people forming an action group feel that the identified need is their own (Swanepoel and De Beer, 2006). The extension officer,
government agent, or community development worker should be careful not to impose needs on people or to organise people for what they regard as a good cause. People will not easily be moved to action if they do not feel a need, irrespective of the reality and urgency of the need (Matiwane and Terblanche, 2012:78).

The following factors should be considered for an extension service to be successful (Terblanche, 2008):

- the interrelationship between agricultural development and human development;
- development being needs-based;
- participation being essential for all role-players; and
- any intervention programme focused on behaviour change.

In recent developments of extension delivery, demand-led approaches are encouraged because they focus on the needs of the clients. “Demand-led” is a relatively recent label for a notion that has existed since people began to write about extension practice (Scarborough, Killough, Johnson and Farrington, 1997).

An “extension approach” refers to the doctrine an organisation follows which informs, stimulates, and guides aspects such as an organisation’s structure, mission, vision, leadership, programmes, strategies, resources, and linkages. An extension approach influences the choice of the target audience, the resource requirements and allocation, the methodologies employed, and the results and impacts of the extension efforts (Directorate of Agricultural Extension Services, 2011). Participatory approaches in extension were developed after the failure of TOT (AgriCultures Network, 2013) in the 1980s. The new approaches, which allowed the use of scientific knowledge from extension workers and local knowledge from the farmers, were introduced and labelled participatory technology development (PTD).
Similarly, PTD is an approach involving collaboration between experts and citizens of less developed countries to analyse problems and find solutions that are appropriate for specific rural communities. It was created in response to low rates of adoption of new technologies in developing countries (Boslaugh, 2016). The Zambian Ministry of Agriculture (2009:10) emphasised the main features of a participatory extension approach (PEA):

- **Community action plans**: Broad-based and address the community’s priority concerns for rural development.
- **Community involvement/participation**: PEA considers the contributions of different socio-interest groups (women, men, youth, and the marginalised).
- **Community leadership role**: Related to the planning, implementation, and monitoring of developmental activities.
- **Systematic agricultural and rural development**: Leading to both quantitative and qualitative improvement in the social, economic, and political spheres.
- **Establishment of community development committees**: Such committees oversee and monitor the implementation of the community action plan.
- **Farmers are experts**: Extension workers listen, learn, and facilitate. Rather than teaching, they act as sources of information and technologies which are locally unavailable.

### 2.10.4 Participatory extension approaches

Davis and Place (2003:749) summarised the philosophy, mission, methods, and issues of the PEA as shown in Table 2.4.
Table 2.4 Terminology used to describe extension and development by current stakeholders in Kenya.

<table>
<thead>
<tr>
<th>Philosophy</th>
<th>Mission</th>
<th>Methods</th>
<th>Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers first</td>
<td>Facilitation</td>
<td>Partnerships</td>
<td>Collaboration</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>coordination</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>alliances</td>
</tr>
<tr>
<td>• Participatory</td>
<td>• Catalyse</td>
<td>• Multi-partner</td>
<td>• NGOs</td>
</tr>
<tr>
<td>• Demand-driven</td>
<td>• Support</td>
<td>federations</td>
<td>• Private sector</td>
</tr>
<tr>
<td>Farmer-centred</td>
<td>• Enable</td>
<td>consortiums</td>
<td>Privatisation</td>
</tr>
<tr>
<td>• Community-based</td>
<td>• Network</td>
<td>development</td>
<td>Commercialisation</td>
</tr>
<tr>
<td>• People-driven</td>
<td>• Link</td>
<td>partners</td>
<td>Cost-sharing</td>
</tr>
<tr>
<td>• Bottom-up</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ownership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Farmer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>trainers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.10.4.1 Philosophy of “farmers first” in extension

Engle (1986) opines that the participation of clients or beneficiaries in all the stages of the programme cycle (planning, development, implementation, and evaluation) leads to the success of the programmes. These types of programmes have a greater likelihood of success because local producers can incorporate local priorities and concerns into a programme, which also addresses national priorities and concerns (Engle and Stone, 1989).
2.10.4.2 Facilitation in extension

Extension employees work with and in diverse groups to accomplish organisational, client, group, and community goals. Extension programming staff often find themselves expected to fulfil dual roles, namely: to teach content and to effectively facilitate groups for positive change. The growing complexity of community issues increasingly prompts the public to look to extension to play a group facilitation role in a neutral manner (Cyr, 2008).

2.10.4.3 Partnerships and collaboration in extension services

Extension has been criticised for not being effective and having an insufficient impact (Le Gouis, 1991). This may be due to the high workload of the existing personnel or/and low human capital of the extension officers in some areas that need special attention, such as marketing. To overcome all these, other sectors which are agriculture-orientated should be considered in assisting to develop sustainable production. As the extension system is called upon to address food insecurity issues; there is a need for partnership to fit well in a pluralistic, multidisciplinary, and integrated effort of many sectors, both public and private (Rivera and Qamar, 2003).

There has been some disapproval of public extension because of its unidirectional nature of information flow (Farrington, 1994). There have been multiple sources of new agricultural inputs, ideas, and practices that include private, commercial, and voluntary sectors, farmers’ own innovations, and public sector services (Farrington, 1994). Information must therefore be multidimensional. Dimelu and Emodi (2012) postulate that agricultural development is driven by the complex supply and demand of farm knowledge among researchers, extension, and farmers. It is a function of interaction and linkages between innovation development and innovation processes, driven by the institutions and policies that affect the innovative behaviour and performance (Dimelu and Emodi, 2012).
Smutko and Garber (1997:2) defined a collaborative process into three stages as shown in Figure 2.2.
Initiate the process | Establish procedures | Ratify the agreement
---|---|---
Assess issues and stakeholders | Educate each other | Integrate agreement
Design a strategy | Specify needed information | Into formal process
Set up a programme | Define the problem | Implement
Generate options | Agreement
Develop evaluation criteria | Keep avenues open
Evaluate and select options | For renegotiation
Develop a plan

**Figure 2.2** Stages of the collaborative process.

*Source: Adapted from Smutko and Garber (1997:2)*

Agricultural knowledge and innovation systems (AKISs) emerged with the purpose of overcoming the limitations of the National Agricultural Research System (NARS). AKIS deems farmers not only to be the recipients of technology from research via extension (that is the perspective of NARS) but also as important participants in generating, disseminating, and using knowledge in the entire process (Mirzaei, Rivera and Zheng, 2010:92). Recently, the model of an innovation system that considers holistic planning, knowledge production, and use, has gained popularity. AKIS links and integrates farmers, researchers, agricultural educationists, and extensionists and encourages them to exploit and promote reciprocated learning. It also encourages them to create, share, and utilise agriculture-related technology, knowledge, and information.
Farming communities are at the centre of the knowledge triangle (Kassa and Temesgen, 2012). Rivera, Qamar and Mwandemere (2005:5) designed an AKIS model, which demonstrate how the role-players in innovation adoption are linked. The role-players include: education, extension, and research and their clientele (which are farmers or producers at the central point) as shown in Figure 2.3.

![Figure 2.3 AKIS model.](source: Rivera et al. (2005:5))

The agricultural innovation system (AIS) concept urges national agricultural knowledge-generation and communication systems to interact closely with other actors in the enterprise, demand, intermediary, and support domains, and to address the rules and mechanisms by which these different agents could interact better (Rivera, 2009). AIS is a national platform for information and knowledge sharing and exchange for agricultural research and development (ARD) for target groups and stakeholders at a country level (Near East and North Rural and Agricultural Knowledge and Information Network-Regional Agricultural Information Network).
NERAKIN-RAIS (2016:1) further outlined the following as the objectives of AIS:

- To strengthen the capacity of the MOA and other stakeholders to establish an effective and efficient information system that will support agricultural development and ensure food security at a country level, based on the needs and demands of its stakeholders. Additionally, integrating the various resources in the MOA and National Agricultural Research Institutes (NARI) (NERAKIN-RAIS, 2016:1).

- To serve as an information and knowledge repository or exchange mechanism at the national level and a gateway to the national knowledge systems for ARD at a country level. Aiming to strengthen, coordinate, and add value to initiatives by national programmes and regional organisations in order to increase agricultural production and improve food security for the benefit of improving the performance of farmers and agrarian business (NERAKIN-RAIS, 2016:1).

The World Bank Group (2006) distinguished between the three methods of knowledge sharing as shown in Table 2.5.
Table 2.5 Three main frameworks to promote and invest in knowledge in the agricultural sector.

<table>
<thead>
<tr>
<th>Defining features</th>
<th>NARS</th>
<th>AKIS</th>
<th>AIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actors</td>
<td>Research organisations</td>
<td>Farmer, research, extension, and education</td>
<td>Wide spectrum of actors</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Technology invention and TOT</td>
<td>Technology adoption and innovation</td>
<td>Different types of innovation</td>
</tr>
<tr>
<td>Organising principle</td>
<td>Utilising science to create new technologies</td>
<td>Accessing agricultural knowledge</td>
<td>New uses of knowledge for social and economic change</td>
</tr>
<tr>
<td>Mechanism for innovation</td>
<td>TOT</td>
<td>Knowledge and information exchange</td>
<td>Interaction and innovation among stakeholders</td>
</tr>
<tr>
<td>Role of policy</td>
<td>Resource allocation, priority, setting</td>
<td>Linking research, extension, and education</td>
<td>Enabling innovation</td>
</tr>
<tr>
<td>Nature of capacity strengthening</td>
<td>Strengthening infrastructure and HR</td>
<td>Strengthening communication between actors in rural areas</td>
<td>Strengthening interactions between all actors; creating an enabling environment</td>
</tr>
</tbody>
</table>


Mulhall and Garforth (2000) defined extension pluralism as the emergence of multiple actors providing services, either autonomously in response to farmer demand or facilitated by government policy measures.

In many cases, potential partners in extension agree on a set of criteria that the new technologies should meet, namely (Anandajayasekeram, Puskur, Workneh and Hoesktra, 2008:63):
• Farmers participate in innovation, evaluation and diffusion.
• Indigenous knowledge and skills are an integral part of the technology development and dissemination process.
• Adopt technology that is cheap and accessible, assists in averting risk, and is socially and culturally sensitive.
• New technologies aim to enhance the sustainability of the entire farming system and not merely the production of a single commodity.

Schwartz and Kampen (1992) recommended the need for a pluralistic extension system as public extension services need to be accountable to both the clients and the wider population. At best, partnership programmes reflect the strengths of all partners and minimise the weaknesses (Scoppetta, 2006). Scoppetta (2006:13) further explained that collaboration of individual extension partners could strengthen all role-players since it:

• addresses multi-sectoral (or cross-sectoral) challenges in order to improve the quality of support to certain target groups or sectors;
• develops a multidimensional orientation (integrated approaches to multidimensional problems);
• increases effectiveness and efficiency in the use of partners' resources; and
• makes the best use of synergies and prevents duplications of activities in the region.

Christoplos (1996:14) strongly encourages the support of pluralism extension with the following explanations:

• Pluralism should be encouraged by acknowledging that a broad variety of structures providing extension services are already in place in any rural development context.
• Pluralism is not something which a development agency can “implement”.

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• Pluralism is best promoted by refocusing national level efforts on the vision and principles, while leaving methodological decisions to a broad spectrum of service providers.

• Failed models of controlling the vast and complex array of private, public, and nongovernmental institutions providing agricultural services should be abandoned. Instead, constructive cooperation in favour of chosen target groups should be supported. Methods such as participatory rural appraisal (PRA) have proven effective for establishing platforms to include target groups in negotiating access to the services which they need.

• The various new participatory methods, which lead to platform approaches (such as PRA), represent a fresh start for supporting pluralism.

• More attention, however, needs to be paid to exploring how the platforms initiated can be fostered over time and beyond project contexts.

It is not beneficial to copy fixed designed models of extension to any situation because extension services differ in different places (Birner, Davis, Pender, Nkonya, Anandajyasekeram, Horna and Benin, 2009). Therefore, Rivera (1996) recommended strategic funding and shared service provision as explained in Table 2.6.
Table 2.6 Matrix of options for providing and financing pluralistic agricultural advisory services.

<table>
<thead>
<tr>
<th>Description</th>
<th>Service provider</th>
<th>Source of finance</th>
<th>Public sector</th>
<th>Farmers</th>
<th>Private companies</th>
<th>NGOs</th>
<th>Farmer-based organisations (FBOs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public sector</td>
<td>Public sector extension services with different degrees</td>
<td>Public-sector extension agents with farmers paying fees</td>
<td>Public-sector extension agents hired by private companies</td>
<td>Public-sector extension agents hired by NGOs</td>
<td>Public-sector extension agents hired by FBOs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private companies</td>
<td>Publicly funded contracts or subsidies to private service providers</td>
<td>Private service providers hired and paid for by farmers</td>
<td>Information provided with sale of inputs</td>
<td>Private service providers hired and paid for by NGOs</td>
<td>Private service providers hired and paid for by FBOs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGOs</td>
<td>Publicly funded contracts or subsidies to NGO service provider</td>
<td>Extension agents hired by NGOs, with farmers paying fees</td>
<td>None</td>
<td>Extension agents hired by NGOs as a free service to farmers</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBOs</td>
<td>Publicly funded contracts or subsidies to FBO service providers</td>
<td>Extension agents hired by FBOs, with farmers paying fees</td>
<td>None</td>
<td>Extension agents hired by NGOs and paid for by FBOs</td>
<td>Extension agents hired by FBOs as a free service to farmers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Rivera (1996)

Bitzer, Wennink and De Steenhuijsen Pipers (2016) found an emergence of pluralism in recent extension reform. Extension pluralism is advantageous in that it allows the input of different institutions and disciplines from outside the extension sector (Bitzer et al., 2016). Within the
context of disruptive innovations and rapidly changing business environments, performance management has recently become one of the most debated topics within the HR arena. Some organisations have discarded their traditional PMS and have adopted a completely new approach. Other organisations are rethinking their current framework and considering changes (Krullaars and Visbeen, 2015). In general, it seems that the novelty of performance indicators wears off relatively quickly, and after a number of years, performance tends to decline again. In Ethiopia, the outcome dimension is captured by measuring the number of farmers adopting a standardised technology package. Integrating farmers’ satisfaction into performance indicators may be a way to circumvent the narrow focus on technology adoption and ensure two-way communication on what constitutes good performance and direct outcomes of such outcomes (Bitzer et al., 2016).

2.11 SUMMARY

From the literature reviewed, it is evident that performance management may be affected by different factors that could lead to its success or failure. The intention of a PMS is to better organisations, but its success depends on the strategies, leadership, and compatibility of the system to the organisation as well as the culture of the organisation. Similarly, extension as a phenomenon of helping farmers to help themselves is influenced by many factors that could lead to either its failure or success. It depends on the approach utilised to extend services to the clients. As the world evolved, the performance management and the extension sectors evolved. In this manner, agricultural extension organisations need to rethink and develop a PMS that is compatible with current recommended extension approaches; not simply adopting any system since the systems are not one-size-fits-all. Both performance management and extension have gone through many reforms in order to determine their best fit. The literature shows that the PMS has failed in most of the organisations that utilised such a system, while few case studies have found the PMS to be successful. The other similarity of performance management and extension service is that their recent approaches
call for participatory systems that involve all the staff members of an organisation since they are demand-driven.
CHAPTER 3 METHODS

3.1 RESEARCH DESIGN

A research design encompasses the methodology and procedure employed to conduct scientific research. The design of the study defines the study type, research question, independent and dependent variables, and data collection methods (Boundless, 2015).

This study utilised descriptive and quantitative methods. The functional paradigm that guides the quantitative mode of enquiry is based on the assumption that social reality has an objective ontological structure and that individuals are responding agents to this objective environment (Morgan and Smircich, 1980:498). The advantage of this method is that it generates highly accurate and precise quantitative or numerical data.

The study investigated the factors influencing the PMS in extension service delivery. The study came about due to the awareness that the MOA’s performance is unsatisfactory and there are some failing agricultural projects in Botswana; thus the outcry of poor extension service delivery despite public service reform strategies being in place.

A descriptive research study is a study designed to depict the participants in an accurate way. There are three ways a researcher can conduct a descriptive research project, namely:

- **Observational**: A method of viewing and recording participants.
- **Case study**: An in-depth study of an individual or group of individuals.
- **Survey**: A brief interview or discussion with an individual about a specific topic (Kowalczyk, 2003:1).

A survey and case study design was utilised in this study. These designs are discussed in the sections that follow.
3.1.1 Survey

A one-on-one interview was conducted with the strategic officer of the MOA at the Office of the PS. The strategic officer is responsible for overseeing the implementation of the PMS in all departments. There was a discussion with the strategic officer on clarity of the general purpose and influence of the PMS in the ministry. This officer reports directly to the PS on the performance of the ministry. He oversees all the performance improvement coordinators (PICs) of the departments based strategically at the ministry. The four PICs for the departments selected to be involved in the study (the DAP, DCP, DVS, and DABP) were also interviewed. The department PICs are responsible for the training, rewarding, and reforms that affect their departments. They are also responsible for the implementations of the reforms and performance improvement within their departments. The PICs compile all the reports concerning performance improvement on a departmental level but based at the ministry. The PICs were interviewed to provide more information on the purpose, objectives, and status of the PMS in their departments.

3.1.2 Case study

Two sets of questionnaires were administered to two groups of respondents. One set of questionnaires was administered to the extension officers of the four departments in two districts, namely: Kweneng and Southern District. Another set of questionnaires was specifically designed for the supervisors of the extension workers at sub-district level and HODs at district level. Figure 3.1 represents the agricultural district’s structure.
3.2 DESCRIPTION OF THE STUDY AREA

The description of the study area provides a view of the location and why it was selected to conduct the research.

3.2.1 Selection of the study area

The poverty rate in Botswana is estimated at 19.3%, while rural absolute poverty is estimated at 8.4% (of which one-third of the heads of households work on their own arable lands or cattle posts). Smallholder farming is the dominant livelihood activity in the rural areas and a substantial source of food, employment, and income. However, agriculture accounts for less than 2% of the overall gross domestic product (GDP) (Marumo, Tselaeesele, Batlang, Nthoiwa and Jansen, 2014). The Government of Botswana therefore developed several agricultural programmes such as the Integrated Support Programme for Arable Agriculture Development (ISPAAD) and Livestock Management and Infrastructure Development (LIMID) as interventions. The Kweneng and Southern Districts are some of the agricultural extension areas that implement these programmes.
These two districts cover more than 20% of the total area of the country and have many privately-owned ranches. The 2016 DVS Extension Field Report indicated that there are approximately 311 206 cattle in Kweneng and 308 470 cattle reared in the Southern District (Gaopatwe, 2016). Moreover, the 2016 DCP Extension Field Report showed that there are 18 287 crop producing farmers using 69 644 hectares of land in Kweneng, while there are 18 925 farmers for 99 850 hectares in the Southern District (Morapedi, 2016).

These districts are still marked by the failure of projects and poor extension service delivery. Marumo et al. (2014) opined that ISPAAD failed due to poor implementation to fulfil their intended objectives of increasing grain production; thus, the households who received the programme packages still experience poverty.

The two districts selected as study areas are among the first three largest districts and largest continuous growing populations in Botswana (Table 3.1). They are in close proximity to the capital city and have many branches, making them attractive to extension research. Sustainability of agriculture in this area is of great importance because the agriculture sector has to find means of increasing production to cater for the growing population to avoid poverty. Additionally, the districts have potential for agro-entrepreneurship and there is a challenge of introducing urban agriculture since the city grows to these districts. To solve all these challenges, extension service delivery has to be evaluated, hence evaluating its management system in these two districts.
### Table 3.1 The population of the districts of Botswana according to census results and latest official projections.

<table>
<thead>
<tr>
<th>Name</th>
<th>Capital</th>
<th>Area (A km²)</th>
<th>Census (Cf) 1981-08-12</th>
<th>Census (Cf) 1991-08-14</th>
<th>Census (Cf) 2001-08-17</th>
<th>Census (Cf) 2011-08-22</th>
<th>Projection (P) 2017-08-22</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Botswana</strong></td>
<td>Gaborone</td>
<td>581 730</td>
<td>941 027</td>
<td>1 326 796</td>
<td>1 680 863</td>
<td>2 024 904</td>
<td>2 266 900</td>
</tr>
<tr>
<td>Central</td>
<td>Serowe</td>
<td>142 302</td>
<td>358 024</td>
<td>463 797</td>
<td>563 260</td>
<td>638 604</td>
<td>688 100</td>
</tr>
<tr>
<td>(incl. Orapa, Selebi-Phikwe,)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghanzi</td>
<td>Ghanzi</td>
<td>117 910</td>
<td>19 096</td>
<td>23 725</td>
<td>33 170</td>
<td>43 355</td>
<td>50 900</td>
</tr>
<tr>
<td>Kgagadi</td>
<td>Tsabong</td>
<td>105 200</td>
<td>24 059</td>
<td>32 128</td>
<td>42 049</td>
<td>50 492</td>
<td>56 400</td>
</tr>
<tr>
<td>Kgatleng</td>
<td>Mochudi</td>
<td>7 960</td>
<td>44 461</td>
<td>57 770</td>
<td>73 507</td>
<td>91 660</td>
<td>104 700</td>
</tr>
<tr>
<td>Kweneng</td>
<td>Molepolole</td>
<td>31 100</td>
<td>117 129</td>
<td>170 437</td>
<td>230 335</td>
<td>304 549</td>
<td>359 100</td>
</tr>
<tr>
<td>North East</td>
<td>Masunga</td>
<td>5 199</td>
<td>67 701</td>
<td>108 598</td>
<td>132 422</td>
<td>159 225</td>
<td>178 000</td>
</tr>
<tr>
<td>(incl. Francistown)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North West</td>
<td>Maun</td>
<td>129 930</td>
<td>75 997</td>
<td>108 660</td>
<td>142 970</td>
<td>175 631</td>
<td>198 900</td>
</tr>
<tr>
<td>South East</td>
<td>Ramotswa /Gaborone</td>
<td>1 991</td>
<td>109 340</td>
<td>203 104</td>
<td>276 319</td>
<td>345 613</td>
<td>395 500</td>
</tr>
<tr>
<td>(incl. Gaborone, Lobatse)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern</td>
<td>Kanye</td>
<td>28 570</td>
<td>125 220</td>
<td>158 577</td>
<td>186 831</td>
<td>215 775</td>
<td>235 300</td>
</tr>
<tr>
<td>(Jwaneng)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Botswana: Republic of Botswana (n.d.)*
3.2.2 Geographic location

Kweneng District is located in the south-eastern part of Botswana. It has a large population of 304,549 people, representing approximately 15% of Botswana’s population. The district comprises three sub-districts, namely: Letlhakeng, Molepolole/Lentsweletau, and Mogoditshane/Thamaga. There are 57 villages in the entire district (Kweneng District profile, 2013).

The Southern District of Botswana is also known as the Ngwaketse district and Kanye is the capital. Bangwaketse is located in the Southern District, one of the largest growing villages in Botswana. The Jwaneng diamond mine, the third diamond mine of Botswana, is also located in the Southern District. The district boarders the North West Province of South Africa in the South. Sub-districts of the Southern District include: Good Hope, Kanye, and Mabutsane (Southern District (Botswana), n.d.). It is also home to Botswana’s largest beef farmers from large privately-owned ranches, and several government beef ranches which provide agricultural support to the locals. The vegetation is Savannah-esque, with tall grass, bushes, and trees (Southern District (Botswana), n.d.). The population of the Southern District is estimated at 215,775 (Botswana: Republic of Botswana, n.d.). The demarcation of these districts is shown in Figure 3.2.
3.3 RESEARCH VARIABLES AND MEASUREMENT

The dependent variable of this study is the influence of the PMS on agricultural extension. It is the outcome variable since it is the basic reason for conducting the research. Therefore, the independent or conceptual variables are the ideas that need further assessment and measurement. In this case, the conceptual variables are the factors that influence the extension PMS in extension work. To operationalise the variables, factors that influence extension performance management were measured. These factors include: strategies utilised to implement the PMS; leadership styles; methods of feedback and communications; benefits offered to employees by the system; support system from the managers; and availability of resources.

The ordinal and nominal methods of variable measurements were utilised. The ordinal method was utilised where the data was ranked, and the permissible statistics of percentiles
and correlations were utilised appropriately. On the other hand, the nominal method of variable measurement was utilised to measure data that had two or more mutually exclusive categories.

3.4 SAMPLE AND DESIGN

A survey and individual interviews were utilised in this study. One strategic officer and three PICs for the DAP, DCP, and DABP were administered a questionnaire, while there was no representative for the DVS at the time of the interviews. Eight HODs (four from each district) at district level and 15 supervisors for the different departments at sub-district level also responded to a set of questionnaires to provide data that is representative of their perceptions on the implementation of the PMS. A “supervisor” will be referred to as an “immediate supervisor to the extension officer” and appraises the extension officer via the current PMS. The supervisors at the sub-district level report to their HODs and are therefore appraised by them.

Ninety-seven extension officers from different departments in different extension areas also responded to a set of questionnaires to provide their opinions on the implementation of the PMS and its effects on their service delivery. Furthermore, secondary data such as reports, other research works, and newsletters related to the study were also utilised to gather data.

3.5 POPULATION

A research population is generally a large collection of individuals or objects that are the focus of a scientific query. It is for the benefit of the population that the research is done. According to Creswell (2012), a population is an entity of individuals with common characteristics which research can recognise and study. The population of this study is the number of extension officers in the country for four departments, namely: DAP; DCP; DVC; and DABP. There are 687 extension workers from these departments in the 10 districts of Botswana (Table 3.2).
However, there are only 190 extension workers \((116 + 74 = 190)\) for the two research areas (Kweneng and Southern Districts).

There are four HODs at district level, with one representative each; therefore, all eight of the two districts responded to the questionnaires. There are approximately 20 supervisors at the sub-district levels of the two districts and only 15 of them were respondents. Regarding interviews, the head of the Strategic Office was selected as a representative for the Office of the PS. In total, there were four PICs for the departments concerned (one for each department); hence, they were all interviewed.

**Table 3.2 Number of extension officers per district and per department in Botswana.**

<table>
<thead>
<tr>
<th>No.</th>
<th>Districts</th>
<th>DABP</th>
<th>DCP</th>
<th>DVS</th>
<th>DAP</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>South-East</td>
<td>5</td>
<td>8</td>
<td>17</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Southern</td>
<td>4</td>
<td>45</td>
<td>32</td>
<td>35</td>
<td>116</td>
</tr>
<tr>
<td>3</td>
<td>Kweneng</td>
<td>5</td>
<td>35</td>
<td>20</td>
<td>14</td>
<td>74</td>
</tr>
<tr>
<td>4</td>
<td>Kgatleng</td>
<td>5</td>
<td>14</td>
<td>10</td>
<td>7</td>
<td>36</td>
</tr>
<tr>
<td>5</td>
<td>Central</td>
<td>16</td>
<td>87</td>
<td>72</td>
<td>51</td>
<td>226</td>
</tr>
<tr>
<td>6</td>
<td>North-East</td>
<td>8</td>
<td>13</td>
<td>28</td>
<td>9</td>
<td>58</td>
</tr>
<tr>
<td>7</td>
<td>North-West</td>
<td>5</td>
<td>17</td>
<td>15</td>
<td>10</td>
<td>47</td>
</tr>
<tr>
<td>8</td>
<td>Chobe</td>
<td>2</td>
<td>3</td>
<td>12</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>9</td>
<td>Ghanzi</td>
<td>5</td>
<td>7</td>
<td>18</td>
<td>8</td>
<td>38</td>
</tr>
<tr>
<td>10</td>
<td>Kgalagadi</td>
<td>4</td>
<td>4</td>
<td>19</td>
<td>4</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>59</strong></td>
<td><strong>233</strong></td>
<td><strong>243</strong></td>
<td><strong>152</strong></td>
<td><strong>687</strong></td>
</tr>
</tbody>
</table>

Sources:
- DABP PIC Office (2016)
- DCP Training and Reform Office (2016)
- DVS Extension Field Office (2016)
- DAP PIC Office (2016)
3.6 SAMPLE SIZE AND SAMPLING METHOD

Sampling is the act, process, or technique of selecting a suitable sample, or a representative part of a population for determining parameters or characteristics of the entire population (Mugo, 2002). The population sample of extension officers comprised extension workers based in the Kweneng and Southern Districts of Botswana. The two districts have approximately 190 extension officers for four departments; however, only 97 were selected as respondents (Table 3.3).

<table>
<thead>
<tr>
<th>Departments</th>
<th>Number of extension workers per districts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kweneng</td>
</tr>
<tr>
<td>DAP</td>
<td>5</td>
</tr>
<tr>
<td>DCP</td>
<td>15</td>
</tr>
<tr>
<td>DVS</td>
<td>8</td>
</tr>
<tr>
<td>DABP</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

Random systematic sampling was utilised to select the representative sample of the entire population of extension officers. In general, random sampling requires that, in every draw, each eligible population element be given equal probability of selection (Tryfos, 2001). Since there were few district HODs, supervisors, and PICs, random sampling was not utilised as all the representatives at the time of data collection were considered respondents.

3.7 DATA COLLECTION INSTRUMENTS

A data collection instrument is an information collection and measuring tool utilised to...
answer relevant questions on targeted variables in order to obtain the outcomes. The two types of data collection tools, which are primary and secondary data collection, were both utilised in the study.

3.7.1 Primary data collection

3.7.1.1 Questionnaire

Taylor-Powell (1998) defined a questionnaire as an information-collecting tool which a researcher utilises to draw details and facts of the study and be able to represent and interpret the results in an understandable way. As a data-collecting instrument, it could be structured or unstructured. This tool was utilised to collect information from the extension officers, district HODs, and sub-district supervisors to provide clarity on their perceptions on the implementation of the PMS. The questionnaire consisted of both structured and unstructured questions. The questionnaires were administered to individuals whom then answered in the presence of the interviewer; in some cases, the respondents were grouped but answered the questions individually. The questionnaires were flexible in that the researcher discussed the questions with the respondents for the sake of clarity.

3.7.1.2 Interviews

Interviews were conducted to obtain information from the head of the Strategic Planning Office of the MOA and PICs of the four departments on the purpose, objectives, and implementation of the PMS in the ministry and respective departments. These were one-on-one interviews and the interviewer audio-recorded the interviews.

3.7.2 Secondary data collection

Secondary data is information that has been collected for a purpose other than the current research project but has some relevance and utility for one’s research (Grimsly, 2003). The
sources of secondary data can be internal or external to the organisation or programme being investigated. The literature utilised were gathered from sources such as journal articles, books, conferences, newspapers, administrative reports and records, and previous studies related to the research topic. The following secondary data sources were utilised:

- administrative reports;
- annual government reports for each department on the PMS; and
- scholarly research.

3.8 DATA ANALYSIS AND INTERPRETATION

Data collection in the field can take a long time; however, the researcher can continually reflect, analyse, and adjust the research during this time. Pieces of data ought to be carefully labelled and organised in a way that eases ongoing analysis. This process of analysis involves making sense of data recorded in text, image, audio, and/or video formats (Centre for Teaching, Research and Learning, 2016). The Statistical Package for Social Sciences (SPSS) was employed to analyse the raw data collected during the study.

The steps involved in data analysis are a function of the type of information collected; the purpose of the assessment and the assessment questions will provide a structure for the organisation of the data and a focus in the analysis (Interpretation of data: The basics, 2014). In this research, quantitative as well as qualitative analysis was conducted.

3.8.1 Qualitative data analysis

The information gathered during the interviews conducted with the strategic and planning officer and the PICs of the different departments was physically analysed by evaluating the common information that leads to achieving the study goals presented in tables.
3.8.2 Quantitative data analysis

A detailed analysis of numerical data was conducted in order to make sense of and derive meaning from the information. This analysis was done on the data collected through different sets of questionnaires administered to the extension officers, extension officers’ supervisors, and the district HODs. Descriptive statistics, cross-tabulations, and correlations of the results were utilised for the following reasons (Kent State University, 2018):

- **Descriptive statistics**: It was used in order describe the features of the study and to calculate averages of large amounts of data to compile an understandable summary.
- **Cross-tabulations**: This method is very important in comparing different variables of the study and also to determine the relationships among the variables.
- **Correlations**: The bivariate Pearson correlation produces a sample correlation coefficient, \( r \), which measures the strength and direction of linear relationships between pairs of continuous variables. By extension, the Pearson correlation evaluates whether there is statistical evidence for a linear relationship among the same pairs of variables in the population.

The analysed information is presented in tables and graphs. Tables are a simple means of presenting analysed data because they interact well with the written discussions (Kent State University, 2018).

3.9 ETHICAL CONSIDERATIONS

The respondents’ views and opinions were treated with a high level of confidentiality and were not disclosed to any third parties. Respondents’ names were not revealed in the questionnaires. The participants were given the right to participate willingly and treated with respect and dignity.
CHAPTER 4  RESULTS

4.1  INTRODUCTION

This chapter discusses the results that explain the understanding of the PMS by the Strategic and Planning Office of the MOA and the PICs of the departments. The chapter also highlights the results of the socio-economic characteristics of extension officers and their supervisors in the chosen study areas. A thorough description of participants allows readers and researchers to determine to whom research findings can be generalised and allows comparisons to be made across replications of studies. It also provides the information needed for research syntheses and secondary data analyses (Bein, 2009). The respondents’ characteristics were evaluated for the purpose of personal profiling. These characteristics included: gender, age group, work experience, and qualification. It also focuses on the opinions of the extension workers and their superiors on the implementation of the PMS in relation to their service delivery. It looks at the degree of the availability of resources in the workplace, the workload of extension officers, the benefits that the PMS offers to the workers, and the general influence of the PMS on extension work delivery.

4.2  PERCEPTIONS OF THE HEAD OF STRATEGIC AND PLANNING OFFICE OF THE MINISTRY ON THE IMPLEMENTATION OF THE PERFORMANCE MANAGEMENT SYSTEM

4.2.1  The culture of implementing the performance management system

During the interview with the strategic and planning officer of the MOA, it was outlined that the purpose of the PMS for the ministry is to monitor the fulfilment of the ministry’s goals and reporting. The ministry draws its goals from the NDP, which sets the objectives of the PS. The directors of the different departments and the DACs draw their objectives from the PS’s objectives. The district HODs draw their objectives from the DACs. Supervisors in sub-districts and extension officers in varying extension areas align theirs with the objectives of the HODs in their respective districts.
The PMS implementation was conducted utilising a top-down approach; there are no consultations with subordinates or front-line extension workers during planning; thus, no participatory approaches are employed during its implementation. Even though the top-down approach is utilised, there is a flexibility to accommodate initiatives by extension officers in addition to the set and aligned objectives.

The reform officer in the PS’s office indicated that the PMS has long been used in promotions of extension officers. Since 2013, however, they coupled the PMS with competency-based interviews to neutralise possible biases of the appraisals. Each department also arranges its own way of rewarding employees. The MOA has never evaluated the PMS since its implementation because it is the responsibility of the National Strategy Office (NSO) and the Government Implementation Coordinating Office (GICO).

### 4.2.2 Challenges encountered in the implementation of the performance management system

The respondent further explained that subordinates on their respective levels, especially on district-level, often do not align their objectives to those of their directors because:

- They set their own objectives which they perceive to be appropriate and achievable in their workplace.
- The MOA is poorly structured since the extension service is under the supervision of the directors of the departments at ministerial level. Additionally, the DACs at district level have different duties but the same controlling powers.
- Officers do not feel ownership of this strategy because they perceive that it is utilised for promotions and rewards, which extension officers perceived as unfair.

Because of the aforementioned reasons, there are contradictions of performance appraisal marks. Individual subordinates at a lower level of the structure receive high marks, while their
directors of departments, PS, and the ministry in general receive lower marks. This demonstrates the poor structure and alignment of responsibilities within the ministry.

In summary, the strategic officer indicated that the PMS could be an effective performance improvement tool if it had a good supporting system. The officer highlighted that some officers do not understand the system properly, some are not interested in it, and the ministerial structure contributes confusion in implementing the tool. These results raise questions regarding the type of implementation strategy utilised.

4.3 PERCEPTIONS OF PERFORMANCE IMPROVEMENT COORDINATORS OF THE DEPARTMENTS ON THE IMPLEMENTATION OF THE PERFORMANCE MANAGEMENT SYSTEM

PICs are officers within each department who have been assigned the duties of reform and training in their departments. These officers are assigned these additional duties since they are specialists in their respective departments, that is, they have core duties in the field of agriculture, which they are appointed for. They do not have tertiary training qualifications in management or project development, monitoring, and evaluation. They completed short training courses in relation to managing the PMS through the Strategic Office. The PICs that they have a heavy workload, therefore they did not give the PMS implementation their undivided attention. In addition to this, the PICs have indicated that they did not receive a salary increase or allowance for performing these additional reform duties.

The PICs indicated that there are numerous stumbling blocks to the implementation of the PMS. These challenges were outlined as poor ministerial structure; poor PMS implementation strategy (blueprint approach); incompetence of supervisors during appraisals since they are biased and thus demotivate workers; and poor feedback and evaluation strategies in the entire cycle of the PMS implementation (Table 4.1). The responses were received from three departments, namely: the DABP, DCP, and DAP, since the DVS did not have a PIC at the time of the interviews.
Table 4.1 The perceptions of performance improvement coordinators on the implementation of the performance management system.

<table>
<thead>
<tr>
<th>DABP</th>
<th>DCP</th>
<th>DAP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qualification of PICs and purpose of the PMS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The PIC holds a Master’s degree in International Trade. He is responsible for training and reform of the department, and other duties in the field of speciality. The officer explained that the PMS is utilised for monitoring performance in the department.</td>
<td>The PIC holds a (first) degree in Agriculture. He is responsible for the training and reforms of the department, and also performs other duties in the field of speciality. The officer stated that the purpose of PMS in the department is to manage performance.</td>
<td>The PIC holds a (first) degree in Animal Science. He is responsible for the training and reform of the department, and also heads the Small Stock Office in the MOA. The department utilises the PMS to improve and monitor the performance of the department.</td>
</tr>
<tr>
<td><strong>Uses of the PMS in promotions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The officer indicated that only the PMS was initially utilised regarding promotions. However, it is now utilised in conjunction with competency-based interviews.</td>
<td>The officer indicated that only the PMS was initially utilised regarding promotions. However, it is now utilised in conjunction with competency-based interviews. Since it was considered inadequate by itself.</td>
<td>The officer indicated that only the PMS was initially utilised regarding promotions. However, it is now utilised in conjunction with competency-based interviews since it was considered inadequate by itself.</td>
</tr>
<tr>
<td><strong>Effects of PMS on meeting farmers’ needs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The PIC indicated that the PMS does not satisfactorily</td>
<td>The officer showed dissatisfaction with the use</td>
<td>The officer showed dissatisfaction with the use of</td>
</tr>
</tbody>
</table>
### Qualification of PICs and purpose of the PMS

<table>
<thead>
<tr>
<th>DABP</th>
<th>DCP</th>
<th>DAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>lead to meeting farmers’ needs since the extension officers cascade their objectives from those of the supervisors who are drawn from the department’s director. It was further clarified that, despite this, there is flexibility and allowance for the extension officers to add their initiatives.</td>
<td>of the PMS. He does not consider it a complete solution in meeting the farmers’ needs because of the use of the top-down approach in developing the objectives. It was further clarified that, despite this, there is flexibility and allowance for the extension officers to add their initiatives.</td>
<td>the PMS. He does not consider it a complete solution in meeting the farmers’ needs because of the use of the top-down approach in developing the objectives. It was further clarified that, despite this, there is flexibility and allowance for the extension officers to add their initiatives.</td>
</tr>
</tbody>
</table>

### Evaluation and providing feedback via the PMS

| The PIC indicated that the DABP has never evaluated the PMS. Furthermore, it was explained that the | The officer explained that the DCP does not formally evaluate the PMS, but occasionally identifies | It was explained that the DAP never evaluates the PMS, since the department relies on what the Strategic and |
### Qualification of PICs and purpose of the PMS

<table>
<thead>
<tr>
<th>DABP</th>
<th>DCP</th>
<th>DAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ratings that the supervisor gives to a subordinate during appraisals are the only ones utilised as feedback to individual officers.</td>
<td>issues related to the PMS and addresses these issues. It was further indicated that the department holds divisional and staff welfare meetings during which they provide feedback on performance and identify possible interventions.</td>
<td>Planning Office of the MOA has planned. Furthermore, it was explained that the ratings that the supervisor gives to a subordinate during appraisals are the only ones utilised as feedback to individual officers.</td>
</tr>
</tbody>
</table>

### Challenges in the implementation of the PMS

<table>
<thead>
<tr>
<th>DABP</th>
<th>DCP</th>
<th>DAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>The PIC pointed out the following as challenges of the PMS in the DABP: The MOA is poorly structured and therefore makes the implementation of the PMS difficult. This structure fails the departments in improving the performance of extension delivery. Poor cascading of objectives; some officers go along with what they feel needs to be done.</td>
<td>The PIC pointed out the following as challenges of the PMS in the DCP: Some officers do not understand the PMS properly. Some are not interested in it, to the extent that they refuse to be appraised.</td>
<td>The PIC pointed out the following as challenges of the PMS in the DABP: The MOA is poorly structured and therefore makes the implementation of the PMS difficult. This structure fails the departments in improving the performance of extension delivery. Poor cascading of objectives; some officers go along with what they feel needs to be done. Biases of the supervisors during appraisals.</td>
</tr>
</tbody>
</table>
Biases of the supervisors during appraisals. The PIC officer has a heavy workload; therefore, there is no capacity to initiate evaluations properly.

Incompetence of supervisors in appraisals. The PIC officer has a heavy workload; therefore, there is no capacity to initiate evaluations properly.

The PIC officer has a heavy workload; therefore, there is no capacity to initiate evaluations properly.

The PIC officer has a heavy workload; therefore, there is no capacity to initiate evaluations properly.

The PIC for the DABP indicated that the PMS is a good tool for monitoring performance; however, the implementation strategy has many gaps.

The PIC for DCP pointed out that the PMS is not perfect for improving the performance of the department as it faces challenges and has gaps.

The PIC for the DAP stated that the tool could be very good if well implemented. Additionally, the PMS needs to be supplemented with other tools to improve its performance.


4.4 PERCEPTIONS OF EXTENSION OFFICERS AND SUPERVISORS ON THE IMPLEMENTATION OF THE PERFORMANCE MANAGEMENT SYSTEM

4.4.1 The extension officers’ socio-economic characteristics

Table 4.2 shows that 63.9% of the extension officers were male, while 36.1% were female. The extension officers of the DVS have the highest number of males (78.6 %). Masanja (2010) revealed that there are still few educated females compared to their male counterparts, especially in the fields of science, mathematics, and technology. Women are still pursuing
careers perceived relevant for women such as nursing, secretarial, and social work. The results also show that most of the respondents (49.5%) fall under the age groups of between 40 and 55 years, followed by 42.3% for the age group under 40 years, only 8.2% were over 55 years. The DCP and DABP had no respondents older than 55 years, while most respondents over the age of 55 years were in the DVS (21.4%), followed by the DAP (8.7%).

The results showed that a third (33.3%) of all the extension officers have more than 15 years’ work experience. More than half (57.9%) of the extension officer’s from the DVS have more than 15 years’ work experience. Extension officers for the DAP have work experience of six years and more; between 6 and 10 (37.4%); between 10 and 15 (31.3%), and more than 15 (31.3%). On the other hand, the DCP has more extension officers (45.8%) wit between 6 to 10 years’ work experience. The DABP has more experienced extension officers; 50% have between 11 and 15 years’ experience, while the other 50% have over 15 years’ work experience. The results further revealed that three departments (DAP, DCP, and DVS) have no officers with Master’s degrees, while 28.6% of the DABP sample hold Master’s degrees. The DVS has the highest (53.6%) number of certificate holders, followed by DAP (26.1%), and the DCP (23.1%). The DAP has the highest (47.8%) number of first degree holders.
Table 4.2 Cross-tabulation of socio-economic characteristics of extension officers by their departments.

<table>
<thead>
<tr>
<th>Socio-economic characters of extension officers</th>
<th>Frequency (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DAP</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>69.6</td>
</tr>
<tr>
<td>Female</td>
<td>30.4</td>
</tr>
<tr>
<td><strong>Age group</strong></td>
<td></td>
</tr>
<tr>
<td>Less than 40</td>
<td>52.2</td>
</tr>
<tr>
<td>Between 40 and 55</td>
<td>39.1</td>
</tr>
<tr>
<td>More than 55</td>
<td>8.7</td>
</tr>
<tr>
<td><strong>Work experience</strong></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>0.0</td>
</tr>
<tr>
<td>Between 1 and 5</td>
<td>0.0</td>
</tr>
<tr>
<td>Between 6 and 10</td>
<td>37.4</td>
</tr>
<tr>
<td>Between 11 and 15</td>
<td>31.3</td>
</tr>
<tr>
<td>Above 15</td>
<td>31.3</td>
</tr>
<tr>
<td><strong>Qualification</strong></td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>26.1</td>
</tr>
<tr>
<td>Diploma</td>
<td>26.1</td>
</tr>
<tr>
<td>First degree</td>
<td>47.8</td>
</tr>
<tr>
<td>Master’s</td>
<td>0.0</td>
</tr>
</tbody>
</table>
4.4.2 Correlations of the extension officers’ age group, work experience, and qualification

Table 4.3 shows that the negative correlation (-0.496) of age group implies that the elder the extension officer, the lower educational qualification they possess. Additionally, the negative correlation (-0.652) of work experience indicates that extension officers with more work experience have lower qualifications. Conversely, the results show 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, the more work experience they possess, while the younger they are, the less work experience they possess. With rapid changes in technology, farmers’ needs, market situation, and competitive environment, planning for HR has become an important, challenging task for extension (Miller, Burack and Albrescht, 1980).

In 2005, the Department of Agriculture, Forestry and Fisheries (DAFF) in South Africa formally recognised the need for professionalism in extension when the DAFF published a report titled “Norms and Standards for Extension and Advisory Services in Agriculture”. The study revealed poor extension to farmer ratios (including capacity shortfalls and constraints), knowledge and skills shortfalls as key and critical issues, lack of professionalism and commitment, and an environment which is not conducive to efficient and effective service delivery (Terblanche, 2013:95).

Table 4.3 Pearson correlations of extension officers’ age group, work experience and qualification.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Age group</th>
<th>Work experience</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson correlation</td>
<td>Sig. (2-tailed)</td>
<td>Pearson correlation</td>
</tr>
<tr>
<td>Age group</td>
<td>1</td>
<td>-</td>
<td>0.492</td>
</tr>
<tr>
<td>Work experience</td>
<td>0.492</td>
<td>0.000</td>
<td>1</td>
</tr>
<tr>
<td>Qualification</td>
<td>-0.496</td>
<td>.000</td>
<td>-0.652</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.01 level (2-tailed).
Among other duties, the extension officers revealed that their responsibilities include advisory services on production through different methods of training and demonstrations, and implementation of the agriculture-orientated projects and programmes. Therefore, for an extension officer to be competent in his/her work, he/she has to be well developed and advanced in agriculture and interacting with people from different backgrounds. Agricultural extension has many different branches since the extension worker has to impart technological knowledge to farmers in order for them to help themselves. The key to delivering their service well is therefore human development (Lopotoyit, Onyango, Kibett and Langat, 2012).

4.4.3 The socio-economic characteristics of the extension officers’ supervisors and heads of the department

The majority of the extension officers’ supervisors in the sample were male (73.3%), while females comprised 26.7% of this group. In total, 86.7% of the supervisors were below the age of 55 years, while 26.7% were below 40, and 60% were between the ages of 40 and 55. The results also indicate that most of the supervisors are experienced (66.7%), having more than 15 years’ work experience. In addition, of the four departments, the DVS has more Master’s degree and first degree holders (40% for each qualification category) as supervisors, while most (50%) supervisors for the DAP and DCP hold diplomas. All the supervisors in the DABP are first degree holders.

Similar to the other respondent categories, the majority (62.5%) of HODs are male. A total of 62.5% of district HODs range between the ages of 40 and 55 years, followed by 20% of the age group below 40 years, and only 12.5% for those older than 55 years. They all have work experience exceeding 5 years and 6.5% of them have more than 15 years’ work experience. None of the HODs have a qualification lower than a first degree; 62.5% have a first degree and 37.5% have Master’s degrees.

The results showed that the HODs are experienced and trained, while the front desk extension officers are not well developed. This could lead to poor performance in the agricultural sector of Botswana. According to Allo (1983), for the extension officer to perform his/her job well,
he/she has to be trained and skilled in science, technology, and social competence. Similarly, development, as well as clients’ demands, change with time; therefore, if organisations aim to keep up with the standards of the new era, they have to continuously empower their employees (Ganjinia, Gilaninia and Sharami, 2013).

### 4.4.4 Availability of resources for extension service delivery

Performance management entails systematic means to implement performance standards as benchmarks of improved productivity and efficiency. It is linked with perceived, desired, and projected goals and outcomes that can be established to measure performance through a standardised PMS (Radebe, 2013). In this manner, it is crucial to avail the resources that would assist in the attainment of the organisational goals.

Table 4.4 shows that there are inadequate transport and communication platforms such as the internet. The most disadvantaged departments in terms of resources are extension officers from the DVS. Only 49.3% of respondents from this department indicated that they have adequate resources as opposed to 53.8% from the DCP. On the other hand, most extension officers (91.4%) in the DABP were better equipped with almost all the necessary resources, followed by 80.8% of the respondents from the DAP. Additionally, most of the extension officers in all the departments except for DABP indicated that they do not have vehicles in their extension areas (52.2% from the DAP; 82.1% from the DCP; and 75% from the DVS). Furthermore, 94.8% of these officers do not have any control over any vehicle; thus, they have to request a vehicle when they require transport.
Table 4.4 The availability of resources for extension services.

<table>
<thead>
<tr>
<th>Resources</th>
<th>Availability of resources in percentage</th>
<th>( % )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DAP</td>
<td>DCP</td>
</tr>
<tr>
<td>Office</td>
<td>Yes</td>
<td>91.3</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>8.7</td>
</tr>
<tr>
<td>Internet</td>
<td>Yes</td>
<td>82.6</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>17.4</td>
</tr>
<tr>
<td>Landline phone</td>
<td>Yes</td>
<td>91.3</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>8.7</td>
</tr>
<tr>
<td>Cellular phone</td>
<td>Yes</td>
<td>91.3</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>8.7</td>
</tr>
<tr>
<td>Vehicle</td>
<td>Yes</td>
<td>47.8</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>52.2</td>
</tr>
<tr>
<td>Average</td>
<td>Yes</td>
<td>80.8</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>19.2</td>
</tr>
<tr>
<td>Request/control vehicle</td>
<td>Request</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>0.0</td>
</tr>
</tbody>
</table>

These results are supported by the responses of the majority (93.3%) of the supervisors who agreed that there is lack of resources. Furthermore, 85.7% of them indicated that transport is a major problem (Table 4.5). Unavailability of resources to carry out some assignments may demotivate the extension officers, especially as they are appraised for the work. Pitesa and Thau (2014) found that a lack of material resources leads to poor organisational results because it affects the employees psychologically. When employees do not have adequate resources to carry out their duties, they compromise their work by making unreasonable decisions, which results in poor production and performance. Extension workers sometimes have to attend emergency cases on farmers’ requests as well as appointments and routine meetings. If there are no resources such as transport and communication means to carry out these duties, both the extension officer and the farmers become demotivated.
Table 4.5 Supervisors’ responses regarding inadequate resources in extension areas.

<table>
<thead>
<tr>
<th>Inadequate resources</th>
<th>Percentages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>85.7</td>
</tr>
<tr>
<td>Staff shortage</td>
<td>7.1</td>
</tr>
<tr>
<td>Funds</td>
<td>7.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

4.4.5 The workload of extension officers

The extension officers’ workload is a factor which affects the effectiveness of their service delivery. Botswana farmers are dominated by subsistence farmers; hence, the most appropriate method for these farmers to extend information is through frequent contact. The degree of contact between the farmers and the extension officers is most often determined by the availability of transport and the number of farmers per extension officer, since it is advisable to be done in the field. Haq (2013) found that the more extension officers’ visit the farmer, the more productive that farmer becomes.

Table 4.6 shows that more than half of the extension officers for the DCP (54.6%); DVS (59.7%) and DABP (85.8%) are responsible for farmers in the range of 1 to 500. Most of the extension officers from the DAP (47.7%) are responsible for farmers in the range of 501 to 1000. These ratios (1:500 and 1:1 000) are not adequate considering The World Bank (2011) standard ratios of 1:800 and 1:1 000. On the other hand, a few extension officers indicated that they have farmers in the range of 2000 to 5000. More farmers are very difficult for one extension officer to handle, especially if there are inadequate resources.
Table 4.6 Number of farmers per extension officer per department.

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of farmers (in ranges) per extension officer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 to 500</td>
</tr>
<tr>
<td>DAP</td>
<td>34.5</td>
</tr>
<tr>
<td>DCP</td>
<td>54.6</td>
</tr>
<tr>
<td>DVS</td>
<td>59.7</td>
</tr>
<tr>
<td>DABP</td>
<td>85.9</td>
</tr>
<tr>
<td>Average</td>
<td>59</td>
</tr>
</tbody>
</table>

4.4.6 Number of farmers visited monthly

Although the ratio of extension officer to farmers seems to be adequate, most of the extension officers (60.5% from the DAP; 43.7% from the DCP; 53.6% from the DVS; and 57.2% from the DABP) pointed out that they are able to visit at least 1 to 25 farmers per month followed by 26 to 50 farmers per month (Table 4.7). This may be due to the lack of transport indicated by the extension officers and their supervisors as discussed previously. More regular contact between extension officers and farmers is required for effective TOT and agricultural development (Stevens and Ntai, 2011:107).
Table 4.7 Number of farmers visited by extension officer per month.

<table>
<thead>
<tr>
<th>Department</th>
<th>Number of farmers visited by extension officer per month (in ranges) and respondents in percentage (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 to 25</td>
<td>26 to 50</td>
</tr>
<tr>
<td>DAP</td>
<td>60.5</td>
<td>12.9</td>
</tr>
<tr>
<td>DCP</td>
<td>43.7</td>
<td>25.7</td>
</tr>
<tr>
<td>DVS</td>
<td>53.6</td>
<td>9.4</td>
</tr>
<tr>
<td>DABP</td>
<td>57.2</td>
<td>42.8</td>
</tr>
<tr>
<td>Average</td>
<td>53.7</td>
<td>22.6</td>
</tr>
</tbody>
</table>

4.4.7 Number of extension officers within a department working with farmer groups

When considering a lack of communication and transport means, it is more advisable to work with farmers in groups. Table 4.8 shows that on average, most of the extension officers (64.9%) indicated that they work with farmer groups (85.7% from the DABP; 84.6% from the DCP; 52.2% from the DAP; and 37% from the DVS). The results showed that the DVS is the most disadvantaged department in terms of resources; it is an add-on to their problems and may therefore lead to poor service delivery.

Table 4.8 Number of extension officer within department working with farmer groups.

<table>
<thead>
<tr>
<th>Department</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAP</td>
<td>52.2</td>
<td>47.8</td>
<td>100</td>
</tr>
<tr>
<td>DCP</td>
<td>84.6</td>
<td>15.4</td>
<td>100</td>
</tr>
<tr>
<td>DVS</td>
<td>37.0</td>
<td>63.0</td>
<td>100</td>
</tr>
<tr>
<td>DABP</td>
<td>85.7</td>
<td>14.3</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>64.9</td>
<td>35.2</td>
<td>100</td>
</tr>
</tbody>
</table>
According to Hannan (2016:51), the advantages of working with farmer groups include:

- contact with farmers;
- groups assist in targeting;
- improves the learning and spread of knowledge among farmers;
- enables farmers to actively participate in programmes;
- improves the flow of information concerning farmers’ problems;
- provides a forum for farmers to make joint decision or actions; and
- improved access to resources.

### 4.4.8 Frequency of meeting farmers’ groups by extension officer

The results in Table 4.9 show the frequency of extension officers meeting the farmer groups. It is evident that 41.7% of extension officers from the DAP meet their farmers’ groups on a weekly basis; 72.7% of the DCP officers have monthly group meetings; 54.5% of the DVS and 50% of the DABP officers meet their farmers’ groups quarterly. On average, quarterly group meetings (40.5%) are most commonly used, followed by monthly meetings (39.6%). Frequent meetings with farmers’ groups are as important as individual contact between farmers and extension officers. The more contact, the better, especially as group formation goes through several stages of development and the extension officer is needed for guidance. Nguyet (2002:3) pointed out that for the group to be well formed, the extension officer together with farmers have to: a) identify the need for the group; b) formulate group objectives; c) pay attention to group organisation; d) activity planning; and e) internal monitoring and evaluation. Additionally, the extension officer should be skilled in group formation and leadership; therefore, in-house training of extension officers is critical to ensuring effective group dynamics and leadership.
Table 4.9 Percentage frequency of meeting farmers’ groups by extension officer.

<table>
<thead>
<tr>
<th>Department</th>
<th>Weekly %</th>
<th>Monthly %</th>
<th>Quarterly %</th>
<th>Annually %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAP</td>
<td>41.7</td>
<td>25</td>
<td>33.3</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>DCP</td>
<td>3.0</td>
<td>72.7</td>
<td>24.3</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>DVS</td>
<td>9.1</td>
<td>27.3</td>
<td>54.5</td>
<td>9.1</td>
<td>100</td>
</tr>
<tr>
<td>DABP</td>
<td>16.7</td>
<td>33.3</td>
<td>50</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Total (%)</td>
<td>17.6</td>
<td>39.6</td>
<td>40.5</td>
<td>2.3</td>
<td>100</td>
</tr>
</tbody>
</table>

Working with a farmers’ group instils and supports social capital, which is vital to sustainable development. Social capital is the entire set of shared norms, values, attitudes, and beliefs that promote cooperation among individuals within the community and is a key factor in explaining the development (Gomez-Limon, Vera-Tascon and Garrido-Fernandez, 2014). Moreover, residents of agricultural communities are particularly interdependent and rely on social relationships compared to communities engaged in other types of economic activities (Takemura, Uchida and Yoshikawa, 2014).

4.4.9 Perceptions of extension officers on the usefulness of the implementation of the performance management system

Muyuka (2015) explained that it is very important to keep track of the implemented project in order to identify its weaknesses and strengths in order to make appropriate changes. This can only be done through monitoring and evaluation. According to Table 4.10, 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 disagreed and 36.1% disagreed) disagreed that the PMS provides useful feedback. A total of 76.3% (39.2% agreed and 37.1% strongly agreed) agreed that the PMS does not recognise hard work. Furthermore, 71.9% (31.3% strongly disagreed and 40.6% disagreed) disagreed that the PMS currently utilised by the ministry should be left as it is; there is a need for the system to undergo changes.
Table 4.10 Perceptions of extension officers on the usefulness of the performance management system.

<table>
<thead>
<tr>
<th>Usefulness of the PMS</th>
<th>Frequency in percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DAP</td>
</tr>
<tr>
<td>PMS provides useful feedback</td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>21.7</td>
</tr>
<tr>
<td>Disagree</td>
<td>21.7</td>
</tr>
<tr>
<td>Agree</td>
<td>39.1</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>17.4</td>
</tr>
<tr>
<td>The PMS does not recognise hard work</td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>13.0</td>
</tr>
<tr>
<td>Disagree</td>
<td>8.7</td>
</tr>
<tr>
<td>Agree</td>
<td>34.8</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>43.5</td>
</tr>
<tr>
<td>The kind of PMS in use does not need to be changed</td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>22.7</td>
</tr>
<tr>
<td>Disagree</td>
<td>36.4</td>
</tr>
<tr>
<td>Agree</td>
<td>40.9</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>0.0</td>
</tr>
</tbody>
</table>

The strategic officer for the ministry indicated that the ministry never internally evaluates PMS since it is the responsibility of the NSO. The NSO is a body that coordinates the implementation of the PMS for all the ministries of the Botswana Government. If the ministry does not internally evaluate its implementation of the PMS, the revealed problems will persist; thus, the failure of the PMS since the NSO may overlook critical issues. The internal evaluation is carried out by an evaluator from the actual project team. Clearly, such an evaluator has the advantage of completely understanding the thinking behind the development, together with the appreciation of any problems that may have arisen. The
evaluator should also command the trust and cooperation of the other team members (Earl, McConnel and Middleton, 1998).

4.4.10 The perceptions of extension officers on the influence of the PMS on administrative effects

Table 4.11 shows that in general, extension officers have a varying degree of disagreement about administrative benefits from the PMS. More than half (53.6%) of the officers disagree (28.9% strongly disagree and 24.7% disagree) that they benefit fairly for promotions, while 57.8% disagree (28.9% strongly disagree and 28.9% disagree) that the PMS assists in rewarding officers fairly. Additionally, 52.6% (23.7% strongly disagree and 28.9% disagree) disagree that the PMS is not utilised fairly when selecting the extension officers for further training.
Table 4.11 Perceptions of extension officers on the influence of the PMS on administrative effects.

<table>
<thead>
<tr>
<th>Administrative benefits</th>
<th>Frequency in percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DAP</td>
</tr>
<tr>
<td>Fair benefits on promotions</td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>30.4</td>
</tr>
<tr>
<td>Disagree</td>
<td>30.4</td>
</tr>
<tr>
<td>Agree</td>
<td>21.7</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>17.4</td>
</tr>
<tr>
<td>Fair benefits on rewards</td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>39.1</td>
</tr>
<tr>
<td>Disagree</td>
<td>30.4</td>
</tr>
<tr>
<td>Agree</td>
<td>17.4</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>13.0</td>
</tr>
<tr>
<td>Fair benefits on selection for training</td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>26.1</td>
</tr>
<tr>
<td>Disagree</td>
<td>34.8</td>
</tr>
<tr>
<td>Agree</td>
<td>17.4</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>21.7</td>
</tr>
</tbody>
</table>

The next summary shows that, when comparing the responses of extension officers for individual departments, most of the extension officers from the DAP and the DVS disagreed that the PMS assists them in benefiting from promotions, rewards, and training. On the contrary, the minority of the extension officers for the DCP disagreed that they benefit from promotions and training but the majority (51.3%) disagreed that they benefit from rewards. Less than half (42.9%) of the extension officers from the DABP disagreed that they benefit administratively from the PMS. This implies that the majority are of the opinion that the PMS does not help them to benefit from promotions, reward, and training.
Mutimba (2016) pointed out that most of the agricultural institutions do not invest in developing their employees through further training with the assumption that they were well trained during their studies at university. The universities may have performed their task well according to their curricula, but does their product fit well in the market? This is why in modern agricultural extension everything should be done through consultation and partnership of all the role-players. Moreover, agricultural extension is a science; science, technology, and farmers’ needs change with time and therefore extension officers should receive continuous training in order to be well informed.

Nevertheless, the realisation that salary is not the only benefit employees work for is equally important. Many organisations now think in terms of a total rewards package. This type of package includes salary and benefits but also work environment, learning and development, and work-life balance (Deeprose, 2007). An effective manager is able to identify personal biases and not allow them to influence how employees are managed. The ability to be objective when dealing with employees is imperative to fair management practices (Lotich, 2018). If there were biases in appraising subordinates, there would also be unfairness in rewarding and recognising them.

In addition, the extension officers indicated that they were unsatisfied with the mentoring and coaching provided by their supervisors. The results revealed that the MOA does not employ the PMS as an effective communication tool as they do not provide feedback and therefore do not take actions to address the gaps. Coaching and mentoring is important in performance management because after appraisals and evaluations, it enables supervisors to
identify problems, weaknesses, and strengths of individual subordinates and could help them by giving direction and support as appropriately as possible. Figure 4.1 shows the dissatisfaction of extension officers in the coaching and mentoring provided by their superiors. The majority (69%) perceived that they were not mentored and coached in order to improve in their work. This may be due to the poor implementation strategy of the PMS or due to the fact that the system is never evaluated.

![Figure 4.1 Satisfaction of extension officers regarding coaching and mentoring.](image)

During the mentoring process in extension, all the parties involved (the mentor, mentee, and extension corporate) benefit from the process (AgriLife Extension, 2008:2). The benefits of mentoring are summarised in Table 4.12.
### Table 4.12 Benefits of mentoring for the mentor, mentee, and extension corporate.

<table>
<thead>
<tr>
<th>Benefits of mentoring</th>
<th>Mentee</th>
<th>Mentor</th>
<th>Corporate extension</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mentee</strong></td>
<td>Supportive atmosphere</td>
<td>Develops positive and secure self-image</td>
<td>The employees become competent</td>
</tr>
<tr>
<td></td>
<td>Information-technical and process skills</td>
<td>Gives something back to the organisation</td>
<td>Continuity of organisational culture</td>
</tr>
<tr>
<td></td>
<td>Organisational values and norms</td>
<td>Passes on knowledge and ideas to the next generation of staff</td>
<td>Less job turnover</td>
</tr>
<tr>
<td></td>
<td>Sense of competence and worth</td>
<td>Sense of accomplishment through mentees’ success</td>
<td>Increased teamwork</td>
</tr>
<tr>
<td></td>
<td>Opportunity to be successful</td>
<td>Assists in achieving organisational goals</td>
<td>Increased productivity</td>
</tr>
<tr>
<td></td>
<td>Importance of taking responsibility for the requirements of the position</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Corporate extension</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: AgriLife Extension (2008:2)*

### 4.5 SUMMARY

All the respondents indicated that there are some gaps and problems encountered in implementing the PMS. The strategic and planning officer of the MOA explained that some of the extension officers show no interest in implementing the PMS and emphasised that for PMS to be successful, it should have a very strong supporting system. The PICs for the departments suggested that it is important for them to focus solely on the implementation of the PMS so that they could go through all the stages of project implementation, monitoring, and evaluation properly. This is in contrast to their situation whereby they have been assigned
additional core duties in their departments. Their focus in the PMS could assist in identifying the gaps, mentoring or coaching, and rethinking the implementation strategy to improve the PMS.
CHAPTER 5 IMPLEMENTATION STRATEGY OF PMS

5.1 INTRODUCTION

There have been various development methods with the intention of improving extension service delivery. The awakening of humanism and humanisation across the world has in fact enlarged the scope of applying principles of HRM in organisations (Pareek and Rao, 1992). Bernadin et al. (1995) indicated that many institutions that have tried performance management experienced poor results mainly due to the implementation strategies. Extension work is diverse, flexible, and tailored to client needs and thus resists routine application of policies and procedures. Finally, extension systems employ staff with unique expertise and skill sets working in collegial environments where traditional command-and-control supervision is rarely appropriate (Kuchinke et al., 2008). In this manner, the most important aspect is how these development strategies are implemented, specifically in agricultural extension. Seifu (2015) pointed out that in the 1950s to 1970s, the definition of extension revolved around the extending of scientific knowledge to farmers, which consisted of one-way communication. Eventually, the “helping farmers help themselves” phenomenon gained popularity and which called for involvement of all parties. Hence, Adams (1982:xi) rephrased the definition of agricultural extension as: “Assistance to farmers to help them to identify and analyse their production problems and to become aware of the opportunities for improvement.” Since then, participatory methodologies were considered the most appropriate for extension service delivery.

5.2 PARTICIPATION OF SUPERVISORS, EXTENSION OFFICERS AND FARMERS ON THE IMPLEMENTATION OF THE PERFORMANCE MANAGEMENT SYSTEM

More than half (54.6%) of the extension officers indicated that there was participation among the supervisors, extension officers, and farmers in the implementation of the current PMS. Although there is participation, 70.6% indicated that the participation was intermittent. On the contrary, 80.4% confirmed that farmers are never consulted in the development of objectives at the beginning of the year and almost half (49.5%) indicated that unfelt needs
are not considered when planning for the extension activities of the year. Table 5.1 shows that 58.7% (17.5% strongly disagreed and 41.2% disagreed) of extension officers indicated that they are not penalised for diverting from the set goals during the delivery of their services. On the other hand, 41.3% (33.1% agreed and 8.2% strongly agreed) agreed that they were penalised for diverting from the set goals.

Table 5.1 Consequences of diverting from the set goals by extension officers.

<table>
<thead>
<tr>
<th>Penalised for diverting from set goals</th>
<th>Frequency in percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DAP</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>17.4</td>
</tr>
<tr>
<td>Disagree</td>
<td>39.1</td>
</tr>
<tr>
<td>Agree</td>
<td>39.1</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>4.3</td>
</tr>
</tbody>
</table>

As previously mentioned, the PICs explained that there is room for extension officers to add their initiatives to the set goals. The main questions that arise are: Why do extension officers divert from the set objectives? Is the availability of resources to perform their duties considered during the appraisal? This takes the discussion to the importance of considering both felt and unfelt needs. It is important to involve the extension officers from the initial step of developing the objectives for the MOA. The extension officers work directly with the farmers; they may have valid opinions on what the farmers need after considering the available resources they have at their extension areas.

Figure 5.1 indicates that 49.5% (18.6% strongly disagreed and 30.9% disagreed) of the extension officers disagreed that the PMS assists them in meeting the farmers’ needs, while 50.5% (41.2% agrees and 9.3% strongly agreed) agreed that the PMS assist them in meeting the felt needs. These results depend on whether the extension officers truly understand what the farmers’ needs are, and whether the correct methods for farmers’ needs assessment are utilised. The use of participatory methods for identification of farmers’ needs and reconciling
them with the unfelt needs, leads to valid general needs being identified, which could lead to sustainable development.

The results showed that farmers were not involved in the initial stage of planning. Kimaro, Mukandiwa and Mario (2010) explained that the extension officers were not there to spoon-feed the farmers but to work with them in problem identification and needs assessment for improved decision making. This justifies the importance of understanding the perceptions of the clients so that the clients can be effectively involved in extension programme planning and promote their ability to adopt the technologies delivered (Mwamakimbula, 2014). The point at which professionals and lay leaders must come to grips with needs identification and appraisal is the programming stage. Needs must always be recognised and dealt with in some form and to some degree (Leagans, 1964:89). Leagans (1964:89) further explained that people react positively to programmes that are demand-driven since they fill the gaps in the clients’ lives.
5.3 THE EFFECTS OF THE MINISTRY’S APPROVED FUNCTIONAL STRUCTURE ON THE IMPLEMENTATION OF THE PERFORMANCE MANAGEMENT SYSTEM

Table 5.2 indicates that 100% of the HODs from two departments, the DAP and the DABP, are supervised by the DAC and their department directors. The results also show that half (50%) of the HODs for the DCP and DVS are supervised by the DAC and align their objectives with the DAC’s. The remaining half (50%) indicated that they are supervised by the DAC but align their objectives with those of both the DAC and their department director. The results showed that some of the district HODs align their objectives with both the DAC and the director, while others align their objectives either with the director or the DAC. This may cause confusion and an overload of work for the different departments due to two supervisors for district HODs with the same controlling powers but different objectives. An organisational structure is a formal system of tasks and reporting relationships that control, coordinate, and motivate employees so that they work together to achieve organisational goals (Buchanan and Huczynski, 2004).

Table 5.2 Heads of department supervisors and their alignment of objectives.

<table>
<thead>
<tr>
<th>Department</th>
<th>Supervisor of the department’s district HODs</th>
<th>Alignment of objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DAC</td>
<td>DAC and department’s director</td>
</tr>
<tr>
<td>DAP</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>DCP</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>DVS</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>DABP</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 5.3 is a diagram that represents what the results revealed from the current MOA structure. The red circle in Figure 5.3 includes all the parts of the structure that are affected by the conflict of interest between the DACs and the department directors. Maduenyi, Oke, Fadeyi and Ajagbe (2015) found that there is a positive relationship between organisational
structure and organisational performance. Maduenyi et al. (2015) explained that if all the organisational employees understand the organisational structure better, it leads improved organisational performance. Organisational structure affects both the overall behaviour of firms and the situation of individuals and sub-units within a firm. The effect of exogenous changes in the environment (market prices, costs, or regulations) on organisations, can be partitioned into the immediate direct effect of the change and full effect after organisational structure has had time to adjust (DeCanio, Dibble and Amir-Atefi, 2000:1285). It would therefore be very difficult to attain smooth coordination with a structure where there is a conflict of interest between supervisors.

Figure 5.2 Structure of the MOA’s operating system.

Additionally, during the interview with the ministry’s strategic officer, it was revealed that the MOA plans are based on the NSP; therefore, a top-down approach is utilised. The objectives of the ministry are set from ministerial level in the Office of the PS, down through other cadres to the agricultural extension officers at the bottom (Appendix A). Agricultural extension
encourages demand-driven extension programmes and encourages participatory methods in this era. Sanyal (1998) argued that neither top-down nor bottom-up approaches are effective as long as they are used as islands. Sanyal (1998) therefore recommends pluralism extension with good coordination to instil good working relationships among all parties involved in order to contribute to sustainable development.

5.4 SUMMARY

From the results, it is evident that the PMS implementation strategy is not demand-driven. The majority of the extension officers (80.4%) confirmed that farmers are never consulted in the development of objectives at the beginning of the year and almost half of them (49.5%) opined that unfelt needs were not considered. Furthermore, the results indicated that the ministry is poorly structured. It was found that 50% of the HODs are supervised by the DACs and therefore align their objectives with the DAC’s. Conversely, the remaining HODs (50%) are supervised by the DACs but align their objectives with those of the DAC and the department director. This causes confusion because two superiors with the same controlling powers but different objectives to coordinate the extension service delivery.
CHAPTER 6 CONCLUSION AND RECOMMENDATIONS

6.1 CONCLUSIONS

The specific objectives of the research study were: 1) to explore the perceptions of the MOA employees regarding the implementation of the PMS, 2) to determine how the PMS influences extension service delivery, and 3) to identify the methodology utilised to implement the PMS. The research objectives were fulfilled after following the methodology of the study accordingly.

It can be argued that the PMS was implemented by the Botswana Government with the intentions of monitoring and improving performance of the public service. The strategic and planning officer and the PICs opined that the bureaucratic approach of implementing the PMS and the poor ministerial structure were some of the challenges that led to its failure.

Several factors that contributed to the PMS’s failure were identified based on the perceptions of the HODs, supervisors, and extension officers. It is evident that the system was implemented, but management failed to reinforce the support system for the subordinates to execute their plans accordingly. The supervisors (85.7%) confirmed that there is shortage of resources, especially transport and communication platforms for extension officers to perform their duties. The extension officers indicated that even when utilising methods that cut costs such as farmers’ groups, it does not work well since they do not visit and communicate with the farmers satisfactorily due to lack of transport.

The implementation of performance management has to go through certain stages in its cycle, such as: planning, developing objectives, execution, monitoring, evaluation, mentoring, and coaching. This study revealed that not all these steps are followed in the MOA, hence the failure of the PMS. The PICs pointed out that they never internally evaluate the PMS in their respective departments. In addition, the Strategic and Planning Office of the MOA explained that they do not evaluate the system in the ministry but rely on the evaluation report from the external body which evaluates all the ministries. Failure to evaluate the system leads to difficulty to provide feedback and identify the problems and gaps that might need to be
addressed, hence failure of the supervisors to mentor and coach the subordinates successfully. The extension officers (51.6%) revealed that they do not consider the system an effective communication tool since they never receive any feedback through it and the supervisors do not coach and mentor them to improve their performance.

The study also revealed an element of subordinates’ demotivation in that, most (54.7%) of the extension officers pointed out that there is inconsistency, unfairness, and bias during appraisals, therefore the rewarding and recognition is unfair. It was also found that lack of transparency resulted in dissatisfaction in benefiting the extension officers regarding promotions and training.

The MOA is centralised and therefore limited to the use of a top-down approach in implementing performance management. The culture of the ministry or the government drives the employees to autocratic leadership which does not work well in the extension service delivery. The ministry’s blueprint strategy failed to meet the farmers’ needs since not all the concerned parties are involved in planning.

6.2 RECOMMENDATIONS

From the identified factors that influence the implementation of the PMS, the following recommendations are made:

6.2.1 Top-down versus participatory approach

In view of the fact that most of the respondents pointed out the use of a top-bottom approach as an implementation strategy of the PMS, it is vital for the management to reconsider the culture of leadership and management style. It seems appropriate to consider the use of participatory approaches where all the parties concerned are involved in planning for the system. Such an approach would be compatible with the extension service which focuses on fulfilling demands of the clientele. The ministerial structure also has to be adjusted such that
there would not be confusion regarding the flow of supervision which might hinder smooth implementation of the system.

6.2.2 Availability of resources

On the grounds that the PMS was adopted to improve the performance of the public service, its compatibility with the extension service should be taken into account. Furthermore, as with any other programme or system, the availability of resources to drive the system should be considered and availed to the officers. The failure of the system would persist without the necessary resources.

6.2.3 Training of officers

A very well-planned strategy on training of all officers should be devised to improve the understanding of the system and its implementation. This could assist management in following all the steps to execute the system. Transparency in appraisals would promote fairness in recognition and rewards, thus subordinates. The subordinates would also have ownership of the system since they would comprehend the importance of the system and what is expected of them.

6.2.4 Decentralisation of the agricultural sector

It is evident from the results that the agricultural sector in Botswana is centralised. It would be appropriate to consider sectoral decentralisation. Sectoral decentralisation refers to the transfer of responsibility for one sector or one type of activity to a local-level institution responsible for this defined function (Jütting, Kauffmann, McDonnell, Osterrieder, Pinaud and Wegner, 2004:16). This method of decentralisation is important in agriculture because each district will be able to tailor-make its production measures considering the district’s agroecology, unlike the one-size-fits-all approach employed in a centralised sector. Moreover,
sectoral decentralisation improves the management of resources and smooth administrative structure.

6.2.5 Linkage structure to ensure collaboration

The PMS may be one of the interventions to improve extension service delivery; however, other aspects may complement the system. Similar to other countries, Botswana has several agricultural extension stakeholders either public, parastatal, private, or non-governmental institutions. The main concern is their linkage structure and the degree of collaboration. A multi-stakeholder is an arrangement of the role of agricultural parties to improve extension service through participation, therefore making a collective decision.

6.2.6 Developing a framework for coordination of extension service

Further research which develops a framework for linking extension stakeholders for improved coordination of extension services as reform for extension is recommended. This might lead to better coordination and dividing responsibilities, hence wise use of the available resources, which may improve the performance of extension services.
REFERENCES


Baloyi S., Van Waveren C.C. and Chan Y., 2014. The role of supervisor support in predicting employee job satisfaction from their perception of the performance management system: A


European Leader Association for Rural Development (ELARD), 2016. The bottom-up approach [Newsletter].


Monnaesi T. T., 2011. A description of whether the objectives of the performance management system of the Botswana Department of Tribal Administration are being realised (Master’s thesis). Cape Town: University of Stellenbosch.


Nag A., 2016. Sixteen factors that lead to poor performance at the work place. Global Learning Solutions. Comm. Lab, India LLP.


NERAKIN-RAIS, 2016. Knowledge sharing and collaboration for development. AARINEANA and FAO.


The three most important aspects of performance management: What to focus on, 2015. Available from: http://unicornhro.com/blog/


Wideman M. R., 2004. The literature review on the role of project cycle (life span) in project management. AEW Services, Vancouver, BC.


APPENDIX

APPENDIX A: Ministry Functional Structure
APPENDIX B: The performance and development plan and review document.

PERFORMANCE-BASED REWARD SYSTEM

PERFORMANCE AND DEVELOPMENT PLAN AND REVIEW DOCUMENT

General Guidance

1. The basic purpose of this instrument is to objectively assess the officer's performance on the agreed objectives for a given year. The accurate assessment will provide vital information for management decision-making. More specifically the assessment will influence decisions regarding: a) the officer's performance rating; b) awarding of reward; c) specific training and development needs of the officer to improve performance and productivity; and d) the suitability of the officer for appointment to permanent service or potential advancement to higher grade.

2. For the assessment to be objective it is essential that the reporting officer (a) thoroughly understands the contents of the job the appraisee is holding (job description) and the requirements for the job (job specification), (b) properly knows the officer being appraised (performance abilities) through work supervision of at least three months and (c) refers to notes from the checkpoints meetings.

3. The appraisal is for the total reporting period and should reflect the strengths and weaknesses and what hindered or enabled delivery during the period.

4. The reporting officer is normally the Officer's immediate supervisor.

5. The appraisal should be done in the presence of the appraisee and should be accompanied by a constructive dialogue focusing on ways of enhancing the officer's performance and the Department's productivity.

PART A: EMPLOYEE INFORMATION

<table>
<thead>
<tr>
<th>Name of Employee:</th>
<th>Performance Plan Period:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>From: 01 / 04 /15 To: 31/ 03 /16</td>
</tr>
<tr>
<td>Personal Payroll No:</td>
<td>Day Month Year</td>
</tr>
</tbody>
</table>

FORM DPSM 6 (Revised 02/06)
<table>
<thead>
<tr>
<th>NO</th>
<th>OBJECTIVES</th>
<th>OUTPUT</th>
<th>Measure</th>
<th>Performance Results</th>
<th>COMMENTS SUPERVISEE</th>
<th>COM MENT S SUPER VISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Note: Based on the average of the ratings scored above, provide an overall rating of the officer.

Final performance rating:

Note: The overall rating for personal attributes is obtained by multiplying the average result by 0.8 to get the final rating.

PART C: DEVELOPMENT OBJECTIVES

The purpose of this section is to record the employee’s development objectives for the year. The highlighted portion is completed at the planning stage and the rest is completed at the review.
<table>
<thead>
<tr>
<th>INDIVIDUAL DEVELOPMENT OBJECTIVES</th>
<th>EXPECTED RESULTS</th>
<th>FOLLOW UP/COMMENTS BY SUPERVISOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Employee’s Signature:  
Date:

Supervisors Signature:  
Date:

Authorized Official:  
Date:

PART D: ASSESSMENT FOR PERSONAL ATTRIBUTES

Note: Please enter your rating at the appropriate rating level.

<table>
<thead>
<tr>
<th>ITEM FOR ASSESSMENT</th>
<th>RATING</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>95%-100%</td>
<td>Outstanding</td>
</tr>
<tr>
<td></td>
<td>80%-94%</td>
<td>Very good</td>
</tr>
<tr>
<td></td>
<td>65%-79%</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>50%-64%</td>
<td>Satisfactory</td>
</tr>
<tr>
<td></td>
<td>49% below</td>
<td>Unsatisfactory</td>
</tr>
</tbody>
</table>
1. Time Management  
(Quality of time keeping: keeping appointments, punctuality at work, meetings, and meeting deadlines)

2. Knowledge of the work  
(How well does the officer know the purpose, processes and practice of the job)

3. Output: Accuracy, Reliability & Speed  
(How accurate and reliable the performance is and how much work is done on schedule)

4. Customer care  
(Demonstrable value based customer focused initiatives including Botho)

5. Team work  
(Participation in, support for and promotion of team effort and has ability to get along with co-worker)
<table>
<thead>
<tr>
<th>6. Initiative</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Number of initiatives resulting in accomplishment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Supervisory Abilities</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Guidance for initiatives resulting in accomplishment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. Managerial Performance</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Ability to plan, organize and direct activities/resources effectively)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average rating score \[\frac{1+2+3+4+5+6+7+8+}{8}\]

Note: Based on the average of the rating scored above, provide an overall effectiveness/rating of the officer in the space provided below

Final Personal Attributes’ Rating:
Note: The overall rating for personal attributes is obtained by multiplying the average result by 0.2 to get the final rating.

**QUATERLY REVIEW RATING SUMMARY**

<table>
<thead>
<tr>
<th>Item for Assessment</th>
<th>Quarter 1</th>
<th>Quarter 2</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal attributes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments by Supervisee: .............................................................................................................
Comments by Supervisor: ..............................................................................................................

Supervisee’s Signature: .......................................................... Date: .............................................

Supervisor’s Signature: .......................................................... Date ......
APPENDIX C: Questionnaire for extension officers.

RESEARCH TOPIC: Identification of the factors that influence the performance of extension management systems in Kweneng and Southern districts of Botswana.

QUESTIONNAIRE FOR EXTENSION OFFICERS

By Masa Veronicah Ramorathudi
### Section A - General Profile of the respondents

**Questionnaire Number**

**Department**

**District**

Please tick the appropriate answer.

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sex</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>2</td>
<td>Age Group</td>
<td>&lt;39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40-55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>55+</td>
</tr>
<tr>
<td>3</td>
<td>Work Experience</td>
<td>Less than a year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-5 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6-10 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11-15 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More than 15 years</td>
</tr>
<tr>
<td>4</td>
<td>Qualification</td>
<td>Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diploma</td>
</tr>
<tr>
<td></td>
<td></td>
<td>First Degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Masters</td>
</tr>
</tbody>
</table>

### Section B - Extension Service Delivery

1. **What are your main responsibilities as extension officer?**
   
   2. **How many farmers in the district are you responsible for?**
3. Are you involved with specific agricultural projects in the community?
   i. Yes   
   ii. No

If Yes:
   a. Name of Project/s
   b. Aim of Project/s
   c. Number of Participants (farmers in the project)
   d. How often do you meet with them?
      i. Weekly
      ii. Monthly
      iii. Quarterly
      iv. 6th Monthly
      v. Annually

4. Do you work with farmer groups?
   i. Yes   
   ii. No

If yes:
   a. Number of Farmer Groups
   b. Number of farmers in each farmer’s group
   c. How often do you meet with the group?
i. Weekly
ii. Monthly
iii. Quarterly
iv. 6\textsuperscript{th} Monthly
v. Annually

5. Where do you meet the group?

---

6. Do you work with individual farmers?
   i. Yes
   ii. No

If Yes:
   a. Where do you meet the farmer?
   b. How many farmers do you meet monthly on average?

7. Do you have:
   a. An office
   b. Internet

Do you make use of it?
   Yes
   No

   c. Landline phone
   d. Cellular phone
   e. Vehicle to travel with

Do you request for the vehicle or is it under your control?
   i. Request
   ii. Under my control

8. Who is your Supervisor?
9. Do you use the same office premises with your supervisor?
   i. Yes,   ii. No

10. Do you stay in the same extension area as your supervisor?
   i. Yes   ii. No

11. How often do you meet with your supervisor?
   i. Weekly
      ii. Monthly
      iii. Quarterly
      iv. 6th monthly
      v. Annually

12. Do you discuss specific PMS issues at the meetings?
   i. Yes   ii. No

13. If yes, which aspects are discussed?

14. Do you have to report to your supervisor?
   i. Yes   ii. No

15. How do you report to your supervisor?
   i. Orally   ii. Written

16. How often do you report?
    Weekly
    Monthly
    Quarterly
    6th monthly
    Annually

17. What are the main aspects that you report on?


18. Are these reports also addressing specific PMS issues?
   i. Yes       ii. No
19. If yes, name them

Section C - Perceptions of Extension Officers about Performance Management System.
Please indicate the extent to which you agree or disagree with the following statements regarding performance management.

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Statements</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PMS motivates me in doing my work.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>PMS helps me develop the skills and capabilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I receive a lot of useful feedback on performance review.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The most important thing for me about PMS is to benefit administratively:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>i) promotions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ii) Rewards</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>V64</td>
<td>V65</td>
<td>V66</td>
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<td>-----</td>
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<td>-----</td>
</tr>
<tr>
<td>3</td>
<td>iii) training</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5</td>
<td>Hard work is not necessarily recognized or rewarded fairly.</td>
<td></td>
<td></td>
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<tr>
<td>6</td>
<td>My organization communicates well with me through PMS.</td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>I am not satisfied with the way my supervisor conducts my performance review.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8</td>
<td>Assessments of my performance are consistent, fair and unbiased.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>My supervisor does not observe me when I perform my duties and only rely on what I have recorded for my appraisal.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10</td>
<td>The PMS used works well and does not need change.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>The information disclosed in PMS review is used sensitively and productively by the ministry.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>12</td>
<td>PMS has more impact on my</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>i. performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ii. morale</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>iii. incentives</td>
<td></td>
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<tr>
<td>13</td>
<td>PMS has no value for extension officers as individuals but for the ministry.</td>
<td></td>
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</tr>
<tr>
<td>14</td>
<td>I find it difficult to discuss my work problems with my supervisor.</td>
<td></td>
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</tr>
</tbody>
</table>
PMS is a two-way process with the supervisor and subordinates expressing their views.

Using the following scale, please rate your satisfaction with the following parts of the current performance management system.

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Unsatisfied</th>
<th>Very Unsatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Performance Planning (goal setting)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Performance Evaluation</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3</td>
<td>Feedback</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Coaching &amp; or mentoring</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5</td>
<td>Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Leadership development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Rewards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Discipline</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9</td>
<td>Improvement of the quality of extension service delivery</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10</td>
<td>Effectiveness of current Performance Management System</td>
<td></td>
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</tbody>
</table>

Section D-The influence of Performance Management System on the extension service delivery.
Please indicate the extent to which you agree or disagree with the following statements regarding performance management.

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Statements</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

V78  
V79  
V80  
V81  
V82  
V83  
V84  
V85  
V86  
V87  
V88  
V89  

171
<table>
<thead>
<tr>
<th>1</th>
<th>I have the authority to determine my work objectives.</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>PMS helps me to decide what to do and what not to do.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>My work objectives are unrealistic and difficult to obtain.</td>
<td>V90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I have autonomy over the way I perform my work.</td>
<td>V91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>PMS support me to do my job better.</td>
<td>V92</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I get penalized for diverting from the set goals.</td>
<td>V93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>PMS helps in meeting farmer’s needs.</td>
<td>V94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section E-Participation OF Performance Management System in the Extension Service.
Please tick the appropriate answer.

<table>
<thead>
<tr>
<th>Sr no.</th>
<th>Statement</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Does your supervisor allow you to bring up objectives you perceive beneficial to farmers?</td>
<td>i. Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. No</td>
</tr>
<tr>
<td>2</td>
<td>Does PMS in your work create a participative environment among the supervisor, subordinates and clients/farmers?</td>
<td>i. Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If yes;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Sometimes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Always</td>
</tr>
<tr>
<td>3</td>
<td>Do you feel free to express to your appraiser your agreement regarding the appraisal decisions?</td>
<td>i. Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. No</td>
</tr>
<tr>
<td>4</td>
<td>Do you consult with farmers before you draw your objectives of the year plan?</td>
<td>i. Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. No</td>
</tr>
</tbody>
</table>
APPENDIX D: Questionnaire for extension officers’ supervisors and heads of departments.

RESEARCH TOPIC: Identification of the factors that influence the performance of extension management systems in Kweneng and Southern districts of Botswana.

QUESTIONNAIRE FOR EXTENSION OFFICERS’ SUPERVISORS AND HEADS OF DEPARTMENTS

By Masa Veronicah Ramorathudi
Section A - General Profile of the respondents

Questionnaire number______________

Department_____________________________________________

District_________________________________________________

Sub-District_____________________________________________

Please tick the appropriate answer.

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sex</td>
<td>i. Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Female</td>
</tr>
<tr>
<td>2</td>
<td>Age Group</td>
<td>i. &lt;39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. 40-55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. 55+</td>
</tr>
<tr>
<td>3</td>
<td>Work Experience</td>
<td>i. Less than a year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. 1-5 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. 6-10 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv. 11-15 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>v. More than 15 years</td>
</tr>
<tr>
<td>4</td>
<td>Qualification</td>
<td>i. Certificate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Diploma</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. 1st Degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv. Masters</td>
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</tbody>
</table>

Section B - Extension Service Delivery and Performance Management System

1. What are your main responsibilities as a supervisor?
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
2. How many extension officers do you supervise?
   i. Males
   ii. Females

3. Who is your Supervisor?
   a. The Department’s Director
   b. The District Agricultural Coordinator
   c. Both

4. Whose objectives of the Performance Management System do you draw yours from?
   a. The Department’s Director
   b. The District Agricultural Coordinator
   c. Both

5. What are the main purpose/objectives of PMS in the department?

6. Is the purpose of the current PMS being fulfilled since implementation?
   i. Yes 
   ii. No
If yes, how, if no, why not, describe

7. Is the current PMS better than the previous public service reforms you know?
   i. Yes    ii. No
   If yes, what is the difference?

8. Do you involve the extension officers in making their own decisions in formulating their own objectives of the year?
   i. Yes    ii. No
   If yes, how do you do it?
9. How often do you appraise your subordinates?
   i. Weekly
   ii. Monthly
   iii. Quarterly
   iv. 6th monthly
   v. Annually

10. How many extension officers do you appraise?
    i. Males------------
    ii. Females----------

11. Do you use the same office premises with all your supervisees?
    i. Yes                ii. No

12. If no how many do have in the same extension area and how many are in other different extension areas?
    i. Same Extension Area----------------------
    ii. Different Extension Area----------------

13. How often do you meet with your supervisees?
    Weekly
    Monthly
    Quarterly
    6th monthly
    Annually

14. Do you discuss specific PMS issues at the meetings?
    i. Yes                ii. No

If yes, which are they?
15. Do they have to report to you?
   i. Yes    ii. No

16. How do they report to you?
   i. Orally    ii. Written
   ii. How often do they report?
      i. Weekly
      ii. Monthly
      iii. Quarterly
      iv. 6th monthly
      v. Annually

17. What are the main aspects that they report on?
---

18. Do these reports also address specific PMS issues?
   i. Yes    ii. No

19. Do the extension officers have enough resources to execute the Performance Development Plan?
   i. Yes    ii. No

If no, which resources are inadequate?
---
20. Do you monitor extension officers when they deliver their services?
   i. Yes    ii. No
If yes, how do you monitor their work?

21. Do you rely only on what they have recorded during performance appraisal?
   i. Yes    ii. No
If no, what else do you also rely on?

22. Does the current PMS measure the quality of service delivery?
   i. Yes    ii. No
23. As an appraiser what problems do you encounter in the whole process of conducting PMS?

24. Do you use PMS to nominate extension officers for?
   i. promotions,
   ii. Training
   iii. rewards?
25. How do you give appraisal feedback of PMS to your subordinates?

26. Do you consult with farmers before working on the Performance Development Plan of the District?
   i. Yes    ii. No

   If yes, how?

27. Is the current PMS the right tool for extension service delivery that meets farmers’ needs?
   i. Yes    ii. No

   If yes, how, if no how not?
APPENDIX E: Interview questions for the strategic and planning office for the ministry of agriculture.

INTERVIEW QUESTIONS FOR THE STRATEGIC AND PLANNING OFFICE FOR THE MINISTRY OF AGRICULTURE

1. What is the purpose of PMS in the ministry?
2. For how long has the PMS been implemented in the ministry?
3. What is its purpose in the ministry?
4. Are its purposes being fulfilled?
5. What strategy is used to implement it?
6. Do you perceive it as a good tool to measure performance?
7. Is the current PMS compatible to the nature of duty in agricultural service?
8. Is it complemented with other tools for measuring performance?
9. What performance reform was there before PMS?
10. Was the previous reform better than the current PMS?
11. Do you ever evaluate PMS in the ministry, if yes, how?
**APPENDIX F: Interview questions for performance improvement coordinators in the departments.**

**INTERVIEW QUESTIONS FOR PERFORMANCE IMPROVEMENT COORDINATORS IN THE DEPARTMENTS**

1. What is the purpose of PMS in your Department?
2. Are the purposes being fulfilled?
3. As head of public service reforms for the department, what challenges and problems do you encounter?
4. Are promotions strictly based on PMS?
5. Does PMS help in improving the quality of extension service delivery?
6. Does PMS meet the needs of the farmers?
7. Do you encourage participation in the process of implementing PMS?
8. Does the current PMS improve the quality of extension service delivery?
9. Do you evaluate PMS?
10. How do you give feedback to the subordinates in the districts?
11. Do you receive queries from extension officers from the district concerning dissatisfaction of PMS implementation?