

## EXTENSION OFFICERS' PERCEPTION TOWARDS ACCREDITATION AND REGULATION OF EXTENSION SERVICES IN NORTH WEST PROVINCE, SOUTH AFRICA

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### ABSTRACT

*This paper examines extension officers' perception towards accreditation and regulation of extension services. This is based on the premise that a pluralistic extension service delivery currently prevails in South Africa where public and private service providers exist with differentials in quality of services to clients; which can be overcome through accreditation of providers from end-users' perspectives. Using a random sampling technique, 69 extension officers were sampled and a questionnaire was used to collect data, which was analysed with the aid of Statistical Package for Social Sciences (SPSS) using frequency counts, percentages and probit regression. Extension officers have high knowledge that accreditation aids periodic quality review ( $\bar{X} = 1.81$ ,  $SD = 0.49$ ); improving quality of services ( $\bar{X} = 3.91$ ,  $SD = 1.26$ ) and promotes accountability ( $\bar{X} = 2.49$ ,  $SD = 0.79$ ). Significant determinants of the perception on accreditation are gender ( $t = 3.08$ ;  $p < 0.05$ ); marital status ( $t = -2.42$ ;  $p < 0.05$ ); number of children ( $t = 1.73$ ;  $p < 0.05$ ); household size ( $t = -2.03$ ;  $p < 0.05$ ); residence status ( $t = 1.78$ ;  $p < 0.05$ ); distance to clients ( $t = 2.06$ ;  $p < 0.05$ ); and attitude to accreditation ( $t = 1.86$ ;  $p < 0.05$ ).*

**Keywords:** accreditation, agricultural extension service, information sources, farmers, service delivery, service providers

### 1. INTRODUCTION AND BACKGROUND

Information dissemination has been a key part of extension service provision globally, because information plays a key role in farmer decision-making. Extensionists, a collective overarching term used in this paper to describe extension managers, workers, staff or personnel are often a prominent source of information, while trust and credibility have been associated with accreditation in the context of information delivery (Oladele et al 2018). In South Africa, the accreditation of extension service provision has been demanded by end users because it builds trust and credibility (Lukhalo, 2014).

Agricultural extension in South Africa, like most third world nations, is lacking in the area of accreditation of sources of agricultural information, hence, among others, an appropriate method of assessment and evaluation of the academic, capabilities and skills qualifications of agricultural extension officers is required. Service end users have emphasised the need for the accreditation of professional advisors and consultants in South Africa (Lukhalo, 2014). Accreditation is a process that leads to the improvement of personnel's skills through quality training and development in the agricultural sector, including entrepreneurship training. This process includes the recruitment and training of a new corps of public service extension

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officers that are able to react effectively to the demands of smallholder farmers and add to their successful involvement in the food value chain (FAO, 2013).

In South Africa, there are pluralistic extension services which imply that public and private extension service providers. However, the quality of these service providers varies considerably because of training and educational background differences, as well as exposure to clients or end users. The quality and standard of services rendered by some service providers has been described as below standard in terms of effectiveness and efficiency (Lukhalo, 2014). Chassin, Loeb & Schmaltz, (2010) suggests that a socially rendered public service should acquire certain standards to be considered a quality service deliverer. These standards should be measurable, verifiable and include the capability of meeting the needs of end users, or target beneficiaries.

Presently, professionalisation through appropriate accreditation of extension service provision has become a major concern in agricultural and rural development. It is part of a number of problems and challenges with regards to the coordination of extension and advisory services that need to be urgently addressed to enhance and maintain the required pace of rural development. The need to assess and evaluate the quality of extension services and accountability of such service providers has been so strong that it led to the approval of an accrediting organisation for extension SACNAPS (South African Council for Natural Scientific Professions) in 2015 (Lukhalo, 2013; Lukhalo, 2014).

Empowering farmers starts with information as it supports decisions. Decisions trigger actions and actions affect the achievements or performance of the system. Enhancement of farmers' knowledge and skills through information can increase their productivity. Fawole & Tijani, (2008) stated that access to information is one of the major prerequisites to agricultural development, thus credible information can enable farmers to make better choices and decisions. *A targeted approach to disseminating agriculture-related information that takes into account the diversity of sources can ensure information reaches as many farmers as possible; of greater importance is the credibility of the information as well as the sources* (Mittal & Mehar, 2016).

The realistic revealed value of information is the measured difference in performance between the start and end due to informational factors such as information sources. Fadiji, Atala & Jacob, (2005) and Mittal & Mehar, (2016) reported the use of different sources of information for gathering information on agricultural activities and grouped information sources into four broad categories, namely i) face-to-face (community groups, commission agents), ii) other farmers (relatives, neighbours), iii) mainstream media (television, newspapers, radio) and iv) modern ICT tools (landline phones, mobile phones, internet and internet kiosks). Further, the ability of information to stimulate farmers is an important aspect of assessing the worth of the information (Meir, 2000). Timeliness and accuracy of the information are other measures of the worth of information (Babu, Singh & Sachdeva, 1996). The importance of information depends on potential user's judgment of its worth. Information worth is assessed using a performance score of the information on each of four criteria: timeliness, adequacy, relevance and accuracy of the information. Anecdotal evidences suggest that farmers may be using these criteria when they assess information they receive from extension officers (Osikabor, Oladele & Ogunlade, 2011).

Adegboye, Oyinbo, Owolabi & Hassan, (2013) revealed that extension agents are prominent sources of information in agriculture in Nigeria. Traditionally, agricultural advisors have

played vital roles, not only in the dissemination of new information, practices and technologies, but also in helping farmers to adopt technologies (Prokopy, Haigh, Mase, Angel, Hart, Knutson, Lemos, Lo, Mcguire & Morton, 2013). Lemos, Yun-Jia, Kirchhoff & Haigh, (2014) stated that trust in sources of information favoured the use of crop advisors (extension agents) for climate information. Agricultural Assistant (a rank of extension agent) was the most credible information source perceived by banana growers in India (Kapse & Chole, 2008). Fadji *et al.*, (2005) also opined that extension agents, followed by radio, is the main source of information to the farmers in rural northern Nigeria. Okwu & Daudu, (2011) reported that in Benue state of Nigeria, interpersonal communication channels such as extension agents, contact farmers, opinion leaders and friends/ neighbours were generally preferred by the farmers to the mass media to obtain information on improved farm technologies. Several studies including (Daudu, Chado & Igbashal, 2009; Fawole & Tijani, 2013; Ogunremi, Faturoti & Oladele, 2011; Kwarteng, & Okorley 2014) have revealed that the village level extension agent is the most effective source of information for farmers but certainly not the most efficient in terms of cost and coverage. Afful & Lategan, (2014) reported that in Free State province, South Africa, public extension was the dominant information source for production activities for most farmers. Meena, (2010) found that scientists and extension officers were perceived as most credible by farmers in Sriganganagar district of Rajasthan of India. Dhayal & Bochalya, (2015) reported that 'agriculture supervisor' was the most credible personal cosmopolite sources by the ber growers in Rajasthan of India. The extent to which the information and recommendations of communicators are accepted by farmers depends on their perception of the credibility of communicators as sources of information. Credibility is the degree to which a communication source or channel is perceived trustworthy and competent by the receiver. Thus, credibility refers to perceived trustworthiness and expertise accorded to a source or channel by its audience at any given time. The knowledge of credibility of information sources will be of immense value to the change agent or extension workers as it will help in appropriate planning of the communication strategy which may result in the quick acceptance of improved technology on the part of the farmers (Kapse & Chole, 2008). Dhayal & Bochalya, (2015) reported that credibility of information sources and channels affect the adoption of improved agricultural practices by farmers.

Most studies examined use of information sources, pattern of utilisation, information needs. Fewer studies examined the credibility of information sources and information worth assessment. Even less research attention paid to accreditation of information sources. The utility of information is in part influenced by the credibility of the sources (Kakade, 2013). Several researchers have established that extension agents are the most prominent and common information source among farmers in Africa.

Düvel, (2007) noted that since the inception of extension services, its major objective has been the dissemination of new information in relation to agricultural activities to farmers to aid maximum productivity and provide food security as well as rural development. However, these objectives have had so many obstacles which seem to hinder the achievements of extension service goals. A major issue hindering extension service delivery is the lack of accreditation and regulation of the extension services providers, leading to poor extension service credibility. Accreditation has been hailed as a potential solution because it would enhance trust, assure expertise and could therefore enhance the impact of extension service delivery. For example, Duckett, (1998) states that quality improvement can be ensured through accreditation with the use of diverse approaches, with the major purpose of creating procedures and regulation that will elevate the quality of service providers to the target

consumers. Accreditation is a process that involves the assessment of individuals in an organisation, based on sets of pre-determined standards used in evaluating and assessing individuals as certified professionals in an organisation (Klazinga, 2000; Pompey, Contandriopoulos, François & Bertrand, 2010). Accreditation is also regarded as a means of assessing individual's ability in fulfilling organisations' missions and objectives and compliance of the organisation in regard to accrediting requirements (Pompey *et al.*, 2004). Inclusively, accreditation is aimed at ensuring that a standard level of quality is sustained by individuals in an organisation (Chassin *et al.*, 2010). Also, accreditation is a form of affirmation of individuals continual commitment in providing a quality and effective service to targeted consumers (Pompey *et al.*, 2010).

This paper examines the perception of extension officers towards accreditation due to the fact that perception is the process by which social beings comprehend and categorise sensation to create a meaningful experience of the world (Lindsay & Norman, 1977). This suggests that when individuals are faced with a situation or stimuli, the individuals perceive the stimuli as something meaningful to them based on a previous encounter. However, individuals' interpretation or perception of the stimuli or situation may substantially vary from reality (Allport, 1993). In this paper, attitude was measured on a Likert scale on opinionated issues expressed as attitudinal statements related to accreditation, while knowledge was operationalised through factual statements rated as true or false and scored as correct or wrong. The main objective of this paper is to determine the attitude of extension officers towards accreditation and regulation of extension services in North West province, South Africa. Specifically, for the extension officers the personal characteristics were identified, perception towards accreditation ascertained, perceived impact of accreditation on extension services and level of knowledge on accreditation determined.

## 2. METHODOLOGY

The study was conducted in all districts of the North West province, namely Bonjanala, Ganyesa, Zeerust, Rustenburg, Taung, Klerksdorp and Potchefstroom. North West is a province of South Africa (Mahikeng is its capital). According to North West Parks Board the area of the North West Province of South Africa is 118,797 sq km (45,869 sq miles). It shares the international border with Botswana. Within the country it shares margins on the south with provinces of Free State, Northern Cape, and on the northeast and east by the Limpopo Province and Gauteng. Temperatures range from 17-31°C (62-88°F) in the summer and from 3-21°C (37-70°F) in the winter. Annual rainfall totals about 360 mm, with almost all of it falling during the summer months, between October and April (Tshwene & Oladele 2016).

The research design used for this study was descriptive and quantitative. Bless & Higson-Smith, (2000) and Kerlinger & Lee, (2000) define such a design as being about conditions that exist, practices that prevail, beliefs and attitudes that are held as processes that are ongoing and trends that are developing. A simple random sampling technique was used to select 69 from 110 extension officers across the districts in the province; these 69 extension officers responded to the administered questionnaire.

Data were collected through personal interviews using a structured questionnaire. The questionnaire was developed based on the objectives and review of literature. The completed questionnaires were sorted and analysed with Statistical Package for Social Sciences (SPSS) 18.0., using standard deviation, mean, frequency counts and percentages and probit regression analysis to isolate factors influencing perception of extension officers towards

accreditation. The method of measurement of perception and attitude on opinionated issues related to accreditation as opposed to factual statements on accreditation differentiates perception from knowledge. Probit regression was used to model dichotomous or binary outcome variables such that the inverse standard normal distribution of the probability is modelled as a linear combination of the predictors. In the probit model the discrete dependent variable  $Y$  is a rough categorisation of a continuous, but unobserved variable  $Y^*$ . If  $Y^*$  could be directly observed than standard regression methods would be used (such as assuming that  $Y^*$  is a linear function of some independent variables, for example:

$$Y^* = \beta_1 X_{1i} + \dots + \beta_j X_{ji} + u_i \dots \dots \dots (1)$$

In this study,  $Y^*$  is perception of extension officers on accreditation which is used as a proxy for  $Y^*$ . Perception measured as Yes and No. A probit model is appropriate when the dependent variable to be evaluated is dichotomous (Ameniya, 1981 and Maddala, 1983). The actual model specification for is  $Y_i = \beta_0 + \beta_1 \text{ age} + \beta_2 \text{ gender} + \beta_3 \text{ marital status} + \beta_4 \text{ household size} + \beta_5 \text{ qualification for higher degree} + \beta_6 \text{ distance from office to client} + \beta_7 \text{ number of farmers covered} + \beta_8 \text{ means of mobility} + \beta_9 \text{ working experience} + \beta_{10} \text{ impact} + \beta_{11} \text{ knowledge} + \beta_{12} \text{ source of information} + \beta_{13} \text{ constraints}$ .

### 3. RESULTS AND DISCUSSIONS

Table 1 shows that 62.2% of extension officers are male, which shows male dominance in the extension service delivery. Also, the majority of extension officers (50.2%) are above 40 years of age, with 58% having married status; 88.3% having between 1 to 3 children and 53.6% with a household size of 5 to 8 persons. These demographic characteristics are to give insight into the kind of roles conflict the extension officers may be experiencing in the combination of family and work responsibilities.

Majority of the extension officers (84%) are Christians, 39.1 % have a B.Sc. Degree as the highest academic qualification. Düvel, (2007) reported that only Gauteng and Free State Provinces in South Africa have a high percentage of extension officers with B.Sc. Degree qualifications. However, only 18.8% of the respondents are studying to acquire a higher degree. About 53% of the extension officers had between one and 10 years working experience, while 76.8% live in the job location area although 55.1% indicated that they had a rural background. The majority of the extension officers (88.4%) have job designation of advisors, with 44.6% covering between one and 10 farming communities. 77.4 % travelled more than 30 km to reach their farmers while 57.1% reached more than between one and 200 farmers monthly.

**Table 1:** Personal characteristics of extension officers

Variables	Indicators	Frequency (%)
Gender	Male	43 (62.32)
	Female	26 (37.68)
Age	25-29	10 (14.3)
	30-40	24 (34.6)
	41-50	22 (31.6)
	51 – 60	13 (18.84)
Marital status	Married	40 (58.0)
	Widowed	6 (8.7)
	Divorced	4 (5.8)
	Separated	1 (1.4)
	Single	18 (26.1)
Number of Children	1-3	61 (88.3)
	4-6	8 (11.5)
Religion	Christianity	58 (84.0)
	Islam	2 (2.9)
	Traditional	9 (12.9)
Highest Qualification	Diploma	16 (23.1)
	B-Tech	18 (26.1)
	BSc	27 (39.1)
	Post Graduate Diploma	4 (5.8)
	MSc	4 (5.8)
Studying for degree	No	56 (81.1)
	Yes	13 (18.8)
Household Size	1-4 persons	28 (40.5)
	5-8 persons	37 (53.6)
	Above 8 persons	4 (5.7)
Working Experience	1-10 years	38 (53.4)
	11-20 years	15 (21.5)
	Above 20 years	16 (23.18)
Living in Job Location area	Yes	53 (76.8)
	No	16 (23.2)
Rural-Urban Background	Born in urban area	29 (42)
	Born in rural area	38 (55.1)
	Brought up in urban area	1 (1.4)
Rank/Job designation	Advisors	61 (88.4)
	Senior Advisors	4 (5.8)
	Specialist	4 (5.8)
No of communities covered	1-10	31 (44.6)
	11-20	22 (31.88)
	Above 20	16 (22.7)
Numbers of farmers covered	1 – 200	40 (57.1)
	201 - 500	16 (22.8)
	Above 500	12 (17.39)

Distance of clients from office	Less than 30km	14 (20.28)
	30 – 60 km	27 (37.4)
	Above 60km	28 (40.0)

Table 2 presents the knowledge of extension officers on accreditation. In this paper, knowledge was operationalised through 44 factual statements on accreditation of extension service providers using dichotomous variables: true (coded 2) or false (coded 1), with an actual mean of 1.5. This means that item scores below 1.5 indicate lower than average, or low knowledge while scores above 1.5 show above average, or high knowledge of that particular statement or variable. Variables with the highest knowledge score among respondents are the following statements: accreditation aids periodic quality review ( $\bar{X} = 1.81, SD = 0.49$ ); accreditation assures quality and effectiveness ( $\bar{X} = 1.78, SD = 0.51$ ) and accreditation indicates standards of quality ( $\bar{X} = 1.78, SD = 0.51$ ). Respondents' lowest knowledge score on accreditation is that accreditation supports funding requests ( $\bar{X} = 1.37, SD = 0.59$ ). Respondents therefore do not have knowledge that accreditation will help their funding requests. Düvel, (2007) suggests that the acceptance of extension as a field of profession creates opportunity for extension officers to practice as professionals. It is essential to note that to be accredited as professionals, there is a need for extensive training and mastery of specialised knowledge, ethical code and process of certification of licensing.

**Table 2:** Knowledge of extension officers on accreditation

Items	True	False	$\bar{X}$	SD
Accreditation is a regulatory provider of rural advisory services	51(73.9)	15(21.7)	1.69	0.55
Accreditation deals with quality of diversion of services	51(73.9)	15(21.7)	1.69	0.55
Accreditation assures quality and effectiveness	57(82.6)	9(13.0)	1.78	0.51
Accreditation is a mechanism for quality assurance	55(79.7)	11(15.9)	1.75	0.52
Accreditation is a mechanism for quality improvement	52(75.4)	14(20.3)	1.71	0.54
Accreditation serves to protect the needs of farmers	39(56.5)	26(37.7)	1.50	0.60
Accreditation promotes the needs of farmers	44(63.8)	22(31.9)	1.59	0.57
Accreditation promotes accountability	55(79.7)	11(15.9)	1.75	0.52
Accreditation promotes credibility	54(78.3)	12(17.4)	1.73	0.53
Accreditation benchmarks successful practices by sharing information	54(78.3)	12(17.4)	1.73	0.53
Accreditation ensures reasonable level of assurance	50(72.5)	16(23.2)	1.68	0.55
Accreditation supports funding requests	30(43.5)	35(50.7)	1.37	0.59
Accreditation benefits all stake holders	46(66.7)	20(29.0)	1.62	0.57
Accreditation improves organisational standards	52(75.4)	14(20.3)	1.71	0.54
Accreditation aids periodic quality review	59(85.5)	7(10.1)	1.81	0.49
Accreditation indicates standards of quality	57(82.6)	9(13.0)	1.78	0.51
Accreditation requires different management control	47(68.1)	18(26.1)	1.62	0.59
Accreditation ensures efficient and effective use of resources	47(68.1)	19(27.5)	1.63	0.56
Accreditation improves capacity building	52(75.4)	14(20.3)	1.71	0.54
Accreditation legitimises extension services	52(75.4)	14(20.3)	1.71	0.54
Accreditation promotes opportunity for feedback	45(65.2)	21(30.4)	1.60	0.57
Accreditation identifies areas that need improvement	50(72.5)	15(21.7)	1.66	0.58
Accreditation provides suggestions to improvement	52(75.4)	14(20.3)	1.71	0.54

Accreditation is useful in monitoring evaluation and assessment	53(76.8)	13(18.8)	1.72	0.53
Accreditation used to ensure a disciplined and systematic approach to training programs	54(78.3)	11(15.9)	1.72	0.56
Accreditation strengthens community confidence in the quality of service delivery	50(72.5)	16(23.2)	1.68	0.55
Accreditation stimulates continuous improvements in service delivery	55(79.7)	11(15.9)	1.75	0.52
Accreditation provides access to reliable and certified information on facilities and infrastructures to ensure quality service delivery	48(69.6)	18(26.1)	1.65	0.56

Table 3 presents the attitude of extension officers towards accreditation. In this paper, attitude was measured on a Likert scale on opinionated issues related to accreditation which are different from beliefs. This was rated on a five-point Likert scale: 1=Strongly Disagree (SD), 2=Disagree (D), 3=Undecided (U), 4=Agree (A) and 5=Strongly Agree (SA) with 24 attitudinal statements. Due to the rating scale the actual mean is 3.0. This denotes that item scores below the actual mean indicate an unfavourable attitude while scores above the actual mean show a favourable attitude. However, it must be noted that the extent of the deviation from the mean score shows the level of attitude on such items. Prominent attitudinal statements that extension officers are favourably disposed to are accreditation improves quality of services ( $\bar{X} = 3.91$ ,  $SD = 1.26$ ); accreditation helps to improve confidence ( $\bar{X} = 3.75$ ,  $SD = 1.25$ ) and accreditation helps extension agents to improve their work ( $\bar{X} = 3.68$ ,  $SD = 1.16$ ). Conversely, extension officers were not favourably disposed to attitudinal issues such as Accreditation increase job satisfaction level ( $\bar{X} = 2.92$ ,  $SD = 1.39$ ); Accreditation decreases the stress level of staffs ( $\bar{X} = 2.85$ ,  $SD = 1.39$ ) and accreditation improves farmers' right ( $\bar{X} = 2.78$ ,  $SD = 1.44$ ).

**Table 3:** Attitude of extension officers on accreditation

Items	SA	A	U	D	SD	$\bar{X}$	SD
Accreditation improves quality of services	26(37.7)	27(39.1)	7(10.1)	5(7.2)	1(1.4)	3.91	1.26
Accreditation improves the outlook of rural advisory services	16(23.2)	32(46.4)	5(7.2)	11(15.9)	1(1.4)	3.5	1.35
Accreditation makes rural advisory services systematic	13(18.8)	29(42.0)	11(15.9)	12(17.4)	1(1.4)	3.4	1.26
Accreditation improves the image of rural advisory services	17(24.6)	25(36.2)	14(20.3)	7(10.1)	2(2.9)	3.5	1.35
Accreditation increases the workload of extension agents	12(17.4)	14(20.3)	17(24.6)	17(24.6)	6(8.7)	3.0	1.38
Accreditation extension agents to update themselves	12(17.4)	25(36.2)	16(23.2)	9(13.0)	4(5.8)	3.3	1.31
Accreditation increase job satisfaction level	10(14.5)	16(23.2)	16(23.2)	17(24.6)	6(8.7)	2.92	1.39



Accreditation decreases the stress level of staffs	9(13.0)	17(24.6)	13(18.8)	18(26.1)	9(13.0)	2.85	1.39
Accreditation improves farmers right	9(13.0)	15(21.7)	15(21.7)	17(24.6)	8(11.6)	2.78	1.44
Accreditation improves farmers satisfaction	12(17.4)	21(30.4)	15(21.7)	12(17.4)	6(8.7)	3.17	1.38
High chances of legal action of famers against extension agents	8(11.6)	24(34.8)	20(29.0)	9(13.0)	4(5.8)	3.15	1.30
Accreditation affects productivity of staffs	10(14.5)	24(34.8)	14(20.3)	12(17.4)	6(8.7)	3.15	1.35
Accreditation increases better work condition	17(24.6)	24(34.8)	15(21.7)	7(10.1)	3(4.3)	3.52	1.32
Accreditation is a valuable tool to implement changes	14(20.3)	27(39.1)	15(21.7)	7(10.1)	3(4.3)	3.47	1.29
Accreditation enables better response of agents to farmers	12(17.4)	24(34.8)	14(20.3)	10(14.5)	5(7.2)	3.23	1.40
Accreditation enables the improvement of farmer care	11(15.9)	26(37.7)	16(23.2)	8(11.6)	5(7.2)	3.30	1.32
Accreditation enables the motivation of extension agents	14(20.3)	29(42.0)	16(23.2)	3(4.3)	3(4.3)	3.52	1.31
Accreditation enables team work and collaboration	13(18.8)	27(39.1)	21(30.4)	1(1.4)	4(5.8)	3.50	1.24
Accreditation facilitates development of extension agents	16(23.2)	31(44.9)	13(18.8)	3(4.3)	3(4.3)	3.65	1.25
Accreditation helps to improve confidence	18(26.1)	33(47.8)	10(14.5)	2(2.9)	6(8.6)	3.75	1.25
Accreditation helps extension agents to improve their work	15(21.7)	31(44.9)	16(23.2)	3(4.3)	4(5.7)	3.68	1.16
Accreditation improves ideas about what they have done	8(11.6)	29(42.0)	20(29.0)	6(8.7)	6(8.6)	3.34	1.19
Accreditation gives extension agents a sense of direction	10(14.5)	29(42.0)	21(30.4)	4(5.8)	5(7.2)	3.46	1.17
Accreditation facilitates extension agents' leadership capabilities	12(17.4)	25(36.2)	17(24.6)	10(14.5)	5(7.2)	3.37	1.26

Table 4 indicates the results of perceived impact of accreditation on extension service delivery. The impact of accreditation was rated on a 3-point Likert-type scale of 1=Low, 2=Medium, 3=High with 26 items. Due to the rating scale the actual mean is 2.0. This denotes that item scores below the actual mean indicate low impact while scores above the actual mean show high impact. It must be noted however that the extent of the deviation from

the mean score shows the level of impact of such items. The items with the highest mean scores were accreditation will improve confidence of extension agents ( $\bar{X} = 2.53$ ,  $SD = 0.77$ ); Accreditation will promote accountability ( $\bar{X} = 2.49$ ,  $SD = 0.79$ ) and accreditation will promote credibility ( $\bar{X} = 2.52$ ,  $SD = 0.75$ ). However, the extension officers recorded low scores in terms of the impact of accreditation on extension service delivery on accreditation will benefit funding bodies and stake holders ( $\bar{X} = 1.91$ ,  $SD = 0.93$ ) and accreditation will increase job satisfaction ( $\bar{X} = 1.92$ ,  $SD = 0.94$ ).

**Table 4:** Perceived impact of accreditation on extension services

Items	High	Medium	Low	$\bar{X}$	SD
Accreditation will improve confidence of extension agents	44(63.7)	20(29.0)	5(7.2)	2.53	0.77
Accreditation will improve quality of rural advisory services	31(44.9)	27(39.1)	11(15.9)	2.26	0.85
Accreditation will promote accountability	42(60.5)	21(30.4)	6(8.6)	2.49	0.79
Accreditation will promote credibility	42(60.5)	23(33.3)	4(7.4)	2.52	0.75
Accreditation will improve quality of information	30(43.4)	25(36.2)	14(20.2)	2.20	0.88
Accreditation will improve the skills and knowledge of staffs	30(43.4)	32(46.4)	7(10.1)	2.30	0.79
Accreditation will improve quality of diversion of services	29(42)	28(40.6)	12(17.3)	2.21	0.85
Extension services will change from generalist approach to specialist	31(44.9)	29(42)	9(13)	2.28	0.82
Accreditation will serve to protect the needs of farmers	19(27.5)	28(40.6)	22(31.9)	1.91	0.90
Accreditation will benefit service users	27(39.1)	30(43.4)	12(17.3)	2.18	0.84
Accreditation will benefit accredited organisation	29(42)	31(44.9)	9(13)	2.26	0.81
Accreditation will benefit funding bodies and stake holders	21(30.4)	24(34.8)	24(34.8)	1.91	0.93
Accreditation will establish a professional relationship between agents and farmers	32(46.4)	30(43.4)	7(10.1)	2.33	0.79
Accreditation will serve as a means of self-regulation	33(47.8)	27(39.1)	9(13)	2.31	0.83
Accreditation will lead to better knowledge of analyses	30(43.4)	32(46.4)	7(10.1)	2.30	0.79
Accreditation will lead to documentation of all actions	26(37.6)	31(44.9)	12(17.3)	2.17	0.83
Accreditation will increase motivation of extension agents	32(46.4)	30(43.4)	7(10.1)	2.33	0.79
Accreditation will strengthen the organisation	31(44.9)	30(43.4)	8(11.6)	2.28	0.84
Achievements of extension agents will be more legally recognized	43(62.3)	19(27.5)	7(10.1)	2.49	0.81
Accreditation will give the organisation better outlook	32(46.4)	28(40.6)	9(13)	2.28	0.85
Accreditation will improve capacity building	33(47.8)	28(40.6)	8(11.6)	2.33	0.81
Accreditation will promote opportunity for	25(36.2)	31(44.9)	13(18.8)	2.14	0.84

feedback					
Accreditation will increase job satisfaction	22(31.9)	23(33.3)	24(34.8)	1.92	0.94
Accreditation will improve work condition	24(34.8)	34(49.3)	11(15.9)	2.15	0.81
Accreditation will Increase extension research skill	36(52.1)	24(34.8)	9(13)	2.36	0.83
Accreditation will improve extension agents' leadership capabilities	31(44.9)	25(36.2)	13(18.8)	2.21	0.90

Table 5 presents the results on perceived constraints to the accreditation of extension service providers. Respondents indicated lack of coherent staff development plans by extension organisation (50.7%); lack of supportive work environments (50.7%); management are not convinced that extension agents' development is vital to quality service delivery (50.7%); Accreditation itself does not guarantee a certain level of individual competence (56.5%) and accreditation is not the end point in development of quality rural advisory service (53.6%).

**Table 5:** Perceived constraints to accreditation of extension officers

Perceived constraints	Yes	No
Scepticism about the value of accreditation to rural advisory services	34(49.3)	23(33.3)
Lack of coherent staff development plans by extension organisation	35(50.7)	23(33.3)
Prohibitive entry requirements to programmes	33(47.8)	22(31.9)
Available programmes are inappropriate to rural advisory services needs	28(40.6)	29(42.0)
Lack of supportive work environments	35(50.7)	24(34.8)
Lack of employer co-operation	33(47.8)	19(27.5)
Management are not convinced that extension agents development is vital to quality service delivery	35(50.7)	24(34.8)
Affects productivity of staff	29(42.0)	30(43.5)
Accreditation itself doesn't guarantee a certain level of individual competence	39(56.5)	19(27.5)
Accreditation is not the end point in development of quality rural advisory service	37(53.6)	20(29.0)
It only sets the minimum level of competence for critical functions	31(44.9)	25(36.2)
Accreditation is just a launching pad for further initiatives to improve service quality.	33(47.8)	26(37.7)

The results of the Probit regression model on the analysis of perception of extension officers on accreditation of extension service providers are presented in Table 6. The analysis of the results shows that there is significant relationship between the independent variables and perception on accreditation with a Chi square value of 657.19,  $p < 0.05$ . Significant determinants of the perception of accreditation of extension service provider are gender ( $t = 3.08$ ;  $p < 0.05$ ); marital status ( $t = -2.42$ ;  $p < 0.05$ ); number of children ( $t = 1.73$ ;  $p < 0.05$ ); household size ( $t = -2.03$ ;  $p < 0.05$ ); residence status ( $t = 1.78$ ;  $p < 0.05$ ); distance to clients ( $t = 2.06$ ;  $p < 0.05$ ); and attitude to accreditation ( $t = 1.86$ ;  $p < 0.05$ ). This implies that the current trend of demographic characteristics of extension officers will promote the accreditation of extension service providers except a change in the marital status of extension officers.

**Table 6:** Multiple regression between socio-economic characteristics and perception of extension officers on accreditation

Parameter	Estimate	Std. Error	Z	Sig.
Information sources	-.004	.005	-.682	.495
Gender	.249	.081	3.082	0.002
Age	-.001	.007	-.141	.888
Marital Status	-.067	.028	-2.417	.016
Number of Children	.066	.038	1.727	.084
Religion	-.066	.052	-1.272	.203
Highest Qualification	-.003	.035	-.079	.937
Household Size	-.194	.096	-2.031	.042
Working Experience	-.012	.012	-1.000	.318
Job Location	-.004	.007	-.549	.583
Rural-Urban Background	-.062	.107	-.582	.561
Residing within the circle	.163	.092	1.779	.075
Rank/ Job Designation	-.062	.072	-.858	.391
Job Location	-.137	.099	-1.390	.165
Number of Communities	.000	.000	.057	.954
Number of Farmers Group	.000	.001	.246	.806
Number of Farmers	.000	.000	-1.537	.124
Distance coverage	.000	.000	2.064	.039
Knowledge of accreditation	.008	.007	1.140	.254
Attitude to accreditation	.006	.003	1.863	.062
Impact of registration	.001	.005	.245	.806
Constraints to registration	.000	.003	.029	.977
Organisation registered	-.011	.101	-.108	.914
Intercept	-1.316	.541	-2.435	.015
Chi-Square	657.190			
Df	45			
Sig.	.000			

#### 4. CONCLUSION AND RECOMMENDATIONS

This paper has extended the frontier of knowledge from the use of extension services as information sources to accreditation of information sources due to the fact that extension agents are the most prominent and common information source among farmers in Africa. The findings from the study highlights that extension officers generally have a high knowledge of and favourable attitude towards accreditation of service providers. Hence the need to adopt accreditation procedures to extensions service providers. The most prominent impact of accreditation on extension service delivery is that accreditation will improve confidence and accountability of extension agents; such that extension service delivery has high accountability to farmers and other end users. The main constraint is that accreditation itself does not guarantee a certain level of individual competence. The perception of accreditation of extension service provider is influenced by the socio-economic characteristics of extension officers such as gender; marital status; number of children; household size; residence location; distance to clients; and attitude to accreditation. It is recommended that constraints

be alleviated to enhance the process of professionalisation and that the working conditions of extension officers be taken into the cognisance to facilitate professionalisation.

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