# AN INVESTIGATION INTO THE ROLE PLAYED BY EXTENSION SERVICES ON IMPROVING THE LIVELIHOODS OF FAST TRACK RESETTLED FARMERS IN ZIMBABWE: A CASE OF WARD 12, BUBI DISTRICT IN MATABELELAND NORTH

**CHISANGO FUTURE FORTUNE T***

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**ABSTRACT**

Zimbabwe's Fast Track Land Reform program (FTLRP) successfully availed land to the indigenous black farmers. However the massive resettlement brought with it numerous challenges inclusive of, high demand for extension services coupled with inadequate number of officers trained to deliver effectively and match the new demand. This period was followed by a significant drop in agricultural production, as cited by (Obi 2011). This study therefore looked into the effects of extension on improving the livelihoods of the fast track resettled farmers in Ward 12 of Bubi District Matabeleland North Province. The rationale for carrying the research was to evaluate or assess the extent to which the newly resettled farmers were benefiting from extension services provided by Agricultural Technical and Extension Services (AGRITEX) or any other stakeholders like seed houses and Non Governmental Organisations (NGOs) and suggest possible solutions to extension failures. In carrying out this research the participatory approach was used through use of questionnaires, direct visits and personal interview. Simple random sampling was used to select 50 farmers in the sample area. Drawing on evidence from the data collected it can be argued that the majority of farmers are yet to benefit from extension services. There is a lot that has to be done so that the benefits of extension cascade down to the fast track resettled farmer as shown by improved standards of living. There is also need to incorporate Information and communication technology (ICT) in extension to be in line with global trends. The results of this study are hereby presented and discussed.

**Key words:** *Agricultural Technical and Extension Services, Fast track land reform, improved livelihoods, Information and communication technology, Participatory approach & villagised models*

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## 1.0 Introduction

When Zimbabwe embarked on the land reform programme a lot of landless people soon became owners of land either as smallholder farmers in villagised models referred to as AI or plot holders referred to as A2. In spite of the good intention of the program the implementation ended up being haphazard resulting in the coining in of the phrase 'fast track' it is this category of new farmers that the research focused on. The massive resettlement brought with it numerous challenges inclusive of, high demand of extension services coupled with inadequate number of officers well trained and empowered to deliver effectively and match demands of the new farmers. The massive land reform though noble to the indigenous people was however followed by a significant drop in agricultural production, as cited by (Obi 2011). Zimbabwe used to be so rich in agricultural produce that it was dubbed the "bread basket" of Southern Africa, but now struggles to feed its own population. The rationale behind carrying the research was therefore to evaluate or assess the extent to which the newly resettled farmers were benefiting from extension services provided by Agricultural Technical and Extension Services (AGRITEX) or any other stakeholders like seed houses and Non Governmental Organisations (NGOs) and suggest possible solutions to extension failures.

## 1.1 BACKGROUND

Prior to the land reform programme the majority of commercial farmers were whites who numbered less than five thousand (CSO 2009). These were well resourced and could afford consultants to advise them on the proper land use. They could also afford to have their soils tested for pH and nutrients in soil laboratories. Also they could obtain lines of credit from Finance houses and employed qualified farm managers (Marimira, C.S 2010).

The fast track land resettlement programme was officially launched in the year 2000 following massive and random farm invasions by the landless people. This brought with it a number of institutional and organizational changes (Moyo and Yeros, 2009). Although land utilization increased productivity went down due to many reasons like lack of inputs, use of unsuitable seed varieties, recurrent drought, limited farming equipment and farming expertise. Also contributing to this drop in productivity were factors like labor shortages, erosion of agricultural farming knowledge and limited government support in terms of extension, marketing of produce and loans. (Marimira C.S 2010).

Though prior to this phase, resettlement was an ongoing process but as from the year 2000 the programme gathered momentum and became so very extensive to such an extent that the whole process became haphazard resulting in low agricultural production. (Obi, 2010 ). It is during this period that a new breed of farmers emerged, in the form of the fast track resettled famer (FTRF).

This farmer is different from the commercial farmer in so many aspects and it is this farmer who is the subject of this study and how he or she is deriving benefits of extension. As mentioned already that this fast track resettlement programme was characterized by low productivity (Obi, 2010), this study looks at the role of extension in improving productivity hence livelihoods of the fast tract resettled farmer.

The literature on agricultural points out a number of extension failures due to various reasons (Feder G et al 2010). Rivera and others point out that extension services in developing countries have been described as 'failing, moribund, in disarray and barely functional" (Rivera, Qama and Crowder 2001). The reasons advanced to such failures have been cited as ineffective incentives for extension agents. (Feder G et al 2010). Anderson also argues that lack of information and feedback on different farmers' needs and priorities dampens the effectiveness of extension hence leading to failures. These failures are manifested in low incomes of the farmers and hence a negative impact on their livelihoods.

The role of extension to increase productivity cannot be understated. Extension services should tackle issues like crop protection, animal husbandry, enterprise selection based on specific agro climatic conditions of the area. Extension should also look at aspects like choice or availability of inputs like seeds and fertilizers, also extension must help solve problems like loss after harvest through poor storage and marketing of the produce. This study looks at role of extension in improving the livelihoods of fast track resettled farmers. It also touches on shortcomings of extension and possible solutions to these failures.

### 1.2 Statement of the problem

The zeal to own land led to a number of people being resettled in either villagised models A1 or A2 models where plots were parceled out to qualifying applicants. However the majority of smallholder farmers in A1 did not have any formal training in agriculture. As a result the role of extension could not be underestimated. The food security of the nation lies in the hands of these farmers and this can be achieved only through adopting sustainable agricultural practices that improve yields of these farmers yearly.

The farmers in this study area are still in their infancy stage and for them to realize actual benefits from their land the help from extension officers is of paramount importance. The farmers need advice, but the question is whether that advice is readily available. This was the rationale for the study to find out how farmers were benefitting or should benefit. How knowledgeable are the agents working in the area? Are the agents implementing prescriptive programs or involving farmers in coming out with solutions to their problems? These are some of the critical questions which this study sought to answer.

### 1.3 Research objectives

The overall objective of the research was to assess the impact of extension on the smallholder farmer as measured by uptake of new innovations to increase productivity, food security and improved livelihoods of disadvantaged communities. However specific objectives to the study were:

- assessing the extent to which the small holder farmer benefitted from extension services
- examining whether there were changes in farming practices such as adoption of sustainable agricultural.
- examining any visible positive changes in the farmers' socio economic status

### 1.4 Research Methodology

**Research Design**

In the study, the research design that was chosen was the descriptive one. The reasons for settling for this design were that, it explored and described phenomena in their real situations; hence recommendations drawn from the research aptly fitted /applied to the area under study. According to Shuttlewalk (2000) a research design is the structure of a scientific work, which gives direction and helps in systematizing the research. What it implies is that the design so chosen had the added advantage of being suitable in observing and describing the behaviour of the subjects without influencing them in any way.

**Description of the study area**

The area chosen for the study is Ward 12 of Bubi District in Matabeleland North. The ward lies about 70km north of Bulawayo. This area is in Region 1V and basically not favorable to crop production. The ward mainly consists of fast track resettled farmers who moved into the area in 2000.The area receives an average of 450-650mm of rainfall annually. It is also characterized by erratic rainfall pattern especially in January. The former commercial farmers practiced beef production as the area is not very much suitable for crop production especially maize.

**Table 1.4.1 Population & Sample composition**

| Representative Groups by gender | Number of Participants Sampled |
|---|---|
| **Males** | **40** |
| **Females** | **10** |
| **Total** | **50** |

Fifty farmers were randomly selected from a ward population of 600 farmers to reduce costs. Household questionnaires were given to enumerators who in this case happened to be students from local colleges and local extension workers.

**Research Tools**

Questionnaires were the main tools used and prior to issuance to farmers, these were pretested on few selected farmers through the assistance of a Ward Extension Officer. After scrutinizing the returned questionnaires few modifications were made. The questionnaires consisted of 6 main broad areas like household information, socio economic status prior to and after resettlement, cropping patterns, household dietary information and agricultural support. Apart from the questionnaires, personal interviews were held directly by the researcher. Apart from use of questionnaires direct observations to assess any changes in livelihoods of the farmers were also used. This was done so as to verify the data collected for example in the case where a farmer says he/she has managed to acquire say 20 or more cattle , by looking at the size of the cattle pen the researcher would prove whether it was true or not. Also by observing the living structures it was possible to assess any changes in livelihoods whether positive or not. This helped a lot as most farmers still hold suspicions on anyone who comes to them talking about land. Finally secondary data was used in the research and this was obtained mostly from the District AGRITEX office based at Inyathi Rural Service Centre.

## 1.5 Presentation of Results

**Problems faced by Ward Extension Officers**

Effective extension at ward level was negatively affected by numerous problems encountered by Ward Extension Officers. The major problem was mobility of the extension officers. The ward is so big and covering it on foot was a mammoth task to the extension officers. Though the officers

were given bicycles, they said the distance between villages within the ward were too prohibitive and ironically in contrast to the gender argument, as ladies they said they prefer motorcycles to bicycles.

Another problem was failure by ward extension officers to convince farmers to adopt conservation farming as new technology by farmers. The argument being that it was laborious. The main challenge was the level of education or training of the extension officers. This was hampering effective extension as basically these officers are not well versed in adult education. There was lack of link between extension officers on the ground and researchers hence at times the extension officers were not confident of their services. One main reason to emerge from the interviews was lack of motivation in the officers citing poor conditions of service like accommodation as most of them based in wards lack proper accommodation. The few who were lucky were accommodated in former farm houses but the majority had to do with whatever shelter is availed to them. Also the issue of remuneration was cited as a negative factor.

**Gender of farmers**

The distribution of farmers by sex showed that the majority of farmers that is eighty percent are males though the majority of these males are not fulltime into farming and are employed elsewhere. However due to tradition the head of the household remains the man though most of the time is not there and leaves women and children involved in all agricultural activities.

**Table 1.5.1 Distribution of farmers by sex**

| Sex | Frequency | Percentage |
|---|---|---|
| **Males** | **40** | **80** |
| **Females** | **10** | **20** |

Source: Primary Data Collection (2011)

The distribution above was not actually reflective of the real situation in the ward, as from the observations made females were more than males, however due to cultural norms women tended to take the back seat. The greater proportion of the males was employed at mines nearby.

**Age Distribution in comparison with levels of education**

To emanate from the study was the fact that those farmers who are of middle age have gone up to secondary level and those above fifty years that is 50% of the farmers went up to primary level. This has an effect in extension since farming is not only a business but requires some scientific knowledge. Also evident from the study was that those farmers not involved in fulltime farming were of the middle age who felt they had to supplement the family income by working

elsewhere. In fact this was an admission that the notion of farming as a business was still to take root in these farmers.

**Socio economic status of the farmers**

In terms of drinking water 100% of the respondents draw their water from boreholes. These were drilled by the District Development Fund (DDF). However the distances are rather too long for the elderly farmers who rely on those with carts for ferrying water. Prior to being resettled, most of these farmers owned very few livestock but as of now the majority managed to increase the sizes of their herds. The main type of livestock is cattle which unfortunately are being pounced upon by private buyers at very low prices or in exchange with grain. In terms of infrastructural development there is not much change save for one primary school housed at a former farm house. For secondary education the students go to either Inyathi High or Somvubu Secondary School, more than eight kilometers away. Also absent from the ward is a health center.

**Sources of Income**

From the data collected only fifteen percent of the respondents say they have surplus to sell though minimal (Table 2.0) Given that the maize producer price has been $360.00 per metric ton, it implies that a family that has a surplus of two tones will get an income of $720.00 from farming per annum. However eighty five percent cited food shortages meaning no income from farming. The few who are employed elsewhere are the sources of the household income. Twelve percent of the farmers receive remittances especially from relatives in South Africa. However disclosing actual family income is still considered taboo hence actual figures were not forthcoming.

**Table 1.5.2 Surplus Yield**

| Surplus Yield | Frequency | Percentage |
|---|---|---|
| Always | 8 | 16 |
| Sometimes | 2 | 4 |
| Never | 40 | 80 |
| Total | 50 | 100 |

Source:Primary Data (2011)

**Crop Production Trends**

Crop production trends in the ward show that the majority of the farmers are into maize production and very few produce small grains though the agro-climatic conditions favor small grains. From Table 3.0 below Rapoko and Groundnuts are not even considered important though groundnuts besides being a source of protein can also be source of income through secondary products like oil and peanut butter. Through assisting farmers in acquiring for example oil pressing machines or pea nut butter making machines, farmers can be encouraged to grow groundnuts. By highlighting the nutritional benefits of small grains like Rapoko for example, farmers can be persuaded to grow these crops. All this calls for effective extension.

**Crops grown in order of importance**

The main crop grown in the area is maize. Other crops like groundnuts are just fillers and of late small grains have been discarded. Table 3.0 shows the ranking of the crops with maize being ranked the commonest.

**Table 1.5.3 Crop Ranking**

| Crop | Ranking |
|---|---|
| Maize | 1 |
| Sorghum | 3 |
| Rapoko | - |
| Groundnuts | - |
| Cowpeas | 3 |

Source: Primary Data (2011)

1. Main Crop
2. Often Grown
3. Rarely Grown

**Small Grain Production (Sorghum or Millet)**

As mentioned earlier very few farmers are into small grain production as the Bar Graph (Fig1.0) depicts below in terms of yield. The only year that showed a significant yield of small grains was in 2008 when 106 tons were realized but the yield took a nose dive to such an extent that in 2010 the yield was zero and slightly went up to 3.19 tons in 2011. The promotion of small grains apart from alleviating the effect of drought has got also healthy benefits. This can only be realized when farmers are made to understand the benefits through extension.

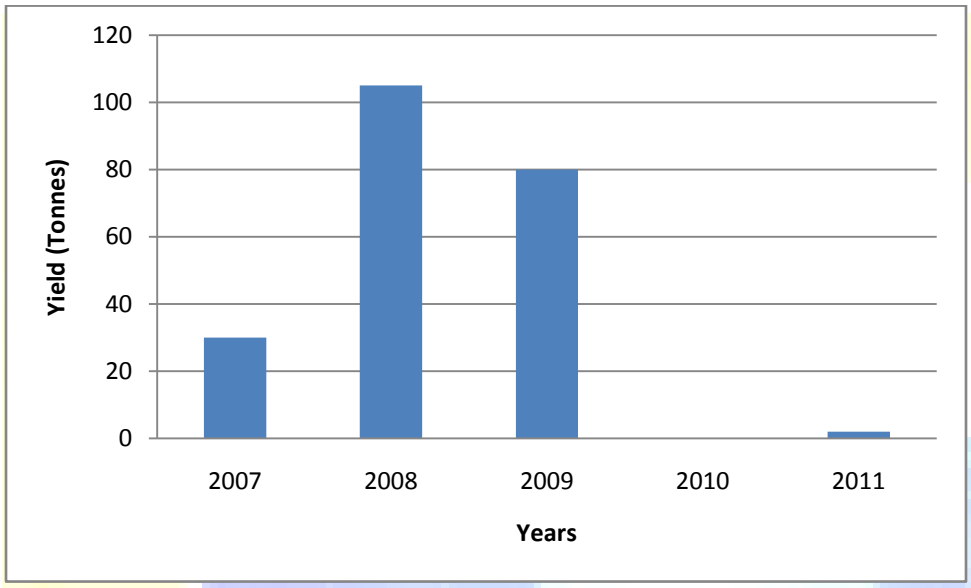


Fig1.5.1Small Grain Production in Tons (AGRITEX 2011)

**Sources of Seed**

As aforementioned land utilization has increased but production is decreasing (Moyo and Yeros 2009). One of the reasons is lack of inputs and use of unsuitable seed varieties. One area of extension is to advise farmers on the most suitable variety of seed for the ward. However from the study it emerged that a total of eighty percent use whatever seed was on the market or use seed from previous harvest and only twelve percent said they use what is recommended by AGRITEX that is buy suitable seed variety. The few farmers who buy their seeds tend to do well as compared to those who depend on state aided inputs which usually come very late. An average of 0.999tonnes (AGRITEX 2011) per household means that family food security is compromised hence no extra to sell to improve the family income. This negatively affects the livelihoods of farmers in the ward. There are many reasons why farmers do not use suitable seed varieties and some of the reasons are lack of advice and financial constraints. However, from interviews some responses show that some farmers still have to accept that they a new era of farming.

**Table 1.5.4 Sources of Seed**

| Sources of Seed | Number of respondents | Percentage |
|---|---|---|
| Previous Harvest | 14 | 28 |
| Whatever on the market | 28 | 60 |
| Recommended | 6 | 12 |

Source: Primary Data (2011)

**Participation in Agricultural Activities (Field days and Shows)**

Field days and shows are very important to farmers and it is through these activities that farmer to farmer interaction can take place hence exchange of ideas. Unfortunately in the ward studied the frequency of these activities is very low. Farmer groups are nonexistent. In terms of attendance seventy percent of the respondents felt that it was not important hence never attended. Twenty percent rarely attend with ten percent saying they attend.

**Table 1.5.5 Participation in Agricultural Activities**

| ATTENDANCE | FREQUENCY | PERCENTAGE |
|---|---|---|
| Never | 35 | 70 |
| Rarely | 10 | 20 |
| Often | 5 | 10 |
| TOTALS | 50 | 100 |

Source; Primary Data (2011)

**Farmers Response to New Technology**

The uptake of Conservation farming (CF) in particular has been met with resistance and the farmers have even christened it 'GACHOMBO' to signify its perceived demands of hard labour. Eighty percent of the respondents knew what it is but only ten percent agreed having used it. Ten

Percent of the respondents were in the dark. The other ten percent of the respondents were for the idea and even agreed that they have at one time practiced it. The ward receives erratic rainfall

hence the need to conserve the little moisture that is gained by the soil. Due to inadequate draught power promotion of CF can be of benefit to resource poor farmers. This calls for extension worker –farmer cooperation so that benefits are seen and the technology adopted. However this has not been the case.

**Table 1.5.6 Adoption of CF**

| Awareness and adoption | Frequency | Percentage |
|---|---|---|
| Aware but not used | 40 | 80 |
| Not aware | 5 | 10 |
| Aware and adopted | 5 | 10 |
| TOTALS | 50 | 100 |

Source: Primary data Collection (2011)

**Area put under maize and yield**

From 2007 to 2011 the area put under crop production was on the decline, the reasons being the agro-climatic conditions of the area and lack of inputs or late acquisition of inputs by the farmers (Personal interview with the DAEO November 2011)

**Table 1.5.7 Area under Maize and Yield**

| Season | Planted area/Ha | Total yield/Tonnes | Average Yield/Ha |
|---|---|---|---|
| 2007-2008 | 1730 | 819 | 0.47 |
| 2008-2009 | 1602 | 3102 | 1.94 |
| 2009-2010 | Data not available | | |
| 2010-2011 | 1492.79 | 535 | 0.36 |

Source: AGRITEX District Office (2011)

The average maize yield per hectare is well below the expected national average of than 2 tons. There is also no sign of increased production as the yield in 2010-2011 showed a six fold decline as compared to 2008-2009. On the same note the increase in population was not in tandem with

production as shown below. Considering that most farmers in the area do not put up more than two hectares under crop production this implies that food shortages are common if the average yield per hectare of 0.36 tons is considered. Shortage of food results in shelving of other activities like putting up good structures as all available resources like livestock are now directed towards buying food. Some farmers in the ward have fallen prey to unscrupulous buyers who at one time were exchanging a beast with a 50kg of maize.

**Table 1.5.8 Comparison of Population and Production**

| Season | Number of Households | Total population | Maize Yield in Tonnes | Average per household |
|---|---|---|---|---|
| 2007-2008 | 536 | 3216 | 819 | 1.53 |
| 2010-2011 | 536 | 4838 | 535.26 | 0.999 |

Source: AGRITEX District Office (2011)

Despite in population by fifty percent there is a decline in yield of about fifty three percent in the two seasons compared. There are various reasons why yield is not on a positive trend. One of the major reasons is the erratic rainfall pattern of the area and failure to adopt sustainable agricultural practices like early planting, use of certified see and above all extension failures.

## 1.6 Conclusion and Recommendations

It is undeniable that in the past agricultural extension was regarded as a way of transferring technologies and practices to the farmer without any input from the farmers themselves. However times have changed extension now goes beyond technology transfer and the role of the farmer not as a recipient of the technology but as a stakeholder in the formulation, implementation and evaluation of extension programmes cannot be ignored. There are a lot of global trends that are shaping the nature of agricultural extension. For example HIV/AIDS in most communities has resulted in the establishment of nutrition gardens to help communities fight the adverse effects of HIV/AIDS through good nutrition. Climate change is also another trend that has had an impact on agricultural extension.

Extension goes hand in hand with rural development and sustainable rural livelihoods that make it possible for the rural farmer to cope with stresses and shocks like natural disasters such as droughts and healthy problems like HIV/AIDS (Chambers and Conwa, 1992). Extension as a service must be seen to respond to the needs of farmers and rural people for knowledge they can use to improve their productivity. The fast track farmer needs extension so much to cope with the demands of agricultural activities. Some of these farmers came straight from towns and cities

and lack basic farming knowledge, hence the role of the extension worker. It is also important that ward extension officers be encouraged to expand their knowledge of agriculture and principles of adult education if to make extension effective. Supervisors must be seen to be more active in the wards until the ward extension officers gain those experiences that make them effective. Most of these officers are still very young and still fresh from college hence the importance of work based learning. Every effort must be taken to improve the mobility of extension personnel either through government assisted schemes to acquire motor cycles or even motor vehicles like the case with members of parliament. In the study area the penetration of mobile phones is above average hence the adoption of ICT can go a long way in extension. Cellular phones can be used to disseminate important information like the beginning of the cropping season, availability of inputs, notices of meetings and other information hence availing much time to the farmer for his or her activities.

For effective extension programmes there is need to understand farmer circumstances and draft programmes specific to them not to import programmes from outside as this is met with resistance and non adoption by farmers. On the part of fast track farmers there is need to change their mindsets so that they take farming as a business not as a pastime. Above all the farmer's needs must be identified first before any intervention programmes are undertaken. In the study area it appears the farmers have accepted their fate of low productivity due to erratic rains but there are other ways of making use of their land productively. The growing of small grains must be promoted if to solve the problems of food shortages. Apart from alleviating the problem of food shortages these small grains like sorghum are recommended for people living with HIV/AIDS. Matabeleland province is known as the region of livestock production as such extension services in the line of livestock production will help farmers improve their livelihoods instead of over relying on rain fed crop production. Where water is available extension must also help farmers go into horticultural production and this has the effect of raising family incomes and improving nutrition in most families. There is need for cross pollination of ideas in extension for example having extension agents in say Matabeleland visiting some districts in Mashonaland East known for their horticultural production for example Mutoko and Murewa.

Finally the study focused on one Ward and this may not be the case with other wards in the same district or other districts. The issue of land is still a sensitive topic and anyone outside the ward trying to understand the living conditions of the farmers is viewed with suspicion. This leads to false responses at times because of this scenario

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