Critical analysis of mentorship conditions in the smallholder broiler contracted entrepreneurs in two provinces of the Republic Of South Africa.

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Abstract

The aim of this study was to investigate whether the entrepreneurs in question have received mentorship and their likelihood of being able to afford mentorship through the revenue generated by the enterprises. In addition, the study also investigated the likelihood of the existence of good relationships with the contractor. The research used both qualitative and quantitative approaches. Twenty-seven (n = 27) enterprises were purposively selected (meaning that all the enterprises in the South African Poultry Association were sampled). The study was conducted in two provinces of South Africa (Limpopo and North West). Both descriptive and inferential analyses were conducted. In this study, mentorship was found to be lacking in both provinces since the availability of mentors were below 40% in these enterprises. The results further revealed that the proportions of those with a mentor as compared to those without were found to be highly significantly different at 5% confident interval with those without mentor being in the majority (74.07%) as compared to the one with mentor. In nutshell, it could be concluded that mentorship in these enterprises is critical for success of enterprise.

Key words: smallholder, entrepreneurs, broiler, contract, mentorship

1. Introduction

Mentorship is a concept that seems to have multi-explanations and is often defined in a more diverse, circumstantial, forms and styles (Mary and Maloney, 2012, Myeki and Mmbengwa, 2014). According to Mary and Maloney, (2012), there is a perception that mentorship is an effective instrument that may increase both productivity and profitability of enterprises across all sectors of the society. In South African agricultural sector, mentorship is highly encouraged for the enterprise development and sustainability (Myeki and Mmbengwa, 2014). This seems to be true in more intensive farming practices such as poultry production units. Broiler farming sector in South Africa seems to have similar perception. In addition, broiler farming industry is regarded as a lucrative and niche business for smallholder farming communities in South Africa (Myeki and Mmbengwa, 2014). Thus, the South African Government has demonstrated its support to the mentorship program in order to increase the cash-flow for vulnerable smallholder farming.

This is because broiler farming, unlike other smallholder farming enterprises, appears to have a good, regular cash-flow derived from the high demand for chicken meat. In view of the higher demand for broiler products in the high density peri-urban and rural areas (where smallholder value chain farming enterprises predominate), the South African government through its infrastructural development facility known as Comprehensive Agricultural Support Program (CASP), has provided a number of smallholder farmers with broiler farming equipments and tools. These farmers were advised to complement the government infrastructure and operational capital through agricultural loans. In addition, the farmers were able to secure short and long-term supply contracts through the efforts of stakeholders such as the South African Poultry Association (SAPA), the provincial Departments of Agriculture, Forestry and Fisheries and the National Agricultural Marketing Council (NAMC).

In 2012, the Department of Agriculture Forestry and Fisheries (DAFF) received various complaints from the contracted farmers. These complaints pointed out those smallholders were not making a profit and thus their farms were under the risk of being repossessed due to the lack of ability for payment of the loan debt. In view of the above problems, the study was commissioned to investigate the various aspects that affect the profitability and sustainability of the contracted boilers farmers in South Africa. This paper reports on some of the aspects which were found to be crucial to the success and sustainability of the contract broiler farmers. The aim of the study was to determine the influence of mentorship or the lack thereof. The objective was to find out whether these contracted broiler farmers can afford the services of a mentor and to examine the type of relationship that exists between the farmers and their contractors.

2. Literature review

The concept of mentorship is not new in either business or professional environments (Earnshaw, 1995). Although this concept is not new, it is difficult to define (Bray and Nettleton, 2007). Mentorship or mentoring has been defined by some researchers as an interpersonal relationship where senior and more experienced organisational members provide support to junior or lesser experienced organisational members (Kram, 1983; Kram and Isabella, 1985). Ghosh (2014) argued that the traditional definition of mentoring has in recent times been greatly refined to accommodate changes in the nature of work and careers in the past few decades and thus this author seems to be of the view that there is a wider consensus around the types of mentoring support received or provided in organizational settings. However, other researchers such as Wilson et al. (2005) are of the view that the concept of mentorship should not only be defined based on its traditional evolution but also as an intrinsic transformational leadership and thus should be linked to the foundational impact of professional leadership.

Hence, these authors contextualize mentoring and its process within transformational leadership. These authors further highlighted the view that mentoring, as a concept, has been explored to encompass the experience of nurturing personal, professional, and intellectual growth and development. According to Wilson et al., (2005), encouraging and challenging youthful potential for leadership opportunities through mentorship provides a path to the development of the networks which may bring a subtle understanding, and organizational savvy that is necessary to thrive in tumultuous times. Mentorship may also involve a focus on interpersonal interaction, communication, and relational caring with individuals. Owens et al. (1998) explored another dimension in defining mentorship as a supportive and nurturing relationship between an experienced professional, a mentor, and an aspiring protégé (the adult learner).

The mentorship process is believed to aid in cultivating the rudimentary skills and knowledge base of the protégé. These different dimensions which have been used to define mentorship appear to confirm the difficulties of defining mentorship as a concept and thus associate this concept with a complex construct that has evolved with time and in different sectors. Various researchers have found that mentorship has tangible and intangible benefits that could benefit both mentor and mentee (Weinberg and Locander 2014). Part of the benefit of mentorship is to fulfill individual needs for support (to improve their personal and professional skills and adapt to their organizational roles throughout their career). This support can be obtained through effective execution of the mentorship process (Ceylan, 2004; Erdem, 2003 and Altuntas, 2012).

Mentoring in the workplace is a developmental relationship between two individuals, the mentor and the protégé (Haynes and Ghosh 2012; Bozionelos et al., 2014). Successful mentoring also increases career satisfaction, and leads to faster rates of promotion, higher salaries, pro-social behavior, improved interpersonal relationships, and positive coping skills (Schönfeldt and Hall 2013). The mentor often feels personal satisfaction in watching the growth and development of the mentee (Gerhart 2012). In the South African agricultural development sphere, mentorship and its benefits has not yet been topical. This is despite the giant step taken by the agribusinesses in South Africa to support the growth and commercialization of smallholder farming enterprises (enterprises which were marginalized due to the separate development policies of the past regime).

However, the attempt to introduce a formal mentorship program by the Department of Rural Development and Land Reform (DRDLR) in the form of a strategic partnership has yielded some disappointing results owing to the weak and exploitative relationship between the farmers and their mentors. As a consequence, some smallholder farmers do not see any reason for such relationships. Where mentorship program have succeeded, the relationship between protégés and mentors was seen to be mutual, positive and acceptable (Noe, 1988; Weinberg and Locander, 2014). Mentoring relationships are perceived to have the capacity to enhance individual development and personal growth at multiple career stages (Kram & Isabella, 1985; Weinberg and Locander, 2014).

3. Research methodology

The study was initiated in the year 2013 and this paper reports on only the mentorship aspects of the study. The research was conducted in two South African provinces (Limpopo and North West). These provinces were chosen for the study due to the high number of distressed farmers (farmers who could not afford to service their debts with commercial banks). This was a serious issue mainly for two provinces as farmers were at the risk of losing their properties through repossession. The study used both quantitative and qualitative research methodologies. These data collection methodologies were opted for due to their relative advantages, where their complementarities were exploited to advance the quality of the research output. A non-probability sample (which used a purposive sampling frame) was used.

During the investigation, the study made use of primary and secondary data (Oni et al., 2013). The secondary data was collected from various related books, published articles (on the internet) and official reports of government which included (but were not limited to) the Department of Agriculture, Forestry and Fisheries (DAFF) and the Department of Rural Development and Land Reform (DRDLR). The primary data were obtained from field surveys that were conducted using face-to-face interviews with the growers. The collection of this type of data included the use of personal

observations by the researchers (numerators), the use of structured interviews, and informal discussions with affected individuals. Prior to the primary data collection, stakeholders such as the South African Poultry Association (SAPA) and the Provincial Department of Agriculture were contacted. Meetings were held regarding the identification of the growers (farmers). The primary data collection commenced upon the receipt and consolidation of the growers' list. Growers identified were contacted with the intention of requesting permission for them to be involved. The structured questionnaire was administered to the respondents (n = 27) selected for the study. The collected quantitative data (such as the number of growers who have mentorship, those that do not and growers' relationships with mentors) were analyzed using the statistical package for social scientists (SPSS) windows version 17.0.

The following hypotheses were formulated:
- Null hypothesis (H_o): The number of growers with mentorship are equal to those without mentorship
- Alternative hypothesis (H_a): The number of growers with mentorship are not equal to those without mentorship

This was done in order to obtain descriptive and inferential statistical results and the results were represented in as logical and systematic way as possible. Qualitative data were used mainly during the interpretation of the results. Statistical calculations such as variances, frequency tables, coefficients, model, standard Hosmer and Lemeshow Test and odds ratios were done. Binary logistical non-parametric statistics and tests were undertaken with the assumption that the characteristics of the growers' variables were either significant at $p < 0.001$ (***), $p < 0.01$ (**) or at $p < 0.05$ (*) levels.

3.1 Model specification: This study used the binary logistic regression model. In general, the binary logistic regression model use binary variables with observed values assigned dual responses such as "yes or no". In this study, the respondents were asked to respond "yes or no" on whether they have a mentor or not. Equation (1) below represents the general binary logistic regression.

$$y_{1i} = \beta_0 + \beta_1 X_{1i} + \epsilon \dots\dots\dots\dots\dots\dots\dots\dots\dots (1)$$

Where:

Y is a dependent variable with binary outcomes coded 0 for yes and 1 for no.

The simple logistic model is based on a linear relationship between the natural logarithm (ln) of the odds of a mentorship and a numerical independent variable. This is represented in equation (2) below:

$$L = \ln(o) = \ln\left(\frac{P}{1-P}\right) = \beta_0 + \beta_1 X_{1i} + \epsilon \dots\dots\dots\dots(2)$$

Where:

P is the proportion of mentorship,
O is the odds of affordability of mentorship and relationship,
L is the ln (odds of mentorship),
X is the independent variable
X_{1i} = provinces,
X_{2i} = Satisfaction, X_{3i} = commodity,
X_{4i} =affordability, X_{5i} = relationship,
X_{6i} = Input supply, X_{7i} = Price,
X_{8i} = Contractor Price, X_{9i} =Chicks price.
β_0 and β_1 are the Y-intercept and the slope, respectively, and
ϵ is the random error.
Dummy variables were used to compare with the variables in question.

Mentorship is used to denote mentorship capacity in the broiler contract farming sectors, while $\beta_1 \cdots \beta_9$ are coefficients associated with each explanatory variable and ϵ is the error term. Several factors were hypothesized to influence the mentorship capacity of broiler contract farming in Limpopo and North West provinces. A description of these factors is presented in Table 1. The choice of these explanatory variables was mainly based on the general working hypothesis and partly on empirical findings from the literature, and, therefore, a positive or negative sign was assigned depending on the potential influence of a particular variable on the mentorship capacity.

4. Results and discussion

This section presents the results and discussion of the analyses of contracted smallholder broiler farmers in North West and Limpopo Provinces. These results are presented out of descriptive and inferential statistical outputs. Table 2 presents the results of the contract farming environments in two provinces (Limpopo and North West provinces). According to the results, North West province has a higher proportion of mentors (37.5%) as compared to Limpopo province. The differences in the proportions of the number of the mentors were found to be non-statistically significant at 5% confident interval where p-value was equals to 0.332. Regarding the existence of commodity groups in the contract farming environment, it was found that Limpopo province have more (73.7%) of these famers in the commodity groups than North West province (62.5%).

Again these differences were not statistically significant at 5% confident interval. The question of whether these farmers were affording to pay their debts from their revenue was investigated. The objective of the investigation was to find out whether these enterprises were productive and economically viable. According to the results, it was found that enterprises in Limpopo province appear to be more (15.8%) economically viable relative to 12.5% of the enterprises in North West province.

However, these results were found to be non-statistically significant at 5% confident interval. The relationship with the buyer of the broiler products is assumed to be critical to the viability of any business. As a result of this assumption, the question of the existence of the relationship was investigated. The results revealed that enterprises in North West province have higher (87.5%) proportions of positive relation with buyers relative to 5.3% observed in Limpopo province. The results of the relationship with buyers were found to be highly statistically significant at 5% confident interval. This appears to indicate that enterprises in Limpopo will require more mentorship on how to increase their relationship with their clients {r (27) = 0.828, p = 0.000}.

Without a good relationship with the clients, business viability may be seriously challenged. The satisfaction with the broiler contractors is perceived as very crucial to maintain the client loyalty and therefore, a lack of satisfaction is assumed to have a negative impact on the business viability due to the possibilities of low revenue accruals. As results of the above, it was found necessary to investigate the state of satisfaction with broiler contractors and these entrepreneurs. The results revealed that enterprises in North West provinces have a higher (37.5%) proportion of farmers who are satisfied with their contractors relative to 5.3% of the counterparts in Limpopo province. The results of these investigation, was found to be highly statistically significant at 5% confident interval.

These results may imply that more workshops on the importance of relationship with contractors need to be planned as part of capacity building to the entrepreneurs in Limpopo than in the North West province. The study also found that both relationship with buyers (eta = 0.829) and satisfaction with the broiler contractors (eta = 0.414) have higher (eta) effect size relative to other factors that affect the contract farming in broiler enterprises in these provinces.

Table 3 highlights the results of the binominal test on the factors that are perceived to affect the broiler contract farming activities. According to the results, it was revealed that Limpopo province has higher broiler contract farmers (70.37%) than (29.63%) North West and the prevalence of these farming activities are not significantly different at 5% confident interval. On the contrary, the satisfaction with the contractor amongst the entrepreneurs was found to be significantly different at 1% confident interval, with those that are satisfied with their building contractor being in the majority at 77.78% relative to 22.22%. The proportions of those with a mentor as compared to those without were found to be highly significantly different at 5% confident interval with those without mentor being in the majority (74.07%) as compared to the one with mentor.

Deducing from this result, it appears that there seem to be a lack of mentorship in this type of farming. Hence, there is a need to address this challenge. The proportions of the farmers who are affiliated to a commodity group were found to be significant different at 5% confident interval. This appears to be so despite observable numerical differences amongst the entrepreneurs. Both the affordability and satisfaction with broiler contractors were found to be significantly difference at 1% confident interval. Those entrepreneurs who seem to afford to service their debt from their revenue appear to be in minority (14.18%) relative to the counterpart, indicating that there may be either production or managerial challenges in these types of enterprises.

This may indicate that these farming activities regardless of having a sustainable market access (that guarantees regular cash-flow); fewer of these farming enterprises are productive. The results of the satisfaction with broiler contractor also revealed that few (14.18%) entrepreneurs are satisfied with their contractors. It may be necessary to investigate the areas of concerns that result in these farmers having these low levels of satisfaction when there is a guaranteed market access. The questions may be whether the lack of satisfaction is as a result of poor services that relates to the enterprises or management of the contract.

The results in Table 4 show that for every unit increase in the contract farming at the provinces, the model predict that the logit of the increases in the frequencies of mentorship will remain unchanged given that all factors in the model are under control. The results also revealed that the null hypothesis that there is no difference in the mentorship across provinces is accepted (β=0.793, p >0.05). Regarding the

satisfaction with the contractor as one of the factors affecting contract farming in these two provinces, the model predict that the enterprises are 4.05 times more likely to have more frequent mentorship activities compared to their counterparts. These results further revealed that there were no significant difference in the provinces regarding the satisfaction with contractors (β=4.05, p >0.05).

Furthermore, the results show that the affiliation to the commodity group by the contract broiler farmers has higher (9.56) odds for influencing the frequency of enterprise mentorship relative to other factors. The results also tend to indicate that belonging to the commodity group may present some business advantages and hence, may influence the entrepreneur to be receptive to mentorship activities. In addition, the results also show that other factors which possess higher influence on the mentorship frequencies for the contract farming enterprises are price differential {β=0.767, exp (β)=9.16} and satisfaction with the broiler contractor {β=0.994, exp (β)=7.29} respectively. It was also revealed in these results that all these factors were not different across the province at p-value equals to 5%. The results also found that the actual model (model 1) had more predictive capacity (96.3%) than the baseline (model 0) whose predictive capacity was found to be 74.1%. Based on the above-mentioned results, it could be inferred that in order to increase the frequency of the contract broiler farming enterprises in both provinces, it may be necessary to ensure that the entrepreneurs in this sector are part of the commodity group as the first priority.

These results seem to suggest that net working or social capital has a strong bearing on mentorship capacity than other factors under consideration. It can also be deduced from the results that price differential for mentorship activities needs to be placed as the second priority when considering interventions that seek to promote mentorship capacity. These findings appear to suggest that prices of the mentorship may need to be standardized across provinces as this may have a direct bearing on the access to mentorship activities. For instance, contract broiler farming whose enterprises are ailing may find it difficult to prioritize mentorship activities relative to the production activities should the prices of both activities are found to be equal. Satisfaction with broiler contractor, appear to have the third highest influences on the occurrence and frequency of the mentorship across these provinces.

It could be inferred from this result that enterprises are more likely to attend to mentorship activities, if the contractors provide quality services that inspire the confidence of the entrepreneurs to turn his or her business enterprise to be viable. Therefore, the results appear to suggest that quality assurance measures should be in place before a contract is signed between the contractor and the entrepreneur in this sector.

5. Conclusion and recommendations

The aim of this study was to investigate whether the entrepreneurs in question have received mentorship and their likelihood of being able to afford mentorship through the revenue generated by the enterprise. In addition, the study also investigated the likelihood of the existence of good relationships with the contractor. In this study, it was found that North West province has a higher proportion of mentors (37.5%) compared to Limpopo provinces. However, the differences in the proportions of the mentors were found to be non-statistically significant at 5% confident interval where p-value was equals to 0.332. Out of these results, it may be concluded that mentorship in both provinces are lacking since the availability of mentors are below 40%.

The results further revealed that the proportions of those with a mentor as compared to those without were found to be highly significantly different at 5% confident interval with those without mentor being in the majority (74.07%) as compared to the one with mentor. Deducing from this result, it appears that there seem to be a lack of mentorship in these type of farming. Hence, there is a need to prioritize the interventions that seek to address this challenge in order to ensure that these enterprises are economically viable. On the other hand, it was revealed in this study that contract boiler farming enterprises found in Limpopo province appear to be slightly (15.8%) economically viable relative to 12.5% of the enterprises in North West province. From these findings, it could be concluded that the level of economic viability of these enterprises relative to the amount invested in the enterprises is marginal and unjustifiable. It may be questionable that the observed economic viability may be the required requisite that may ensure the sustainability of the enterprises.

It is worth noting from the findings of the study that both relationship with buyers (eta = 0.829) and satisfaction with the broiler contractors (eta = 0.414) have higher (eta) effect size relative to other factors that affect the contract farming in broiler enterprises in these provinces. Therefore, it may be correct to conclude that quality assurance measures should be in place before a contract is signed between the contractor and the entrepreneur in this sector.

In nutshell, it could be concluded that mentorship in these enterprises is critically lacking despite the assumption that the contractors will also serve as mentors and service providers to the emerging entrepreneurs. The results also suggest that strategic mentors in this type of enterprises may be critical. It is clear from the

findings of this study, that for the mentorship to be effective and efficient, a well-designed, monitored and evaluated mentorship program should be initiated and its focus should be on quality assurance and the business relationship (between entrepreneur and contractor). The absence of enterprise mentorship guiding policy from policy makers at strategic level appears to be a critical strategic gap which needs to be addressed with seriousness it deserves. On the practical level, should the tradition of using extension workers to be mentors continues due to resource limitations, it would be necessary to subject them to a short training course that upgrades their understanding of mentorship concepts. Furthermore, it may also be necessary to establish mentorship units as part of extension services where dedicated staff members with specialized knowledge on mentorship are housed.

6. Acknowledgements

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Table 1: Description of the dependent and explanatory variables used in the analysis and expected signs

Variable	Variable code	Description of the variable	Expected signs
Dependent Variable			
Mentorship	DHM	Do you have mentor? Yes=1, No=2	+
Explanatory variables			
Province	PVE	Respondents provinces: Limpopo=1, North West=2	±
Satisfaction	SWC	Are you satisfaction with the contractor? Yes=1, No=2	+
Commodity	DHCG	Do you have commodity group? Yes=1, No=2	+
Affordability	AFDEX	Do you afford the operational cost given expense and debt? Yes=1, No=2	±
Relationship	RWB	Do you have relationship with buyers? Yes=1, No=2	+
Input supply	SWBC	Are you satisfied with broiler input expenses? Yes=1, No=2	+
Price	PD	Do you experience price differentials? Yes=1, No=2	-
Contractor Price	POPC	Price of the previous contractor	-
Chicks price	PPC	Price per chicks	-

Table 2: Comparative analysis of contract farming environments in the two provinces

Variables	Limpopo (N=19)		North West (N=8)		Total (N=27)		Eta	Df	Sig
	Yes n (%)	No n (%)	Yes n (%)	No n (%)	Yes n(%)	No n(%)			
1.Do you have a mentor	4 (21.1%)	15 78.9%)	3 (37.5%)	5 62.5%)	7 25.9%)	20 74.1%)	0.171	2	0.332
2.Do you have commodity group	14(73.7%)	5 (26.3%)	5 (62.5%)	3 37.5%)	19(70.4%)	8 (29.6%)	0.112	2	0.442
3.Affordability with the revenue given expenses and debt	3(15.8%)	16(84.2%)	1(12.5%)	7(87.5%)	4(14.8%)	23(85.2%)	0.042	2	0.663
4.Relationship with buyer	1 (5.3%)	8(42.1%)	7 (87.5%)	1(12.5%)	8(29.6%)	9(33.3%)	0.829	2	0.000
5.Satisfaction with the broiler contractor	1(5.3%)	18(94.7%)	3 (37.5%)	5(62.5%)	4 (14.8%)	23(85.2%)	0.414	2	0.033

Table 3: Comparative binomial Test for the contract farming enterprises in Limpopo and North West provinces

		Category	N	(%)	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Respondents' province	Group 1	Limpopo	19	(70.37)	.70	.50	.052
	Group 2	North West	8	(29.63)	.30		
	Total		27		1.00		
Satisfaction with the contractor	Group 1	No	6	(22.22)	.22	.50	.006**
	Group 2	Yes	21	(77.78)	.78		
	Total		27		1.00		
Do you have a mentor	Group 1	No	20	(74.07)	.74	.50	.019*
	Group 2	Yes	7	(25.93)	.26		
	Total		27		1.00		
Do you have a commodity group	Group 1	Yes	19	(70.37)	.70	.50	.052
	Group 2	No	8	(29.63)	.30		
	Total		27		1.00		
Affordability with the revenue given expenses and debt	Group 1	Yes	4	(14.18)	.15	.50	.000**
	Group 2	No	23	(85.19)	.85		
	Total		27		1.00		
Satisfaction with the broiler contractor	Group 1	No	23	(85.19)	.85	.50	.000**
	Group 2	Yes	4	(14.18)	.15		
	Total		27		1.00		

Notes: * = P<0.05, ** = P<0.01

Table 4: Binary logistical analysis of the impact of factors that affect mentorship of contract farming in Limpopo and North West provinces

Variables	Model 0		Model 1		
	B	Sig.	β	Sig	Exp(B)
Constant	1.050**	0.017	2343.43	.990	2.857
PVE	.793	.373	0.00	.990	0.00
SWC	13.238**	.000	4.05	.998	4.05
DHCG	3.431*	.064	9.56	.997	9.56
AFDEX	1.643	.200	1.78	.998	1.78
RWB	.154	.926	0.00	1.000	0.00
SWBC	.002	.963	7.29	.994	7.29
PD	.793	.373	9.16	.767	9.16
POPC	.049	.824	0.00	.990	0.00
PPC	2.423	.120	0.00	.990	0.00
Predicted classification	74.1%		96.3%		