

Full Length Research Paper

Factors affecting the training of farm workers in Free State Province, South Africa

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Farm workers are amongst the workers that are central to the productivity and efficiency of food production. Food and agricultural sector in South Africa cannot achieve their global competitiveness without a properly skilled and technologically wise farm workforce. In order for this sector to effectively prevent food insecurity in South Africa and in Southern African Development Communities (SADC), farmers and other stakeholders needs to prioritize farm workers' training programme. This study examined the training gaps that exist within the farm worker communities in Free State Province, South Africa. The research was carried out in three different regions of the aforementioned Province. An intensive investigation incorporating desktop studies, qualitative and quantitative research methodologies revealed that the absence of dedicated training institute, sponsors and training programs limit the farm workers' human capital development. It was also revealed that there is a significant association ($P < 0.10$) between training and funding of farm workers. To unlock the economic marginalization of these farm workers, the study recommends that training facilities aim at empowering farm workers should be within their reach. A properly designed and supported farm worker training programmes with a particular emphasizes on managerial training, agro-processing and value addition of agro-products be canvassed.

Key words: Skills, development, farm, workers, training, Free State.

INTRODUCTION

South Africa has institutionalized Skills development for workers in the year 1998 by enacting Skills Development Act, No.97 of 1998. The Act provided a framework for developing and improving the skills for the South African employees (Moraka and Mapesela, 2009). Amongst others, the objective of the Act was to resolve the incapacity at the workplace. Thereby attempting to achieve the following objectives:

- i) Increase the level of investment in education and training and to improve the return on the investment;
- ii) Encourage employers to provide employees with

appropriate opportunities to acquire new skills and to gain work experience by using the workplace as an active learning environment;

iii) Encourage workers to participate in learnership and other training programmes;

iv) Improve the employment prospects of the persons previously disadvantaged by unfair discrimination and to redress those disadvantages through training and education;

v) Ensure the quality of education and training in and for workplace.

In this regard, the Sector Education and Training Authority (SETA's) play a significant role in mapping out the National Qualification Framework (NQF) level and accredit providers that satisfy their requirement to carry

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out the aim of the aforesaid Act (Moraka and Mapesela, 2009). Reminiscent of other employees, training of farm workers is an essential tool to Food and Agricultural sector in South Africa for efficiency and productivity (NDA, 2008). Both farm owners and workers can benefit a great deal through the appropriate skills training and technology transfer. According to the Department of Labour, farm workers and their families have the lowest levels of education, training and literacy of all workers compared to other labour groups (Dol, 2001). This is despite the fact that these workers play an important role in implementing crucial operational decisions made by either farm managers or farmers themselves. Although, it is acknowledged that these workers can help increase farm productivity and efficiency, farming communities in many countries, including South Africa have paid very little attention to or have shown insignificant interest in skilling these workers to the advantage of both worker and farmer. The above continue to happen even though various researchers have hinted at the importance of training these workers (Ervene, 1995, Verschoor et al., 2005). Van Zyl and Kirsten (1998) cited by Verschoor et al. (2005) reported that human capacity development and skills training are important determinants of successful farming practice. In addition, Verschoor et al. (2005) have also pointed out that the neglect of human development would often result in development failure. These authors found that there is a direct correlation between low income and investment in training. These findings may imply that without a skills development program for the farm workers, food production would be adversely affected. Henceforth, there appears to be a dire need for agricultural stakeholders to transform themselves in order to meet the developmental needs of farm workers. Without the agricultural stakeholders' involvement in capacity building of these workers, farmer workers on their own would not be able to afford their training. This is partly because the economic structure of the South African agricultural sector does not afford farm workers the financial means to pay for their own training (Fete, 2010). These workers are known to earn relatively lower wages. Turok (2010) reported that the consequence of inappropriate economic structure results in the growing inequality, severe unemployment and unacceptable poverty. All the ills described by Turok characterize farm workers' status quo. This author further proposed the national mobilization of human and social capital for the sustainable growth and development.

In addition, Dr Blade Nzimande the Minister of Higher Education and Training in his budget vote speech of the 30th June 2010 reiterated the importance of education and training to the society by saying the following: " Our point of departure is simple: education and training is a common public good which must not be sold and traded as a commodity, where only those with money and other resources will be able to afford it. Only by providing equal opportunities for all, irrespective of social background, can we contribute towards building a nation in which

everyone has a stake and a common loyalty". Ortman (2005) indicated that in order for the South African economy to grow; South Africans should be educated and skilled. This may implies that for South African Food and Agricultural industries to produce products that are adequate to feed its nation and also to be competitive at a global arena, they need farm workers who are highly skilled and technologically wise. Farm workers may place constraints on food security and economic growth if they have poor and mismatched skills profile (Ortman, 2005). According to Pont (2003), there is a positive correlation between training, economic growth and profit. This author recommended that training should be viewed as an investment by business sector. In agreement with the above, Turok (2010) reflected that without the capacitation of the whole society no amount of investment in special areas is likely to create a stable successful society.

With advent of globalization and massive influx of migrants from neighboring countries, South African Food and Agricultural sector, may be faced with food security and economic challenges. To deal with these challenges, it is necessary that South African industries have a well skilled and technological competent labour force at all spheres of the economy. Therefore, new technologies, accompanied with rigorous systems and niche markets should be identified and developed (Fete, 2010). These require amongst others, the use of trained and productive employees. If these aspects are not incorporated in the development agenda of farm workers, farming in South Africa will lag behind international farming best practices and trends. Blunch and Castro (2005) complemented the above by acknowledging that development of human capital is integral to the economic growth. These researchers further indicated that the attention paid to human capital increased in the 1950s as the development theories shifted away from their previous focus on physical capital and infrastructure. In this article, findings on farm workers' training gaps between managerial and technical training, effect of the region on training , the association of training with funding and training were explored.

METHODOLOGY

This study was conducted in the Free State Provinces of South Africa. The province is known for its agricultural potential (Fete, 2010). The province covers an area of 129 464 km² and has a population of 2.8 million which is about 6.4% of the national population. 71% of the province's population (about two million people) live in urban settlements, whilst 29% (0.8 million) of people live in the rural areas. Most people (88%) who reside in the rural areas are found on the farms. These people derive their income by working on the farms, either as permanent or seasonal employees. This research has been conducted in all three regions of Free State Province namely: Southern Free State, Northern Free State and the Eastern Free State. To ensure that the outcome of the research is reliable and cost effective, the farm workers were classified according to gender. Prior to classification, the farmers and farm

workers in those villages were asked for their consent. Upon their consent, the areas were declared research sites. The study utilized various research techniques with objective of deriving more credible information. The following techniques were used:

- i) Desktop study: Intensive desktop study involving perusal of government reports, internet search and research articles were carried out. This was done in order to establish historical and current evidence.
- ii) Face to face interviewing: Different stakeholders were interviewed in open sessions, where every participant was allowed to give his or her input. This was done prior the actual survey was conducted.
- iii) Telephonic interviews: Other individuals or officials were interviewed telephonically; this method was used to complement the qualitative methodology.
- iv) The survey instrument in the form of self-completion questionnaire comprising about 12 closed-ended questions were randomly provided to 225 (n=225) farm workers. The questionnaire was structured into two sections: Section A comprised of demographic information, whilst Section B comprised of factual information.

According to Diamantopoulos and Schlegelmilch (2005) a sample is a part of the population of interest and the rationale for sampling is to get the information needed from the representative portion of the population. Sampling is done in order to curb problems related to costs, time, destruction of population members, confidentiality and accuracy (Diamantopoulos and Schlegelmilch, 2005). A probability sampling procedure, where every farm workers had a known or non-zero probability of being included in the sample was being opted for. The random samples were collected from three farm worker villages in Free State Province using a stratified sampling design. These villages are located in the areas of Bloemfontein, Ficksburg and Bothaville. The sampling took into account the availability of training providers in Free State Province and furthermore, the farm villages that were considered for this study had to meet the following criteria:

- i) The village had to have more than 500 farm workers residing in the area;
- ii) It had to have resources such as a school and a clinic;
- iii) The farmer had to be willing to give permission for fieldworkers to conduct the interviews;
- iv) Farm workers had to be willing to participate in the interviewing processes.

After the fieldworkers had established that the earmarked farming villages satisfied the above-mentioned requirements, they then arranged for an appointment with the relevant farm workers in order to explain the purpose of the study. Only one farm village per region was included in the interviews and the interviews followed the quantitative and qualitative research strategies. Due to heterogeneity of the population in the farm villages, a large sample size of n=75 people per village was determined. The sample size of interviewees amounted to 225 (n=225) farm workers. Both qualitative and quantitative approaches were used in this study. The outcome of the qualitative approach was integrated with the recommendations. The entire analysis was dominated by quantitative information, where 93% of the questionnaires were returned, that is, 201 questionnaires were received out of 215. The response variable (that is, training) considered in the current study was categorical in nature. That is, the observation was scored as either a '1' or a '0' indicating whether the farm worker had received training or not and thus followed a binomial distribution. Data was analyzed using the GENMOD and FREQ procedures of SAS (SAS, 2000). The GENMOD procedure was used to fit a simple generalized linear model to a response variable that was

transformed using a logit transformation. On the other hand, the FREQ procedure was used to test for independence between variables. The solutions obtained using the GENMOD procedures were back-transformed to the original scale for ease of interpretation. The model used for training included the effects of region, gender and qualifications. A further analysis was conducted on the set of data comprising only farm workers who received training in order to determine the type of training and source of funding for the training. In addition, a chi-square test of independence was conducted between training and funder or benefits that accrued from the training.

RESULTS AND DISCUSION

Managerial and technical training

For any enterprise to be vibrant and efficient, it is important that its workforce is well-trained to perform the tasks required for the particular period. Although, farm workers are workers on the field, some workers may have managerial ability and ambition to progress to managerial levels. On this basis, managerial and technical training opportunities were investigated, with a view to identify the gaps. The research findings revealed that both male and female farm workers have minimal opportunities to access managerial (5.12%) training as compared to 21.33% technical training, Figures 1 and 2 show that male farm workers are 29.58 % likely to access technical training compared to 23.77% chance for the female to access the same type of training. Regarding the managerial training, although all gender have a minimal chance to access this training, it is interesting to note that the female farm workers have 8.77% as compared to 1.47% for the male counterpart. This picture may be as result of trust bestowed in women than man because amongst other things management deals with the control of resources. It may also be because women have less career mobility as compared to the male counterpart. Above all, the picture might reflect that women have natural managerial capacity compared to men, assuming that all genders were given the same opportunity. The summary of the data collected from the three regions of the Free State Province is presented in Figures 1 and 2.

Figure1 indicates that 32.07% of males interviewed in the southern region received technical training whilst 22.58% of the female farm workers who were interviewed in the same region received such training.

The corresponding percentages for males and females in the northern and eastern regions were 38.89 and 31.58%, and 17.78 and 17.14% respectively. Based on this information, it seems that male farm workers received more technical training than females.

The effect of region, gender and qualifications on farm worker training

The results of the Likelihood Ratio (LR) Statistics using

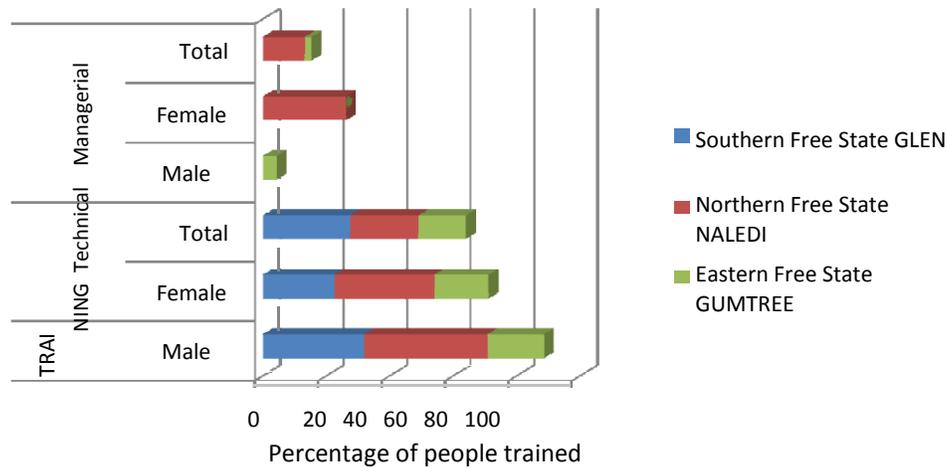


Figure 1. Managerial and technical training offered to the farm workers in three regions of Free State Province.

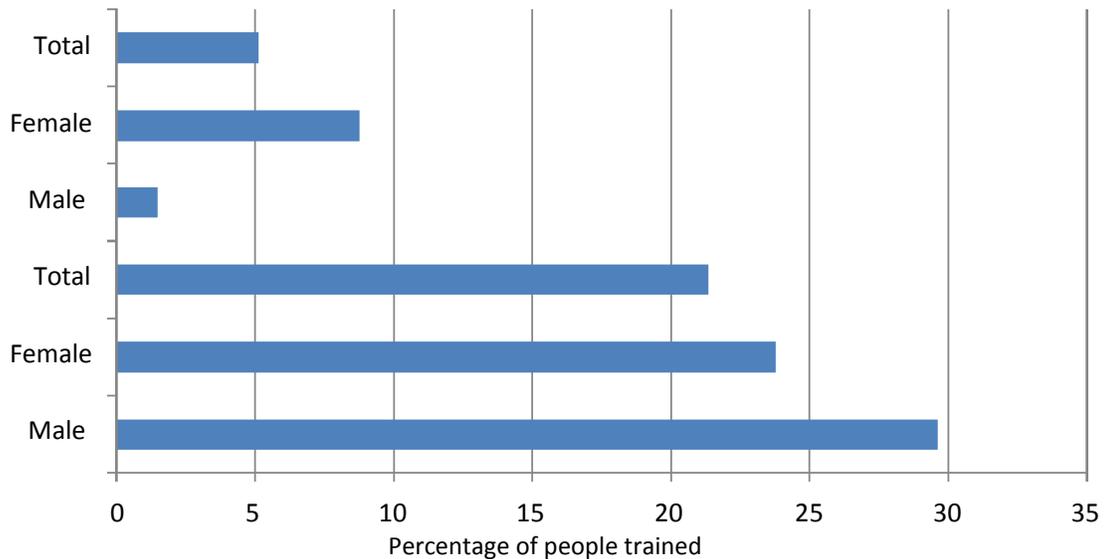


Figure 2. Managerial and technical training offered to farm workers in Free State Province, RSA.

Table 1. Likelihood Ratio (LR) statistics for type I analysis of training in the Free State Province.

Source	Degrees of freedom	Chi-square	P> Chi-square
Region	2	5.67	0.0586
Gender	1	0.40	0.5283
Qualification	3	2.86	0.4133

the GENMOD procedure of SAS⁽⁸⁾ for Type I Analysis of region, gender and qualifications on training in the Free State Province are presented in Table 1.

The Type 1 Analysis fits each effect in the model

separately. Table 1 shows that both gender and qualifications did not statistically ($P>0.10$) influence whether farm workers received training or not. On the other hand, the region significantly influenced ($P<0.10$)

Table 2. Pair-wise comparisons between regions.

Contrast		Estimate	S.E	Chi square	P>Chi square
Region	Region				
1	2	-0.36	0.42	0.74	0.39
1	3	0.66	0.39	2.91	0.5283
2	3	1.03	0.46	5.01	0.4133

¹ Region 1 = Southern; region 2 = northern; region 3 = eastern.

Table 3. Chi-Square test for equal proportions between the types of training¹ received by farm workers.

Source	Degrees of freedom	Chi-Square	P>Chi-Square
Type of training	1	27.94	0.0001

¹The percentages were: technical training = 88%; managerial training = 12%.

Table 4. Chi-Square test for equal proportions between the types of funders who financed training.

Source	Degrees of freedom	Chi-Square	P>Chi-Square
Type of funder	3	35.49	0.0001

¹The percentages were: Not funded = 41%; Farmer = 51%; Government = 6%.

farm worker training in the Free State Province. The pair-wise analysis (contrasts) done for the three regions to indicate regions that are statistically different from one another are presented in Table 2.

The pair-wise comparisons amongst the three regions (Table 2) indicate that region 3 (eastern region) is statistically different ($P < 0.10$) from the other two regions, while there was no significant difference ($P > 0.10$) between regions 1 and 2 (southern and northern regions) respectively. The estimated differences between these regions were back-transformed from the logit to the original scales to indicate the relative odds ratios. The relative odds ratios for the differences between regions 1 versus 2, 1 versus 3 and 2 versus 3 are 0.70, 1.93 and 2.80, respectively. Note that the relative odds ratio of 1.0 indicates equal likelihood of the event occurring in two regions. The odds ratio of 0.70 for region 1 versus 2 indicates that the odds of farm workers receiving training in region 2 were 30% greater than the odds in region 1. On the other hand, the odds ratio of 1.93 indicates that farm workers in region 1 have a 93% greater chance of receiving training than those in region 3. However, farm workers have greater odds (2.80) of receiving training in region 2 compared to region 3. This might be because the Northern Free State is located in a close proximity to former Boskop training centre (dedicated farm workers training centre, which closed due to lack of funding). As a result more farm workers had more chances of getting access to training compared to the both Southern and Eastern region. Even though Glen Agricultural College (which situated in the Southern region) provided

agricultural training in the region, its impact to farmer workers was insignificant. It is clear that farm workers were not highly prioritized by Glen college; hence, their chances to be trained in the aforesaid college was minimal. Therefore, it can be assumed that for farm workers' training to have an impact, a centre or institute need to be solely established for them.

Types of training

The results presented in this section comprise those farm workers who received training. The chi-square test was computed using the FREQ procedure of SAS⁽⁸⁾ in order to determine the differences in proportions between the types of training (managerial and technical) that farm workers received and the results are presented in Table 3. Table 3 shows that there is a significant difference ($P < 0.10$) in the proportions of farm workers who received managerial and technical training. The proportion of farm workers who received technical training was 88%, whilst 12% received managerial training, indicating that more emphasis is placed on technical training as opposed to managerial training.

Types of funders

The results of the chi-square test on the different types of funders who sponsored training of farm workers are presented in Table 4. There were significant differences

Table 5. Chi-Square test of independence between funder and training.

Sponsorships/Funders	Training	
	Technical	Managerial
None	46.51	0.00
Farmer	44.19	100.00
Government	6.98	0.00
Non-Governmental Organisations (NGOs)	2.33	0.00

Pr > Chi-Square = 0.0872.

($P < 0.10$) in the proportions of farm workers with respect to the type of funder. About 41% of farm workers who received training were neither funded by the government nor NGOs, whilst 51% were funded by farmers themselves. Furthermore only 6 and 2% were funded by both government and NGOs, respectively. This picture calls for the government and NGO's to be actively involved in funding the capacity programmes for farm workers. It also reveals that the South African communities perceive the training of farm workers as sole responsibility of farm owners than a societal responsibility. This perception also makes it impossible for farm workers to be trained in areas that promote their growth than the areas that promote the interest of their employees and thereby creating lack of self reliance amongst farm workers.

Relationship between funder and training

The FREQ procedure of SAS⁽⁸⁾ was used to compute the chi-square test of independence between funder and training and the results are presented in Table 5. Table 5 indicates that the null hypothesis (H_0) of independence between training and funders should be rejected ($P < 0.10$). Therefore, there is a significant association between training and funding at the probability level of testing ($P < 0.10$). Of the farm workers who received technical training, about 47% paid for their own training, while 44% were funded by farmers. Government and NGO funding for technical training amounted to approximately 7 and 2%, respectively. On the other hand, all farm workers who received managerial training were funded by farmers themselves.

Conclusion

The findings of this study infer that limited training opportunities (especially with regards to management training) for farm workers are a serious challenge. It appears that this may be due to unavailability of managerial jobs in the farming communities. In addition, it is generally expected that skills development services providers would have a huge interest in the development

of human capacity especially for the poor and vulnerable farm workers, yet the results revealed the contrary. The study also found that proximity of training centres play a significant role in the accessibility of training of farm workers. Therefore, it can be deduced that if the development agencies and government aim to improve skills and knowledge of the farm workers, establishing centres or institutes in their close vicinity appears to a viable option. It is recommended that a properly designed and supported farm worker training programmes with a particular emphasizes on managerial training, agro-processing and value addition of agro-products be canvassed.

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