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THE ROLE OF EXTENSION OFFICERS IN THE EVALUATION OF AGRICULTURAL PROJECTS IN THE BOJANALA REGION, NORTH WEST PROVINCE, SOUTH AFRICA

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ABSTRACT

Research indicated clearly the importance of participatory evaluation of projects, the involvement of all project stakeholders, and that evaluation is not a once off activity at the end of a project. There are currently 474 agricultural projects in operation in the Bojanala Region of the North West Province and the objective of this study is to determine extension officers knowledge and participation with regard to their proficiency to formulate project objectives; determine the frequency of project evaluation and to determine the extent of project committee members involvement in the evaluation of projects. Specific attention was given to the influence of the independent variables gender; age; level of education and years of experience of the extension officers. Only 31% male against 17% female reveal an excellent proficiency to formulate project objectives. 70% of the respondents with 15 years or less of service indicated an above and excellent proficiency to formulate objectives. The younger the respondents the more (70%) they evaluate the projects on a monthly and less frequency than the older respondents (43.5%). Only a slight difference occur namely in favour of the more experienced respondents (33%) against the less experienced respondents (27%), knowing the committee member's involvement in evaluation.

Keywords: Evaluation approaches in extension, objective formulation, evaluation frequency, and extension staff.

1. INTRODUCTION

The importance of project management is clearly stated in the Strategic Plan of the Department of Agriculture (2008/2009) and that there is an urgent need to transform extension. In an attempt to address this need, the training of extension officers in project management has been identified as a priority.

According to Gido & Clements (1994: 4) a project is "an endeavour to accomplish a specific objective through a unique set of interrelated tasks and the effective utilization of resources". The project approach is, according to Ewang (2006:4), a powerful instrument that allows the business model management to be implemented in the extension system. All funded projects have to be registered with clearly defined objectives, action plans, timelines, deliverables, key performance indicators, resource assignments and executing responsibilities (Department of Agriculture, 2005b: 6). Düvel (1998: 37) stated that meaningful evaluation of projects or extension programs are only possible if the objectives are clear, specific and measurable.

Other important and essential elements of an evaluation approach are:

Participatory evaluation

The involvement of all project stakeholders in evaluation (Anandajayasekeram, van Rooyen & Liebenberg, 2004: 221; Düvel, 2002a).

Evaluation frequency

Project evaluation usually takes place at its midpoint, towards or at the end, after a significant amount of time after the project has been completed (Anandajayasekeram et al, 2004). The once off evaluation activity at the end of the project is not acceptable

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anymore (Terblanché, 2004: 72). What is needed is an ongoing and continuous process of monitoring and evaluation during the live time of the project to be able to timely make adjustments in the project if and when necessary (Solomon, 1984: 355 – 357).

Accountability

The term accountability is described as "explainable" and "responsible" and (Anandajayasekeram et al, 2004) stated that evaluation is key to accountability due to the fact that it furnishes information on the degree to which project objectives have been met and how resources have been used.

There are according to Patton (1982) as cited by Anandajayasekeram et al (2004) more than 50 definitions of evaluation. For the purpose of this study the term evaluation refers to the systematic determination of quality or value agricultural projects in the Bojanala Extension Region of the North West Province of South Africa. There are a total of 474 projects with 5469 beneficiaries in the Region but according to Matshego (2006) there is no formal structure to evaluate extension projects. A summary of these projects is the following:

a) Land Redistribution for Agricultural Development
   48 projects
   423 beneficiaries
   16 (33%) unsuccessful projects
b) Food Security projects/ Letsema
   - 54 projects
   - 1733 beneficiaries
   - 5 (9%) unsuccessful projects
c) Land Care projects
   - 17 projects
   - 416 beneficiaries
   - 1 unsuccessful project
d) Technically advised Agricultural extension projects
   - 339 projects
   - 2897 beneficiaries
   - 23 (7%) unsuccessful projects

The broad objective of the study was to determine the approach followed by the extension staff to evaluate the agricultural projects in the Region and the specific objectives were:

i) To determine the extension staff's proficiency to formulate objectives;
ii) To determine the frequency of evaluation as being practised in the Region; and
iii) To determine the extent of project committee members (beneficiaries) involvement in the evaluation process.

2. METHODOLOGY

The extension staff, from the Local Development Centres in Bojanala Region, was the respondents participating in the study. Special group meetings were arranged where a questionnaire was individually completed by each extension staff member. The data was analysed using Spearman Correlations and Exact Significant Tests.

3. FINDINGS

3.1 Demographic Characteristics of Respondents

The demographic characteristics of the respondents are presented in the next table.

Table 1: Frequency distribution of the respondents according to their demographic characteristics

Selected characteristic	Frequency	Percentage
Gender:		
Male	33	82.5
Female	7	17.5
Age:		
<40 years	13	32.5
40-50 years	21	52.5
>50 years	6	15.0
Educational qualification level:		
NQF Level 5*	13	32.5
NQF Level 6**	19	47.5
NQF Level 7&8***	8	12.5
Years of service:		
< 10 years	11	27.5
10 – 20 years	20	50.0
> 20 years	9	22.5

**National First Degrees, National Higher Diplomas & Advanced University Diplomas
*** Honours & Masters Degrees

The majority of the respondents (82.5%) were male while only 7 respondents (17.5%) were female. The table also indicates that 52.5% of the respondents fall in the age range of 40-50 years. In addition, 32.5% are younger than 40 years while only 15% is over 50 years of age.

3.2 The effect of the independent variables on the proficiency to formulate objectives

For the purpose of this study the focus will be on the following independent variables and their effect on the proficiency to formulate objectives:

- Gender
- Age
- Level of education
- Years of service

i) Gender

Respondents were requested to state the objectives of the projects in which they are involved. The project objective formulation scores resulted from the following criteria:

1. Integration with both the institutional and functional objectives – two options:
   a) Not integrated =1 point
   b) Somewhat integrated=2 points
2. Direction which comprise of:
   a) Very vague=1 point
   b) General= 2 points
   c) Specific=3 points
3. Dimensions/criteria that are:
   a) Specific=1 point
   b) Measurable=1 point
   c) Action orientated: 1 point

The maximum points one can get is eight.

Only 29% of the respondents reveal an excellent proficiency to formulate the objectives while 40% indicated an above average proficiency. A total of 31% male against only 17% female respondents reveal an excellent proficiency.

The above differences where however not significantly (Spearman correlation coefficient = - 0.130; p=0.455).

ii) Age

Only 25% of the respondents younger than 40 years of age indicated an excellent proficiency to formulate objectives against 30% who are 40 years of age and above. These differences again where insignificant according to the Spearmen correlation coefficient. Interesting however was the fact that 74% of the older respondents against only 58% of the younger respondents indicated an above average and excellent proficiency to formulate objectives. A possible reason could be that the older respondents do have more experience in formulating project objectives.

iii) Level of education

Table 2 below indicates respondent's level of qualification and their proficiency to formulate objectives.

Table 2: Distribution of respondents according to objective formulation scores and qualification level

Respondent's Qualification Level	Project objective formulation categories									
	Poor (3)		Average (4)		Above average (5 & 6)		Excellent (7 & 8)		Total	
	n	%	n	%	n	%	n	%	N	%
NQF Level 5*	1	8.3	1	8.3	7	58.3	3	25	12	100
NQF Level 6**	2	11.8	4	23.5	6	35.3	5	29.4	17	100
NQF Level 7 & 8***	0	0	3	50	1	16.7	2	33.3	6	100
Total	3	8.6	8	22.9	14	40	10	28.6	35	100

*National Diplomas & National Certificates
**National First Degrees, National Higher Diplomas & Advanced Univ. Diplomas
***Masters & Honours Degrees
Spearman correlation coefficient = -0.081, Exact significance level (P) = 0.644

According to the statistical analysis there is no significant difference however a linear increase occurs in the proficiency category of excellent from NQF Level 5 (25%) to NQF Level 7&8 (33.3%).

iv) Years of service

According to Mathabatha (2005) employees who served a number of years in a certain field develop expertise through experience and thus become more skilful and competent in performing their tasks. A total of 57% of the respondents have 15 or less service, while 43% have more than 15 years of service. The results of the study however indicated the further that 70% of the respondents with 15 years or less of service indicated an above and excellent proficiency to formulate objectives against

67% of the respondents with more than 15 years of service. A possible explanation could be that project management became only important since 2008/2009 in South Africa.

3.3 The effect of the independent variables on the frequency at which projects are evaluated

Respondents indicated how often they evaluate the projects where they are involved with. The evaluation frequencies are: Annually; Quarterly; Monthly or less; after completion of every activity.

i) Gender

Gender, according to Jiggens, Samanta & Olawayo (1998) has proven to be an essential variable for analysing roles, responsibilities, constrains, opportunities, incentives, costs and benefits in agriculture and evaluation of working activities is an essential responsibility of an extension worker. The findings of the study indicated that 52% of the respondents evaluate their respective projects on a monthly or less basis, 30% does it quarterly, 12% after each activity and 6% evaluate their projects annually. According to Spearmen correlation coefficient the difference between male and female respondents with regard to the frequency of evaluation was insignificant, whereby 52% of male and 50% of female evaluate their projects on a monthly or less frequency.

ii) Age

Table 3 below clearly indicate the effect of age on the frequency of project evaluation.

Table 3: Distribution of respondents according to the frequency of project evaluation and age categories

Respondent age categories	Evaluation frequency									
	Annually		Quarterly		Monthly or less		After completion of every activity		Total	
	n	%	n	%	N	%	n	%	N	%
< 40 years	0	0	1	10	7	70	2	20	10	100
≥ 40 years	2	8.7	9	39.1	10	43.5	2	8.7	23	100
Total	2	6	10	30	17	52	4	12	33	100

Spearman correlation coefficient= -0.360; p= 0.041

According to the above table there is a significant negative relationship between project evaluation and age categories. There is significantly more younger respondents (70%) evaluating their projects on a monthly or less basis than the older respondents (43.5%).

iii) Level of education

No significant difference occurs between the level of qualification and the frequency of project evaluation (Spearman correlation coefficient= -0.102; p=0.569). A total of 54.5% of respondents with a NQF level 5 and 56.3% with a NQF Level 6 qualification indicated that they evaluate their projects on a monthly or less basis. Another interesting finding is that 67% of respondents with a NQF Level 7&8 qualification evaluate their projects only on a quarterly frequency – the higher the qualification the less frequently the evaluation.

iv) Years of service

There is a general assumption that the more experienced individuals perform best. Table 4 below indicates respondent's frequency of project evaluation.

Table 4: Distribution of respondents according to the frequency of project evaluation and years of service

Respondent years of service categories	Evaluation frequency									
	Annually		Quarterly		Monthly or less		After completion of every activity		Total	
	n	%	n	%	N	%	n	%	N	%
≤15 years	0	0	4	22.2	10	55.6	4	22.2	18	100
≥ 16 years	2	13	6	40	7	47	0	0	15	100
Total	2	6	10	30	17	52	4	12	33	100

Spearman correlation coefficient= -0.420; p=0.003

A highly significant negative correlation (p=0.003) occurs between respondents with 15 years or less experience against respondents with 16 years or more experience. The less the experience the more respondents tend to evaluate their projects more frequently, namely: monthly or less 55.6% against 46.7% and evaluation after completion of each activity 22% against 0%.

3.4 The effect of independent variables on committee involvement in evaluation

Respondents were asked if they know their project committee members by name, their responsibilities and involvement in project evaluation. For the purpose of this study the focus will be on the following independent variables and their effect on committee involvement in project evaluation:

- Gender
- Age
- Level of education
- Years of service

i) Gender

Table 4 below presents respondents' knowledge with regard to project committee members' involvement in evaluation.

It is clear from the table that 13.5% of the respondents indicated that there is no project committee involved. A total of 57% know there project committee members only by name while 30% know them by their involvement in evaluation of the projects.

According to the Spearman correlation coefficient there is no significant difference between male and female respondents, however 10 male against only one female know there committee members by involvement.

Table 5: Distribution of respondents according to committee members' involvement in evaluation and respondents' gender

Respondent gender categories	Committee involvement in evaluation							
	No committee		Know them by name		Know them by involvement		Total	
	n	%	n	%	n	%	N	%
Male	3	10	17	57	10	33	30	100
Female	2	29	4	57	1	14	7	100
Total	5	13	21	57	11	30	37	100

Spearman correlation coefficient= -0.226; p=0.191

ii) Age

Mokone (2005: 67) found that age favours good performance and efficiency of extension workers.

Table 6 below summarises the respondents' knowledge with regard to project committee members' involvement and age.

Table 6: Distribution of respondents according to committee members' involvement in evaluation and respondents age categories

Respondent age categories	Committee involvement in evaluation							
	No committee		Know them by name		Know them by involvement		Total	
	n	%	n	%	n	%	N	%
<40 years	3	23.1	7	53.8	3	23.1	13	100
≥40 years<	2	8.3	14	58.3	8	33.3	24	100
Total	5	13.5	21	56.8	11	29.7	37	100

Spearman correlation coefficient=0.179 p=0.314

The table indicates that 23.1% of the respondents younger than 40 years of age against 33.3% of the respondents 40 years of age or older know their project committee members involvement in evaluation. Although the difference is not significant it is a clear indication that the older respondents do have a better knowledge of the beneficiaries' involvement in evaluation than the younger respondents.

iii) Level of education

The spearmen correlation coefficient indicated an insignificant (p= 0.84) difference between the three levels of qualification categories. A total of 23.1% of respondents with a NQF Level 5, 33.3% with a NQF Level 6 and 33.3% with a NQF Level 7 & 8 qualification know their committee members' involvement in project evaluation.

iv) Years of service

Table 7 below highlights the respondents' experience and their knowledge about project committee members' involvement in project evaluation.

Table 7: Distribution of respondents according to their knowledge about committee members' involvement in evaluation and respondents' years of service

Respondent years of service categories	Committee involvement in evaluation							
	No committee		Know them by name		Know them by involvement		Total	
	n	%	n	%	n	%	N	%
≤15 years	4	18.2	12	54.5	6	27.3	22	100
≥16 years<	1	6.7	9	60	5	33.3	24	100
Total	5	13.5	21	56.8	11	29.7	37	100

Spearman correlation coefficient=0.128 p=0.508

According to table 7, majority of the respondents, 56.8% know project committee members by names against 29.7 that know committee members through their involvement. There is also an indication that more experienced staff with at least 16 years of experience knows committee members through their involvement in evaluation. There is therefore no significant correlation, only a slight difference in favour of the more experienced respondents occurs.

4. SUMMARY AND CONCLUSIONS

A total of 37 extension officers participated in the study namely 81% male and 19% female. The main aim of the study was to determine the effect of the following independent variables namely gender; age; level of education and years of experience on the important elements of an evaluation approach:

- Extension staff's proficiency to formulate project objectives;
- Frequency of project evaluation; and
- Project committee members' involvement in project evaluation.

a) Proficiency to formulate project objectives

i) Gender

Only 29% of all the respondents indicated an excellent proficiency to formulate project objectives. Only 31%male against 17% female reveal an excellent proficiency.

There is therefore a clear and urgent need to upgrade the skills of extension staff (male and female) in objective formulation.

ii) Age

Although the difference is insignificant a total of 74% of the older respondents against 58% of the younger respondents indicated an above average and excellent proficiency to formulate objectives.

The older extension staff can play an important role to support the younger staff to improve their proficiency to formulate project objectives.

iii) Level of education

No significant difference occurs between the different levels of education and the proficiency to formulate objectives. However a linear increase occurs in the proficiency category of excellence from the lower education category (NQF Level 6) to the highest level of education (NQF Level 7 & 8).

It is therefore recommended that the higher educated extension staff need to give support to those with a lower qualification to improve their proficiency to formulate objectives.

iv) Years of experience

A total of 70% of all the respondents have less than 16 years of experience. The findings 58% of the less experienced staff against 46% of the more experienced staff indicated an above and excellent proficiency to formulate objectives.

More experienced extension staff should engaged with less experienced staff and learn from them how to formulate objectives.

b) Frequency of project evaluation

i) Gender

A total of 52% of all the respondents evaluate the projects on a monthly or less basis. No significant difference occurs between male (52%) and female (50%) respondents.

The once off evaluation of a project at the end of the project is not acceptable anymore. What is needed is an ongoing and continuous process of monitoring and evaluation during the live time of the project. According to the findings there is an urgent need for more frequent evaluation of project activities in the Region.

ii) Age

A significant negative difference occurs between the frequency of evaluation and age categories. The younger the respondents the more (70%) they evaluate the projects on a monthly and less frequency than the older respondents (43.5%).

There is a clear indication that the younger staff members have adapted somewhat easier to the challenges of project evaluation than the more elderly staff members.

iii) Level of education

No significant differences occur between level of qualification and frequency of evaluation of projects. A total of 54.5% of respondents with an NQF Level 5 and 56.5% with an NQF Level 6 qualification evaluate the projects on a monthly or less frequency.

Qualification should today not be a reason for not evaluating projects more frequently.

iv) Years of experience

A highly significant difference ($p= 0.003$) between respondents (56%) with less experience and respondents (47%) with 16 years and more experience, evaluating the projects on a monthly or less basis.

It is a clear indication again, that the less experienced respondents adapted more easily to the prerequisites for successful project evaluation.

c) Project committee members' involvement in project evaluation

i) Gender

A total of 57% of all the respondents know their committee members only by name while 30% know them by their involvement in project evaluation. A total of 10 (33%) male and only one (14%) female respondents know the committee members' involvement in project evaluation.

Participation by all role players in project planning and management is essential for success. I t is therefore essential that every extension officer involved in a project must know what role each person needs to fulfil and specifically to ensure participation in the process of evaluation.

ii) Age

According to the study only 23.1% of the younger respondents and 33.3% of the older respondents do know the project committee members involvement in the evaluation of the project. Although the difference is not significant there is a clear indication in favour of the older respondent's knowledge about the committee member's involvement in project evaluation.

It is necessary that the older respondents support and guide the younger generation into the process of project evaluation to ensure that they will also know the responsibility of each person, and specifically the role of the beneficiaries, in the process of evaluation.

iii) Level of education

No significant differences occur between the levels of education and the knowledge of extension staff about the project committee member's involvement in evaluation.

iv) Years of experience

v)

Only a slight difference occur namely in favour of the more experienced respondents (33%) against the less experienced respondents (27%), knowing the committee member's involvement in evaluation.

There is however urgent need to ensure that all extension officers need to know exactly what the involvement is of every committee member in the evaluation of the project.

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