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Production Performance among The Restitution Farm Beneficiaries in Waterberg District, South Africa

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ABSTRACT

Farmland was regarded as the most important asset used to enhance agricultural productivity in developing countries to improve the livelihoods of restitution farm beneficiaries. Most, unfortunately, recent reports show decreased agricultural productivity in most developing countries. In South Africa, the Land restitution program was introduced to restore land to people dispossessed by apartheid government after 1913. However, production in the restitution farms has declined. This study aimed to address the non-performance of the restitution farms in Waterberg District and evaluate their production performance. A questionnaire was administered to gather quantitative data on the farms' production and the benefits accrued from the farms. Data was captured using Geographic Information System (GIS), and then a remote sensing analysis method was used to map restitution farms to illustrate farms performance. Statistical Package for the Social Scientists (SPSS) version 25 was used to compute statistics on-farm production. About 83% of beneficiaries have not benefitted from the 32 farms, while 61.6% did not have markets, and 64% reported a lack of farms income. Generally, lack of farm production impeded beneficiaries from receiving benefits and employment. The study recommended that private organizations and sector departments work together to assist beneficiaries with capacity building, marketing of farm produce, and funds to improve production.

Keywords: Farm production; land restitution; rural livelihoods; trend analysis; Waterberg District

INTRODUCTION

Farmland is one of the most important assets that can be used to address poverty and support livelihood systems among the rural population in the developing world (Shackleton, Shackleton, & Cousins, 2001). South Africa, like other countries, has implemented a land reform program as an intervention to deal with the challenges of poverty caused by unproductive land reform farms. However, in South Africa, the land reform program aimed to address three sub-programs: Land Tenure, Land Redistribution, and Land Restitution to alleviate poverty and improve the livelihoods of the farm beneficiaries in the country, including Waterberg District. Although South Africa managed to implement the three sub-

programs above, unfortunately, most authors have concluded that land reform program post-1994 has been a dismal failure and disappointing to those who received land through the initiative of the government (Cavanagh, 2014). In addition, more needs to be done by the government of South Africa to ensure that farms allocated to the farm beneficiaries through land reform programs are productive to address poverty in the households of the beneficiaries.

The productivity levels amongst land reform beneficiaries have been very low, and crop productivity also has been declining. Besides, the South African agricultural economy is shrinking without meeting the expectations of the government in terms of economic growth, job creation, and improving farmers' livelihoods (Department Rural Development and Land Reform [DRDLR] 2016). Over the past 20 years, the trend in land reform programs has favored few beneficiaries who were given large pieces of land with the hope that they would bring farming skills and capital to develop the farms. However, little or no improvement has been achieved in terms of the farm beneficiaries' livelihoods (Binswanger-Mkhize, 2014).

Gray, Oss-Emer, & Sheng, (2014) indicated that agricultural productivity could be determined through farm yields, which include but are not limited to outputs, such as crops and livestock. Recent reports show trends of a decrease in agricultural productivity in a number of sub-Saharan African countries (Mahule, 2015). It was also estimated that 2.6 million hectares of suitable agricultural land in Malawi remains uncultivated in the estate sector, accounting for 28 % of the country's total land area lying idle (Luwanda & Stevens, 2015). Unfortunately, the productivity levels amongst land reform beneficiaries in South Africa have decreased while crop production in the farms has been declining drastically in the midst of an ever-growing population that needs to be provided with food. Lack of production of land reform farms has been a trend of close to two decades in South Africa, Waterberg District included. One of the common factors causing low productivity amongst the new landowners is the lack of adequate support for the land reform farm beneficiaries (Tshuma, 2013). Over the past 20 years, the trend in land reform programs has been in favor of a few beneficiaries who were given large pieces of land with the hope that they would bring farming skills and capital to develop the farms. However, little or no improvement has been achieved in terms of the farm beneficiaries' livelihoods (Binswanger-Mkhize, 2014).

Despite implementing a land restitution program in South Africa post-1994 to address poverty and lack of sustainable livelihoods of farm beneficiaries, rural livelihoods of the farm beneficiaries in Waterberg District remains a challenge. More disturbingly, the implementation of land reform has been poor in terms of the area of land transferred, agricultural production, and the creation of livelihoods (Binswanger-Mkhize, 2014; DRDLR, 2016). More importantly, the land restitution initiative that aims to give the land back to the people who were dispossessed of their land under apartheid legislation will not be realized if the farms are not performing to uplift the livelihoods of poor people. Hence, the study's objective was to conduct a trend analysis using maps to study the production performance of the restitution farms in the Waterberg District, from 1995 to 2015, to determine whether performance has improved or not. According to Mmbengwa (2009), it is very important that

small-scale farmers should start taking farming beyond the livelihood level. Ultimately, this can improve farm performance, agricultural growth, and the livelihoods of farm beneficiaries.

RESEARCH METHOD

The study was anchored on the emancipatory research paradigm to focus on how to farm beneficiaries can be emancipated from poverty and improve their livelihoods by utilizing the restitution farms effectively. The true knowledge in this context lies in the collective meaning-making by the people, which can inform individual and group actions that improve the lives of the people (Neuman, 1997). A quantitative approach was used, which concentrates more on percentages, numbers, and statistics of how many than concentrating on in-depth information. Hence, a quantitative approach focuses on closed-ended questions during data collection. A questionnaire was used to collect data pertaining to the production performance of the farms from 1995 to 2015, while the observation method using an observation tool was used to observe the day-to-day activities. SPSS version 25 was used to analyze quantitative data, while transcribing was used to analyze activities of beneficiaries studied through observation.

Description of Study Area

The study was conducted at Waterberg District in Limpopo Province of South Africa. According to Statistics South Africa (2019), the district covers an area of 44,913 km2, consisting of 4,951,882 hectares. The area falls within the summer rainfall season lasting from November to March, with average rainfall between 600 and 650 mm (Waterberg District Municipality, 2018).

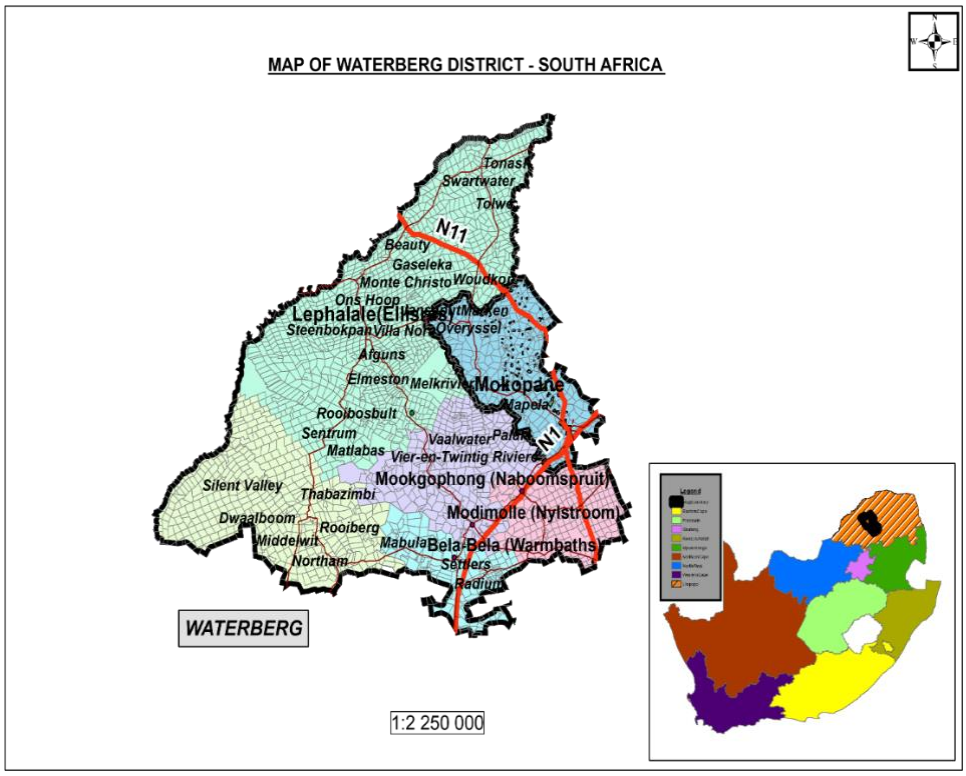

FIGURE 1. MAP OF WATERBERG DISTRICT IN LIMPOPO PROVINCE OF SOUTH AFRICA
SOURCE: WATERBERG DISTRICT MUNICIPALITY, (2018)

The unemployment rate is higher in the district at 28.1% as compared to 29% of the whole country (STATSA, 2019). The District municipality consists of five local municipalities with 79 wards of which only wards where restitution farms are located will be concentrated (Waterberg District Municipality, 2018). As shown in Figure 1, the local municipalities are Mogalakwena, Modimolle-Mookgopong, Belabela, Thabazimbi and Lephalale, and most of the farms are predominantly in Mogalakwena and Modimolle-Mookgophong (Waterberg District Municipality, 2018).

Population and Sampling Methods

The study was conducted between July 2016 and June 2017 to gather views from the study participants; that could bring solutions to farm production challenges faced by the farm beneficiaries within the restitution farms in South Africa and Waterberg District in particular. The target population for the study was 4,409 people who are farm beneficiaries from 32 restitution farms. Stratified sampling methods based on convenient and probability type of sampling were used to select 448 respondents. The aim to choose a stratified sampling method was to conveniently study different types of restitution farms and their impact on improving the livelihoods of the farm beneficiaries. The 32 restitution farms allocated are differentiated according to the following seven categories: (a) livestock farming, (b) crop farming, (c) game farming, (d) livestock and crop farming, (e) game and livestock farming, (f) game and crop farming as well as (g) game, crop and livestock farming. The aim of using the stratified sampling method was to study the livelihoods of the farm beneficiaries who come from the seven different categories of restituted farms. Out of the 448 respondents, 64 were executive members of the farms either as chairpersons or secretaries; hence, a chairperson and a secretary from each of the 32 farms formed part of the sampling size; the remaining 384 participants were ordinary farm beneficiaries. That means out of 448 participants; only 289 farm beneficiaries were interviewed, while 159 respondents did not honor the invitation to be interviewed, and other farm beneficiaries failed to participate because they were not available during the date of the study visit.

Validity and Reliability of The Study

The data collection tools were pre-tested at three selected restitution farms before the data collection process. The farms for pre-testing were selected from three different Municipalities, namely, Makgae farm in Mogalakwena Municipality, Lethlabile Youth farm in Mookgophong, and Stirum farm in Polokwane Municipality, Capricorn District. The three farms only served as pre-testing stations and were not included in the data collection process. Pre-testing of the data collection tools was used to check the validity of the data collection instruments. Some flaws were identified and corrected before the actual data collection for the study commenced. Some of the flaws identified included spelling, the similarity of questions, and the sequence of the questions. These issues identified during pre-testing were addressed, and the final data collection tool was prepared. The validity and reliability of the study were done for all aspects of the entire thesis.

Data collection Methods

The collected data was quantitative data pertaining to the production performance of restitution from 1995 to 2015. A survey was used to collect data from the farm beneficiaries, using a structured questionnaire administered to the study participants on essential issues on-farm production. In addition, the observation method was also used through an observation tool to observe the day-to-day activities of the farm beneficiaries and their impact on farm productivity on the restitution farms. Prior to the interviews, initial contact with all the research participants was made telephonically to prepare them for the data collection engagement. Specific dates and times for engagement were agreed upon for each farm beneficiary and the associated leaders who participated in the study. Before data collection, all participants were reminded that they were free to withdraw from the data collection process if they were not comfortable with the way the study questions were asked. Fortunately, all research participants were able to continue until the end of the data collection process because of their interest in the production problems of land reform farms.

Data Analysis Method

When analyzing data, researchers must ensure that they can do those things they intended to do in the study (De Vos, 2002). Prior to the actual data analysis, there are certain key preliminaries that should be done to qualify the management of the research data, such as accurate recording of data that was collected from the field and the storage of data thereof. During the recording of data, issues such as the number of completed questionnaires and how many were not completed, as well as valid reasons why some were not completed. After the recording, correcting errors for the collected data were corrected so that the final research report matched with the data collected. Furthermore, data verification was conducted to verify all the views provided by the research participants during the research process. Data measurement was also done whereby tables were used and for others frequency tables and maps to depict the relationship between land reform farms and their productivity to improve the livelihoods of the farm beneficiaries.

The Statistical Package for the Social Science (SPSS version 25) was used to analyze the quantitative data to sort by importance the factors that determined the performance or non-performance of farms. SPSS was also used to compute descriptive statistics and cross-tabulations of the farm beneficiaries within the restitution farms. SPSS was used to systematically reorganize raw quantitative data on a specifically developed form to analyze and interpret descriptive statistics. Transcription of interviews, coding, and computer spreadsheet as data analysis techniques were used to develop correlation and cross-tabulations. It was also used to determine the relationships of certain variables, such as the year in which the farm was restored, the income of the farms, income of the individual beneficiaries, education levels, age of beneficiaries, number of dependents within the beneficiaries' households, number of years working on the farm, producing frequencies and production percentages. Then data collected through non-participatory observation using a checklist was also transcribed to understand discoveries from the farm beneficiaries. Some information obtained through the

questionnaire survey was analyzed through the remote sensing analysis method using a GIS tool to develop plotted maps. Added to this, variables that depicted trends in the production performance of the farms were analyzed through the remote sensing method that was used to map the restitution farms and to indicate graphs about their impact on the livelihoods of the restitution farms beneficiaries through the GIS techniques.

Limitations of The Analysis Method Used for The Study

One of the strengths of a questionnaire is that it is a flexible research tool in collecting quantitative data; however, they sometimes provide incomplete responses or little information due to respondents who do not have sufficient education and knowledge about the farms. Nevertheless, this was solved by explaining the questions to respondents using their local language and then writing their responses. Further, to complement any missing information, a feedback session was organized to interact with all the participants to respond to some questions that were not answered properly. Out of 448 selected participants, 159 failed to participate because they were not available during the date of the study visit; however, more respondents from other restitution farms were interviewed to close the gap.

Ethical Considerations

Ethics elaborated below were adhered to but not limited to respect, avoiding harm to respondents, confidentiality, avoiding deception during research, security of data storage, and permission to publish the study. Any study should highly consider ethics in all research steps, and the researcher should be aware of the range of ethical obligations towards the participants in a research project (Seale, 2012). The researcher further secured institutional clearance from the University of Venda Research Ethics Committee (UVREC) for permission to conduct the study. The rights of participants to withdraw from the research if they are not comfortable were highlighted to them by the researcher. Then all respondents signed an informed consent letter for participating in the study prior to interviews.

RESULT AND DISCUSSIONS

Performance of the Farms

The number of respondents, about 40.1%, strongly agreed that production levels of the farms have declined after the land was restored and given to the new owners. Some factors contributing to the decline in production levels of restitution farms were lack of farming skills from the beneficiaries, conflicts, and lack of interest in working on the farms by the beneficiaries. Furthermore, about 27% mostly representing youth beneficiaries aged between 26 and 30, and those aged between 31 and 35 agree that the farm's performance declined after land restoration. Some 12.5% of farm beneficiaries who were also youth, aged between 20 and 25, remained undecided on whether the production levels declined or increased. Some farm beneficiaries were undecided because they did not know the origin and history of the farms and how they obtained the farms (Table 1). When they were called onto the farms,

beneficiaries were not told about their responsibilities when working on the farms. Other beneficiaries who are adults between 36 and 40 also added to the notion that farm performance deteriorated after land restoration. Only 10.7% of the respondents strongly disagreed with the notion that they have not seen improvement due to a decline of the production levels of the farms since restoration, while 9.7% disagreed that farms performance has declined. Beneficiaries who disagreed with the notion that farm production had declined are mostly elder people aged between 50 years because the elderly people enjoy working at the farms compared to the young people who cannot work at the farms that are not generating any income. Above all, those respondents who strongly disagree are those working through the guidance of the farm mentors who always do farming within the restitution farms.

TABLE 1. PERFORMANCE OF THE RESTITUTION FARMS

Response	Frequency	Percentage (%)
Agree	78	27
Strongly agree	116	40.1
Undecided	36	12.5
Disagree	28	9.7
Strongly disagree	31	10.7
Total	**289**	**100.0**

Farm Performance and Level of Education for Farm Beneficiaries

The farmers' level of education is critical in farm performance, particularly for beneficiaries who are given back land through the land reform program. Education would assist beneficiaries to easily understand how land or restitution farms can be used to increase production and income in their farms (Rozaki, Triyono, Indardi, Salassa, & Nugroho, 2020). About 13.5% of the restitution farmers who had grades 1-7, supported by 16.2% of beneficiaries who had grades 8-12, 2.9% graduates, and 1.5% postgraduates agreed that they use the whole farm because of the skills or level of education they have (Table 2). An estimated 10.7% who had grades 1-7, 22.7 with grades 8-12 supported by 2.4% graduates and 1.1% postgraduate confirmed using a portion of land. While 9% of farmers who had grades 1-7 and 7.5% of those who had grades 8-12 supported by 1.6% graduates and 0.2 who are postgraduates confirmed that the farms are not being utilized at all because of low level of education (Table 2).

TABLE 2. CROSS TABULATION ON FARM PERFORMANCE AND FARMERS LEVEL OF EDUCATION

Farm Performance	Level of Education (%)					
	No Education	Grade 1-7	Grade 8-12	Graduate	Post-graduate	Total
Whole Farm	0	13.5	16.2	2.9	1.5	34.1
Portion of the Farm	4.3	10.7	22.7	2.4	1.1	41.2
Farm not utilized	4.4	9.0	9.5	1.6	0. 2	24.7
Total	**8.7**	**33.2**	**48.4**	**6.9**	**2.8**	**100.00**

Product Markets of The Restitution Farms

The map in Figure 2 presents the scenario on product markets of the restitution farms. More than 56.0% of the restitution farms' beneficiaries in Waterberg District indicated a lack

of market, as reflected by the red color on the map. Most of the farms that lacked market used a land size of between 20 and 300 hectares. They have no market for crops and livestock due to reduced farm production and poor products that could not meet the market demands. About 30.1% represented by the light green color on the map supplied or sold livestock to the local markets. The study revealed out of the 32 farms under study, 5.5% of the farms represented by an amber color on the map had accessed the national markets. However, slightly more than 8.3% of the farms presented in dark green color on the map had accessed the international markets; these were two farms in Belabela and Lephalale local municipalities that managed to utilize the whole farm with the size between 300 and 600 hectares of land whereby they sold beef, eggs, green beans and butternuts produced from their farms. The same farms are also involved in tourism, and as such, they attract tourists for game farming.

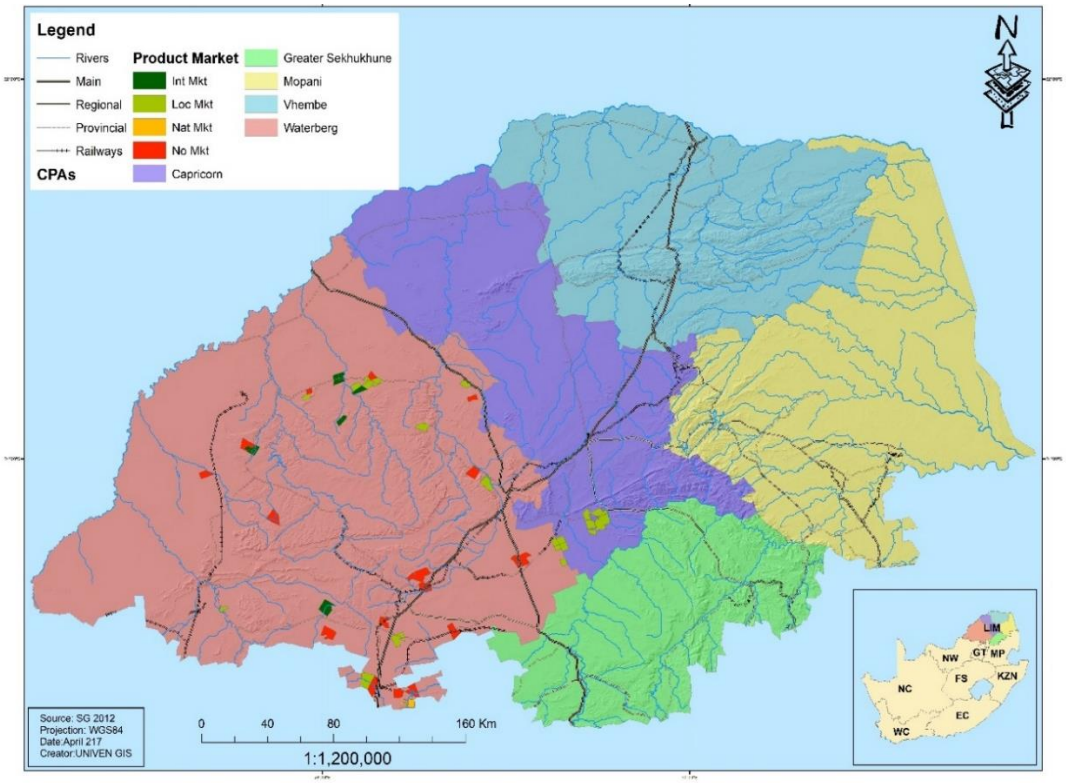

FIGURE 2. MAP INDICATING MARKETS FOR THE WATERBERG RESTITUTION FARM PRODUCTS

Table 3 and Figure 2 present a few restituted farms that supplied the international market. There were four-game farms: Belabela CPA, Mosima Community Trust, Mabula Mosima CPA, and Seabi CPA that attracted international tourists who came and camped on some of the farms; consequently, income was generated and invested into the farm. During data collection, it was also discovered that restitution farms do not have a marketing strategy and officers to advise the beneficiaries on the product, prices, and places to sell products after harvesting. It was also difficult for the farmers to plan for the market, whereas the farms were not producing quality products.

TABLE 3. PRODUCT MARKETS OF COMMUNITY PROPERTY ASSOCIATIONS IN WATERBERG DISTRICT FROM 1995 UNTIL 2015

Type of market	Frequency	Percentage (%)
Local market	87	30.1
National market	16	5.5
International market	24	8.3
No any market	162	56.0
Total	**289**	**100.0**

Product Markets and Education of Restitution Farm Beneficiaries' Relationship

Table 4 presents the cross tabulation for access to market by the restitution farms based on the level of education of the farm beneficiaries. Among the 56.0% of the farm beneficiaries who confirmed lack of market for the farm products, 46.9% of them are for the beneficiaries who have grades 8-12, while 34.0% are for the beneficiaries with grade 1-7 who are in majority. The majority of beneficiaries who also confirmed accessing international and national market are those with grade 8-12 followed by those with grade 1-7. The reason behind this confirmation was that the beneficiaries under those two categories of grades normally depend upon farming activities to survive, then graduates who depend upon other professional jobs rather than agriculture. The above scenario is supported by the low percentages of responses from the graduates and post-graduates. About 6.9 % of graduates and 2.8 % post-graduates responded as compared to 48. 1 % of those who have grade 8-12 and 33.2 % of beneficiaries with grade 1-7. There was no association between product market and education of respondents (χ^2 = 15.61 P> 0.05). Most beneficiaries who have little education such as grade 1-7 and 8-12, who do not know much about farming, try to take initiatives to participate in farming matters. While beneficiaries who are highly educated as graduates and postgraduates, do not view farming as an important activity, because they rely on their education to access other job opportunities than farming.

TABLE 4. CROSS TABULATION FOR PRODUCT MARKETS AND LEVEL OF EDUCATION OF FARM BENEFICIARIES

Product market	Level of Education					Total
	No education	Grade 1-7	Grade 8-12	Graduate	Post-graduate	
Local market	7 (8.0%)	32 (36.8%)	39 (45.9%)	5 (5.7%)	3 (3.4%)	88 (100%)
National market	3 (18.8%)	5 (31.3%)	7 (43.8%)	0 (0.0%)	1 (6.3%)	16 (100%)
International market	0 (0.0%)	4 (16.7%)	17 (70.8%)	3 (12.5%)	0 (0.0%)	24 (100%)
We do not have market	15 (9.3%)	55 (34.0%)	76 (46.9%)	12 (7.4%)	4 (2.5%)	162 (100%)
Total	**25 (8.7%)**	**96 (33.2%)**	**139 (49.2%)**	**20 (6.9%)**	**8 (2.8%)**	**289 (100%)**

Income trends for the Restitution Farms

The majority (64%) of the restitution farms were not generating income. The red color on the income map (Figure 3) indicates no income. The study confirmed that the majority of farm beneficiaries (64%) do not generate income and cited reasons such as lack of production and funds to operate the farms. Another reason given was that some members are not committed to working on the farm. About 21.7% of farm beneficiaries indicated that their farms represented by the color orange generated between ZAR1,000 - ZAR20,000 (US$ 83.75 – 1,675.04 @ 1 USD= 11-94 ZAR) while 3.8% confirmed that their farms generated ZAR

50,000- ZAR 100,000 (US$ 4,187.60 – 8,375.20 @ 1 USD= 11-94 ZAR) per month represented by the light green color (Figure 3).

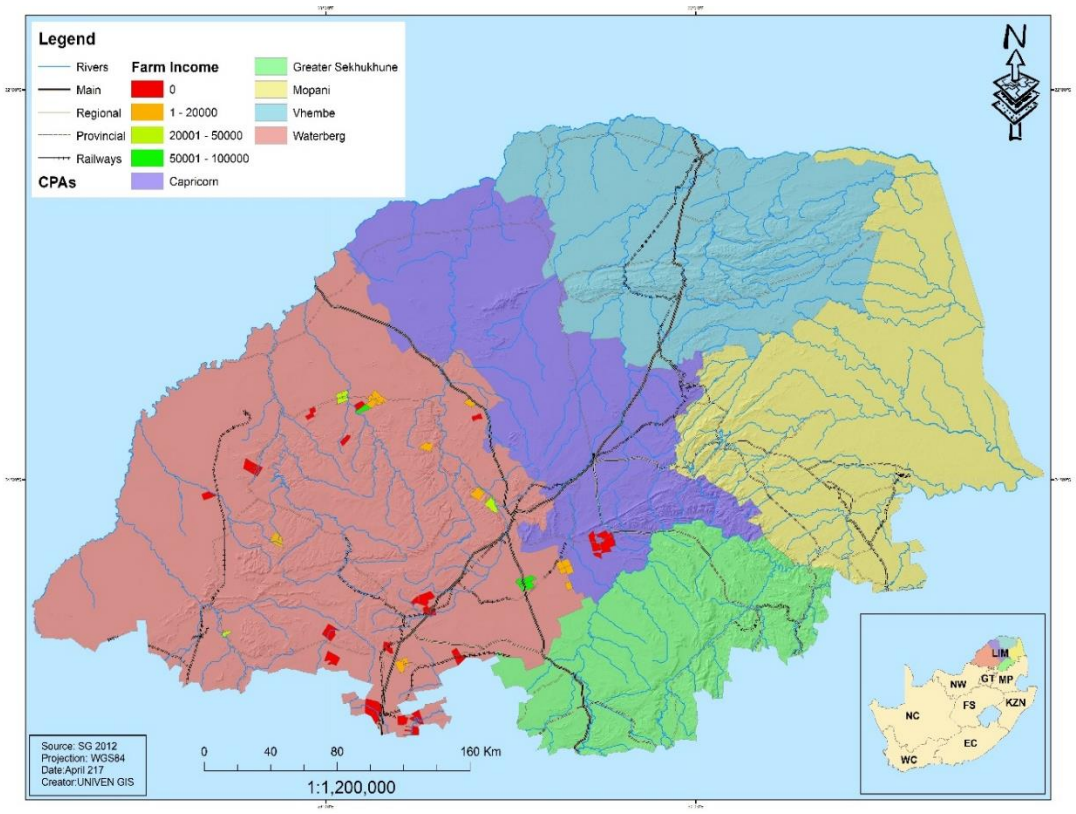

FIGURE 3. MAP SHOWING THE INCOME TREND FOR THE RESTITUTION FARMS IN WATERBERG DISTRICT

Wages of Farm Beneficiaries

Almost all 84.6% farm beneficiaries from the 32 restitution farms have not benefitted from the restitution farms as represented by the color red on the map (Figure 4). About 10.7% farm beneficiaries on two farms, Mawela farm in Belabela local Municipality and Dilokwaneng Community Property Association (CPA) in Thabazimbi local Municipality confirmed receiving ZAR100- ZAR1,000 (US$ 8. 37 – 83.75 @ 1USD= 11-94 ZAR) per month as represented by the color orange on the map. About 5% confirmed that only farm beneficiaries, represented by light green color; Figure 3.4, from one farm called Belabela CPA in Belabela local Municipality received wages between ZAR1,001 and ZAR 5,000 (US$ 83. 83 – 418. 76 @ 1USD= 11.94 ZAR) (Table 5). The same results are also indicated in the map (Figure 3 and 4). This farm is one of the examples of the restitution farms that has performed satisfactorily and is able to provide a better standard of living to the beneficiaries in Waterberg District.

TABLE 5. WAGES OF FARM BENEFICIARIES FROM 1995 UNTIL 2015

Wages in Rand (ZAR)	Income in US dollars (USD) @ 1USD= 11.94 ZAR exchange rate	Frequency	Percentage (%)
Nothing	None	245	84.6
ZAR100- ZAR1,000	USD 8. 37 – USD 83.75	31	10.7
ZAR1,001- ZAR5,000	USD 83. 83 – USD 418. 76	13	4.5
Total		**289**	**100.0**

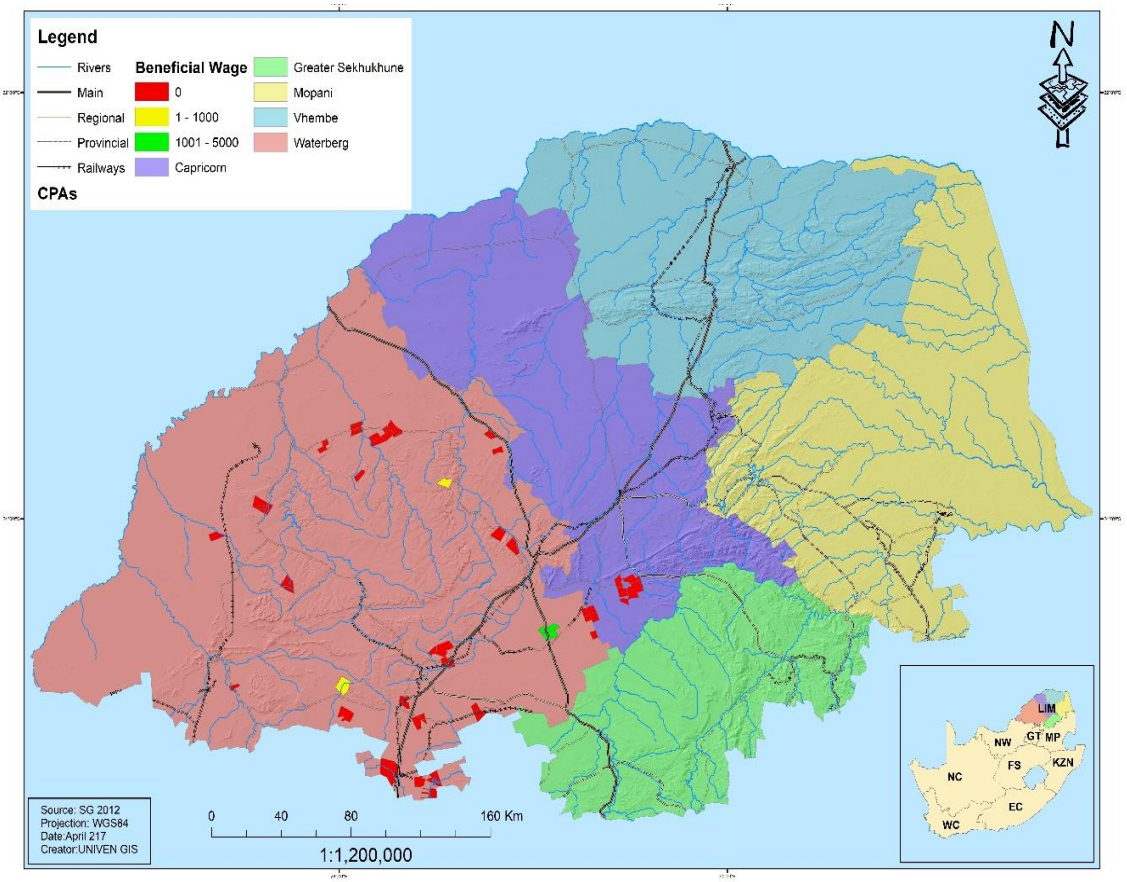

FIGURE 4. MAP FOR WAGES OF FARM BENEFICIARIES PER RESTITUTION FARM IN WATERBERG DISTRICT

The Standard of Living of Restitution Farm Beneficiaries

Usually, unplanned changes in farms production that show declined production, decreased farm income, lead to minimal benefits for the restitution farms' beneficiaries. Hence, the majority of the farm beneficiaries have not received benefits as was expected by the government. The benefits that were expected from the restitution farms were not possible due to unproductive farms. About 68.8 % of the farm beneficiaries who received farms between 2005 and 2009 *strongly agreed* to the notion that their standard of living has not improved. About 20.4 % of the farm beneficiaries *agreed* that standard of living has not changed, while 7.3 % of the farm beneficiaries *strongly disagreed*, and 1.0 % *disagreed* that their standard of living has changed. A few famers (2.4%) remained *undecided* whether their lives had improved or not (Table 6).

TABLE 6. THE STANDARD OF LIVING FOR RESTITUTION FARMERS

Response	Frequency	Percentage (%)
Agree	59	20.4
Strongly agree	199	68.8
Undecided	7	2.4
Disagree	3	1.0
Strongly disagree	21	7.3
Total	**289**	**100.0**

Discussions

Regarding the performance of the restitution farms in Waterberg District, the majority of farm beneficiaries confirmed that their farms have performed poorly and have failed to generate sufficient income to improve livelihoods of the beneficiaries. The beneficiaries also agreed that farm production has declined after land was restored to the black owners. Most of the farm beneficiaries who are mostly youth aged between 20 and 35 as well as farm beneficiaries who were adults between 36 and 40 also added to the notion that farm performance deteriorated after land restoration. The other reason why farm performance deteriorated is that many young people do not have interest to work in the farms. Most of them want white-collar jobs like working in the offices than in farming. In support of the above statement, Rozaki, (2020b) says that food production in Indonesia is very difficult because most farmers are old people who experience difficulties in using technology to increase production in the farms. Furthermore, Manenzhe, Zwane, & van Niekerk, (2016) stated that 73 % of the restitution farms in South Africa have become unproductive after being owned by black farmers because of inexperienced farming. Although production of some farms improved, the overall trend shows deterioration in performance (Kirsten, Machethe, Ndlovu, & Lubambo, 2016). Moreover, the value chain was not available for the restitution farmers to take their products to the good market. The only value chain available was for the commercial farmers who are already well established. This contributed to insufficient or no income in the restitution farms.

Poor performance of the land reformed farms was also experienced in Uganda where the government implemented an Agricultural Sector Program Support (ASPS). The ASPS focused on poverty reduction and household food security (The World Bank, 2004). These ASPS targeted the agricultural sector in a broad sense to provide the livelihoods of small-scale farmers through increased production levels, in the rural areas (The World Bank, 2004). They also focused on gender mainstreaming, livestock research, and supporting farmers' organizations with financial assistance however, the program has not yielded good results as anticipated by the government (The World Bank, 2004). It is crucial that the productive capacity of the land is not compromised by the production systems it supports because both rural subsistence security and poverty reduction depend on the utilization of land.

Improving agricultural productivity in the African countries including Waterberg District in South Africa is not a new phenomenon (Rantšo & Seboka, 2019). During the colonial era, the government of South Africa has implemented many agricultural projects to maximize productivity in the land reform farms to alleviate poverty and improve food security in the country. However, the level of education of the restitution farm beneficiaries plays a very critical role in farm performance, in particular for beneficiaries who received land through the process of land reform program. However, the majority of those farmers who have higher levels of education managed to use the whole farm others used a portion because of better levels of education they had that contributed to their understanding in land matters. Most of the farms that were not utilized at all, most of the beneficiaries had low levels of education which made them not to know how to do farming. The study findings indicated

that farm beneficiaries try to take initiatives to participate in farming matters in order to improve farm production but with no positive results. The similar findings on the level of education and farming production were revealed by Rantšo & Seboka, (2019) on people participating in block farming in Lesotho. According to the study by Rantšo & Seboka, (2019), it is confirmed that low agricultural productivity in Lesotho is associated with lack of farming skills because of low educational background. The main reason behind this notion is that when agriculture is practiced by people with low levels of education, productivity is affected because they are not in a position to do research on modern farming practices and techniques (Rantšo & Seboka, 2019). The notion by Rantso & Seboka is supported by (Hoang, 2020) that farmers with higher education had a greater tendency to adopt VietGAP. In the study conducted in Binh Dinh Province, (Hoang, 2020) revealed young farmers with higher education and participated in credit and training programs were in better position than older and less educated farmers to adopt VietGAP. This trend of low education among the farm beneficiaries, who are not producing adequately within their farms, is occurring in many countries where farming is regarded as the main contributor towards job creation and food security (Peleo, 2018; Rozaki, 2020a; Winarno, 2016). Ultimately, education would assist beneficiaries to easily understand how land or restitution farms can be used to increase production and income into their farms.

Market access is of critical importance in addressing poverty, sustainable development and poor livelihoods of people in the rural areas (Mabuza, 2016). Market trend of the restitution farms indicated that most of the farms do not have good markets for their products due to poor production of the farms. The main reason identified was that the majority of the farm beneficiaries lack innovative farming skills to deal with production in the restitution farms (Mabuza, 2016). None of the 32 farms accessed national market and only four farms managed to supply the international market by receiving tourists and selling of red meat. It is imperative that restitution farms should have markets for their products. If increases in productive efficiency are matched with good market access, particularly where agriculture remains an important economic sector, then a large number of small farms will provide a greater contribution to economic growth than a small number of large farms (Quan, 2000). Added to this, improved access to input and output markets is a key precondition for the transformation of the agricultural sector from subsistence to commercial production (Salami, Kamara, & Brixiova, 2010).

According to the author, smallholder farmers must be able to benefit more from efficient markets and local-level value-addition and be more exposed to competition. In the 32 restitution farms under the study, the majority of the farm beneficiaries said that they have not benefitted from the farms. For instance, China, the Far East and throughout West Africa, small farmers supplied international market with cash crops such as cocoa and cotton, vegetables, staple foods and meat for urban market, that has contributed to agricultural growth (Quan, 2000). Career, Technical and Agricultural Education (CTAE), however, is facing the problem of low-quality raw material in Benin. The bags of soya delivered by the traders to the market of Glazoué often contained chaff, sand and not fully dry grains that turned black

(Dossou, Aoudji, & Adégbidi, 2017). The poor quality of the raw material not only affected the quality of the processed products CTAE was putting on the market, but it also reduced the cooperative's turnover while also damaging its equipment. With such a poor supply base, buyers have little control over the product they end up with (Dossou et al., 2017). On the other hand, (Rao & Qaim, 2013) emphasize that the participation of farmers in the high value market is very important because it will increase income in the farms, this include farms that are allocated through land reform program. However, majority of the land reform farms do not participate in the high value market in South Africa. Once the turnover is reduced, benefits of the farm beneficiaries including livelihoods would not be adversely affected.

According to Luwanda & Stevens, (2015), marketing availability and challenges were also experienced by Community Based Rural Land Development Project (CBRLDP) farm beneficiaries in Malawi. This was because the production inputs were only facilitated to bring out quantity not quality of produce, forgetting that products should meet certain standards at the market to have profitable margins (Luwanda & Stevens, 2015). The majority of the farm beneficiaries (84.2 %) in the CBRLDP confirmed that marketing of agricultural produce was a major challenge. The authors further said that beneficiaries lack access to knowledge support and agricultural inputs, hence, the marketing challenges implied that few land settlement beneficiaries were involved in the CBRLDP, and who consequently progressed into sustainable enterprises (Luwanda & Stevens, 2015). The majority of the farm beneficiaries in Malawi, therefore, have not benefitted from the project.

In Tanzania, services generally focused on increasing production through short-term technical packages, without paying attention to farmers' circumstances, markets, and sustainability (Salami et al., 2010). Between 2013 and 2015, the number of producers linked to CTAE increased from 192 to 236, and local production from 82 to 228 tons because of the stronger business links. The producers' commitment motivated CTAE to deliver documents to them serving as a guarantee for obtaining a loan from micro-finance institutions (Dossou et al., 2017). According to Tshuma, (2013), smallholder farmers require information on current prices, forecast of market trends to assist farmers in planning markets for their products. This is in support of the advice given to farmers in the current study by the extension's officers. As elsewhere in Africa, institutions responsible for agricultural development need to be strengthened, with an emphasis on well-functioning markets and risk management (FAO, 2009). Support services or complementary development support should include assistance with productive and sustainable use of land, infrastructure, support, farm credit, agricultural inputs and access to markets for the farm outputs (Luwanda & Stevens, 2015). Additionally, Ozowa, (1995) asserted that information on improved marketing practices, such as improved harvesting methods, and information on group marketing would enable small-scale farmers to group themselves. Out of the groups, farmers would have efficient sales through surplus and bulk transport of their products, however, in the Waterberg District, most of the restitution farms were not utilized; out of 32 farms only two farms situated in Belabela local Municipality were successful. Grouping of the farms for marketing

could not happen with two farms that are producing different products, although one similar activity that the two farms are doing is livestock, such as cattle.

Income from the restitution farms serves as one of the indicators for success, thus, agricultural productivity is one of the key determinants of high and sustained agricultural growth, and in fact a key determinant of its growth over a longer term (Salami et al., 2010). The current study, however, revealed that most of the farms have not generated any income during the study visit because of lack of production, lack of commitment by the farm beneficiaries, lack of funds and resources; less than five from the thirty-two restitution farms in Waterberg District has performed well. This trend of lack of production of the restitution farms has been ongoing from 1995 until 2015, hence most of the farm beneficiaries abandoned the farms and looked for the alternative jobs to get a stable income. These findings clearly show that something needs to be done to assist these farm beneficiaries. Binswanger-Mkhize, (2014) support the current study that there are few CPAs and production co-operatives that operate successfully in farming. At least half of farms have not produced any benefits for the beneficiaries; apart from rental income, which is set well below the market rate, therefore it was not benefiting the farm beneficiaries. The main benefit to the community was in the form of profit-sharing that is not significant to the farm beneficiaries at all.

In Limpopo Province, there is an example of a commercial farm, Zebediela Citrus Farm. This citrus farm has been widely described as the largest citrus producer in the southern hemisphere and it has led to the establishment of a strategic partnership between the Bjatladi Community Property Association (CPA), the claimant, the current owner of the 5,903-ha property, the Zebediela Workers' Trust, and a strategic partner called Henley Farm Properties (Pty) Ltd (Hall, 2007). These three entities comprise of the operating company, in which Bjatladi CPA owns 30 % of shares, while the other partners, the Workers' Trust and the strategic partner own 15 and 55%, respectively. Only the strategic partner was required to buy shares; the Agriculture Rural Development Corporation (ARDC) transferred shares to the others. In terms of the restitution settlement agreement, the strategic partner will transfer 1% of the total shares to the Bjatladi CPA each year for five years, until it owns only 50% and the CPA has 35 % (Hall, 2007). The land was transferred with title to the claimant community but, as part of the Settlement Agreement, was subject to a 15-year lease agreement with a rental set at R1 million per annum. When the 15-year lease expires, the strategic partner was to transfer all its shares to the CPA. While ensuring a source of cash income for the CPA, this agreement precludes other potential non-financial benefits that might have been gained through direct use of the land by members of the claimant community. Another example was the Groenfontein case study which demonstrated an absence of post-transfer support and pre-settlement planning, which led to the failure of the project in the first three years after settlement. The farm has not improved the livelihood of any claimant. Instead, claimants pursued the lowest risk option of leasing out their land, first to the former owner, and later to a small group of its better- off members to bringing about a small income stream to the Trust, however, there are no tangible benefit for claimants (Hall, 2007). This assertion was also noticed in the current study.

The study further revealed that most of the farms were not able to pay wages for their farm beneficiaries because of the poor income that the farms received. The majority of beneficiaries have not received any material benefit from the restitution farms (DRDLR, 2017). Matukane, (2011) added that, most of the farm beneficiaries across all the restitution projects have received no material benefit whatsoever from restitution, whether in the form of cash income or access to land. Many have not moved onto the land, either because they are restricted from doing so, as in the case of leasing out of land or a result of delayed land-use plans or strategic partnerships that were not forthcoming post-transfer, as support to the new farmers. Another example is the situation with the Shigalo beneficiaries. Only a small sub-group of community members have benefited through access to employment, as part of the benefits, instead of the entire community (Matukane, 2011). Generally, farm beneficiaries at Waterberg district have not realized changes in their livelihoods while they have ownership of the land.

Many authors like Jacobs, (2003) have argued that land reform beneficiaries should be able to improve their livelihoods to address some challenges that torment rural areas such as high unemployment, lack of income and poverty. However, the majority of the restitution farms in Waterberg District in South Africa were not productive, and this affected the socio-economic status of the farm beneficiaries. Moreover, even the benefits that were supposed to be received by the beneficiaries of the restitution farms were not realized due to unproductive farms. More poverty and lack of income among the beneficiaries were very high since the above two aspects depend upon the improved farm production. Hence, most of the farm beneficiaries opted to concentrate on off-farm activities than practicing farming that does not bare fruits for them in terms of uplifting their standard of living in their households.

Policy Implications

The study findings have significant implications for policy makers or policy reviewers who are involved in land reform issues, to change or amend land reform policies to ensure that restitution farms are utilized efficiently and effectively by the farm beneficiaries to improve farm production in Waterberg District in South Africa to improve livelihoods of the beneficiaries. Furthermore, the study contributed to the advancement of the vision 2030 of the National Development Plan (NDP), by developing an intervention strategy on land restitution that would ensures farm beneficiaries participate fully in the economic and social life of the South African country, Africa and beyond (National Development Plan, 2012; (Tjale, 2019).

CONCLUSION

From 1995 to 2015, most of the restitution farms lacked market for their products due to poor production and lack of funds to manage the farms, therefore, beneficiaries should be provided with innovative farming skills such as conventional farming that would improve quality products in the restitution farms. If quality products are produced at the farms, products demand would increase; lack of quality products has caused beneficiaries not to

receive any benefits in the form of income or employment. Out of 32 farms understudy, only three accessed local market, while two of them in Belabela area managed to access international market, as the farms attracted tourists from other countries. Generally, the farms have not made any changes to the farmers' livelihoods in the Waterberg District. It is therefore recommended that both the government and private sectors should support restitution farmers through production, marketing strategies and capacitation for improved productivity and attraction of markets. Furthermore, restitution farms should have marketing officers on each farm to assist in advising beneficiaries on how to produce quality products that are in high demand at the market and improve market access. When farm production is improved, there would be sufficient income coming into the farms that could create more job opportunities to benefit the farm beneficiaries who work on the farms. These findings have created an opportunity to introduce the next chapter which concentrates on the satisfaction of the restitution farms' beneficiaries with performance of the farms in Waterberg District.

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