INFLUENCE OF THE HEIFER INTERNATIONAL PASS ON PROGRAMME ON LIVELIHOODS OF HOUSEHOLDS: THE CASE OF A WANEZI WARD IN MBERENGWA DISTRICT OF ZIMBABWE

By

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DECLARATION

I, Ranganai Chidembo, declare that this dissertation for the Master in Rural Development (MRDV) degree submitted to the Institute for Rural Development, School of Agriculture at the University of Venda has not been submitted previously for any degree at this or another university. It is original in design and in execution, and all reference material contained therein has been duly acknowledged.

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To God be the glory

ABSTRACT

Food and nutritional insecurity, poverty and hunger are some of the 21st-century challenges baffling most developing economies. Worldwide, 1.2 billion people are estimated to be living in poverty. Since 1990, the number of people living in extreme poverty has increased by over 50 million in 2014. Among the many public and private institutions that have made several gritty efforts to address the poverty challenge is the Heifer international through its Heifer International Pass on Programme (HIPP). Under the HIPP, the Pass on the Gift programme has been implemented in Ward 1 of Mberengwa District for over two decades targeting the food and nutritional insecure, hungry and poverty-stricken people who are given a gift in form of cattle, goats, chicken etc. This was done with the belief that the gift will add value to their asset base and serve as stepping stone out of poverty, food and nutrition insecurity. Various reports have been written on how the programme helped in improving household livelihood. However, the voice of the beneficiaries was not being heard. This study explored how the Pass-on-the-Gift programme influenced the household's livelihoods in Ward 1, Mberengwa District of Zimbabwe.

A multi-stage integrated approach was employed. Both the case study and a cross-sectional survey designs were employed. Two sequentially integrated phases were followed. On the first phase, a case study was used to gather data from the Heifer International Pass on Programme beneficiaries and other key stakeholders. During this stage, data were collected using a semi-structured interview guide. Results obtained from the first phase informed formulation of the questionnaire used in the second phase. Respondents were purposefully sampled in both stages. Data obtained through semi-structured interviews were analyzed using Atlas ti 8 software while that from a survey was analyzed using IBM SPPS version 25 software to generate descriptive statistics and inferential statistics components.

Results from the first phase of data collection were triangulated with those from the second phase. This synchronized the two data sets and allowed subsequent discussion of the results. The research findings revealed that the HIPP influenced all the households of the participating farmers financially, socially and economically where p= 0.000. Thus, the study confirmed that the notion that cattle ownership can be used as an avenue of confronting the multi-dimensional rural development challenges. Furthermore, it was revealed that cattle ownership empowers the rural smallholder farmers and has potential to assist households dismantle the perpetual dependency on external support, improve their livelihoods and contribute to sustainable development goals.

Keywords: Household, Poverty, food and nutritional security, livelihoods, pass on the gift

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ABBREVIATIONS

ABM	Agent Bases Model
DSSO	District Social Services Officer
FAO	Food and Agriculture Organization
FAD	Food Availability Decline
FED	Food Entitlement Decline
HI	Heifer International
HIPP	Heifer International Pass on Programme
HIV	Human Immunodeficiency Virus
MDG	Millennium Development Goals
MP	Member of Parliament
MRDC	Mberengwa Rural District Council
UNDP	United Nations Development Programme
UNESCO	United Nations Economic and Social Council
ZIMSTAT	Zimbabwe Statistics Agency

CHAPTER 1: INTRODUCTION

1.1. Background

Throughout the world, about 1.2 billion people live under extreme poverty and hunger (Olinto *et al.*, 2013). From 2012 to 2014, the United Nations Food and Agriculture Organization (FAO, 2016) estimated that 795 million people in the world suffered from chronic undernourishment. This is a clear indication of a serious level of poverty and hunger worldwide. In addition, the World Bank estimates that there are 702.1 million people who are living in extreme poverty of which 347.1 million (35.2% of the total population) are in sub-Saharan Africa and 231.3 million (13.5% of the population) live in South Asia (Bhalla & Lapeyre, 2016). Afro barometer survey suggests that "despite high reported growth rates, lived poverty at the grassroots remains little changed" (Dulani *et al.*, 2013:23). This negative sentiment is in contrast with some notably optimistic (and disputed) assessments published based on internationally available datasets (Arndt *et al.*, 2016). The Heifer International Pass on Programme is one of many non-governmental initiatives implemented in poorest regions where there is a high concentration of vulnerable people (Vries, 2011). Implementation of this programme primarily seeks to combat poverty and hunger. Furthermore, the programme is designed to achieve this by introducing livestock into poor communities.

In 1944, after the civil war in Spain, Dan West a farmer and a church worker founded the Heifer International Pass on Programme (HIPP) to` provide service to the families affected by the war. The programme operated under two principles. The first principle was "to help people get resources to produce milk for themselves instead of giving them a hand-out" (Vries, 2011; Rawlins et al., 2014). The second principle was to ask everyone receiving an animal to help another family with the cow's offspring, thus spreading the benefit and enhancing their dignity" (Vries, 2011). Originally, the programme was designed in a way that it would pass on the offspring of the cow to another family so that they can create a strong asset base that can be used to complement other assets that the beneficiary already has in possession (Vries, 2011). The programme is premised on the perceived benefits and importance of a cow in human life. Cows are a source of wealth; provide meat, milk, draught power and collateral among other things. With time, the Heifer International started to incorporate other animals such as rabbits, goats, chicken and sheep depending on the climatic conditions and culturally accepted animals in a given area (Janzen *et al.*, 2016). The HIPP has been widely implemented and has been emulated to be in the right direction towards ending hunger and poverty in the world.

The HI reports from various countries account for a very successful implementation of the programme. Reporting on the performance of the programme on behalf of the implementing partners, (Rodríguez *et al.*, 2016) alluded to an improved livelihood among the beneficiary communities. In support of this, Vries (2011) noted that Heifer International assistance has had a life-transforming impact on the women of Imadol in Nepal. Based on such reports, the programme appears to be succeeding. However, the voice of the project beneficiaries which is a critical component and central to the implementation and success as well as ownership of the programme seem to lack in the reviewed reports of the programme.

Heifer International began its operations in Nepal in 1997. It has worked with 230 545 families in 41 districts of the country (Heifer International, 2016). In Nepal, the programme focuses on livestock, improved technology, technical training, and education for capacity building and awareness. Of importance to note is the fact that the reports speak the voice of the implementing partners and the communities' voice is nowhere to be heard except for only a few programme leaders. Despite the 22 years of HIPP existence in Nepal, evidence on the ground shows that the target beneficiaries are still battling with high levels of food insecurity (Baulch, 2011). According to the United Nations World Food Programme (UNWFP) Report in 2012, 54% of the population in Nepal were food insecure. The country`s physical, financial and institutional infrastructure are weak, agricultural productivity is very low and food insecurity and malnutrition are still widespread (Maharjan and Joshi, 2013). Food insecurity, in Nepal, is particularly a problem for those facing social barriers, including those in lower castes and women, making it difficult to access resources such as loans, education and training, and agricultural land (Baulch, 2011). As a result, this incongruity tempts one to question this programme and ask for a community-based evaluation which exposes the beneficiary`s voice.

An evaluation of projects of the HIPP by the Human Development Research Centre in Bangladesh reveals that five projects were implemented (Tanner *et al.*, 2015). On average, 65.4% of respondents stated that their food consumption status had improved over time because of the HI livestock transfer programmes. However, in this case, the HDRC acknowledged that the baseline for food consumption was not created because it was extremely difficult for people to recall the number of meals, they had taken years ago when there was no project intervention (Human Development Research Centre, 2015). As a result, the outcome of this evaluation is inferential in nature. The respondents in this evaluation report seemed to be people who were asked questions that wanted to capture the impact of the programme and there is no evidence of these respondents being engaged before in the baseline studies. This deliberate and continuous missing of the household members` voice

in these crucial stages of Heifer International programmes leaves one with a desire to further investigate on this subject matter in a bid to unearth how this voice can enhance programming and improve the quality of the programme out.

In Malawi, the HIPP transferred a cow with a calf to 130 candidate beneficiaries (Fitzpatrick and Akgungor, 2017). The household that received the initial asset, was obliged to pass on the offspring from the transfer to another project participant who was ready to receive a calf (Fitzpatrick and Akgungor, 2017). Over a three-year period: October 2009 - September 2012 a total of 611 households participated in the project, which is a clear sign that the programme grew in terms of coverage and participants.

In Rwanda, Heifer International has been there with two livestock donation programmes, one focusing on goats and the other one dairy cows. The primary goal of all these programmes was to reduce hunger and poverty to poor rural communities. Devereaux *et al.* (2015), noted that in many developing countries, decades of official aid have had little impact on reducing poverty and food insecurity. However, the evaluation which was conducted by Rawlins (2012) to evaluate the programme instead of focusing on eradication of food insecurity and hunger she concentrated on the impacts of the programme on household nutrition (Rawlins 2012). This scenario makes one question the sincerity of the programme in the eradication of food insecurity and hunger in the country since she was hired by the HIPP to conduct that research and there is the likelihood of bias towards HI. The programme was supposed to be assessed based on its main objectives. In addition, the incessant missing of the beneficiary voice in evaluation is very disturbing. Since this programme is destined to benefit them, they should be given a chance to influence it and say if it is addressing their real challenges.

The Heifer international has implemented the HIPP in different parts of Zimbabwe. The basis of these programmes is informed by the thinking that the accumulation of wealth in the form of livestock has a potential of improving the people`s livelihoods (Ngongoni *et al.*, 2006). Mberengwa district is one of the beneficiaries of the programme. The programme has been in operation for the past 10 years. Several vulnerable households have benefited from it. The district still has high numbers of poor people in the country (Zimbabwe Statistics Agency, 2016). Surprisingly, despite the potential impact of this programme on poverty and food insecurity alleviation of the rural people in Mberengwa, there are no clear studies which have done to evaluate and ascertain the impact of the programme on beneficiary`s livelihoods. Despite the HIPP long-term operation in the district, a substantial number of people in the villages where the programme is being implemented are still suffering in poverty and hunger (ZIMSTAT, 2016). Thus, there was need for interrogating the programme and the households

in order to establish their voice regarding the programme. The need to explore the community`s experiences and views in the implementation of the Heifer International programme was informed by the obvious absence of the beneficiary's voice in the key Heifer International reports from most participating countries. Personal observation of the realities of HIPP on the ground was also a factor that informed the decision to carry out this study.

1.2. Statement of the Research Problem

Despite the HIPP's 10 years of combating poverty and hunger, in the Ward 1 of Mberengwa District, most of the beneficiaries continue to live in extreme poverty estimated at 22.7 % (ZIMSTAT, 2016). The HI livestock pass on schemes have success record in improving nutritional and food security in Ethiopia (Scrufari, 2016). However, in Zimbabwe (Chauke and Mudavanhu, 2015) argues that, pass on schemes have not been explored well with respect to combating poverty and food security among the rural communities. Unavailability of information relating to the progress made necessitates exploration of the views and experiences of the target beneficiaries. Although implementing partners report that the programme is performing to their expectation (Scrufari, 2016), the prevalence of extreme poverty among the beneficiary communities raises questions regarding the accuracy of such reports. Quite noticeable in the country reports is the lack of the voice of the beneficiary household members (Human Development Research Council, 2015; Rawlins, 2012 & Sucrufari, 2016). The latter weakness triggered the need to carry out this study, through which the HIPP's influence on the livelihood of target beneficiaries.

1.3. Justification of the Study

This study helped to provide an understanding of the beneficiaries` views and expectations about livelihood improvement by the HIPP. This has managed to bring new dimension in understanding of livelihood improvement from the perspectives of the programme departing from the normative approach of using the HI country reports. Since, from the available literature, there seems to be no study which has attempted to document the people`s experiences and perceptions towards the HIPP, this study provides a body literature for the future studies on the same concept. Incorporation of beneficiaries` voice in programme evaluation was very crucial because it empowered the participating households to change the programme`s approach from planning to evaluation. The study afforded the programme beneficiaries an opportunity to express what they want to be done better and what should be improved. This fits well in the views of Freire (1968), who believes that the poor and the exploited people can and should be enabled to conduct their own analysis of their own reality.

In addition, the study further unearthed that the implementers should be relegated to convenors, catalysts and facilitators. The research outcome will be helpful to both the Heifer international and the people in Ward 1 because it will expose what the beneficiaries really want and expect from the programme for better improvement of their livelihood. Importantly, the research has created a platform for other donor-funded programmes to integrate programme recipients` voices in programme design, implementation and evaluation. Ideally, this research brought together three important stakeholders of community rural development which are the donors, researcher and the programme recipients. This created a fertile ground for exchange of ideas between the donors and programme recipients, which if properly utilised has the potential of transforming the livelihoods of rural communities holistically.

1.4. Research Objectives

1.4.1 Main Objective

The main objective of this study was to document views and experiences on how the HIPP influenced the participating beneficiary household's livelihoods in Ward 1, Mberengwa District of Zimbabwe.

1.4.2 Specific Objectives

1. To explore the beneficiaries` views and experiences on the HIPP`s influence on their livelihoods;
2. To determine the beneficiaries and strategic stakeholders' expectations on the livelihood improvement by the HIPP; and
3. To incorporate the beneficiaries` views and experiences into the HIPP for an improved and beneficiary informed programme.

1.5. Research Questions

1. What are the beneficiaries` experiences and views on HIPP?
2. What are the beneficiaries` and strategic stakeholders` expectation of HIPP on livelihood improvement?
3. How can the HI incorporate the beneficiaries` views and experiences for an improved programme?

1.6. Theoretical Framework

This study is underpinned by two theories which are closely related- the Heifer Theory of

Change and the British Department for International Development (DFID). The DFID sustainable livelihood framework focuses on five aspects for a sustainable development to be realized by a household. These are the vulnerability context, available livelihood assets, institutional structure and processes, livelihood strategies pursued and livelihood outcomes (Krantz, 2001). These are the tenants of the framework that are being utilized in conjunction with propositions of the HI Theory of Change.

The Heifer International Theory of Change states that the transfer of livestock as an asset (physical capital) combined with training (human capital) enhances social capital and productive capacity among beneficiary households (Fitzpatrick and Akgungor, 2017). The productive capacity then stimulates an increase in income. It is further assumed that participants, through collective action, will link to markets and sustain advances made in income. The goal is that the intervention catalyzes a movement out of poverty for the communities in which Heifer works.

The Heifer model assumes that social capital facilitates the collective action that contributes to economic opportunity especially in an environment of missing markets (Fitzpatrick and Akgungor, 2017). Although this link between social capital and increased economic opportunity is frequently cited as important to facilitate endogenous development, there has been limited evidence that interventions have led to a deepening of social capital and that the deepening social capital, has contributed to economic opportunity. This study seeks to unravel the programme beneficiaries' views and expectation on livelihood improvement by the programme and find out whether this theory speaks to the reality on the ground. The summarised framework can best describe by the figure 1 below.

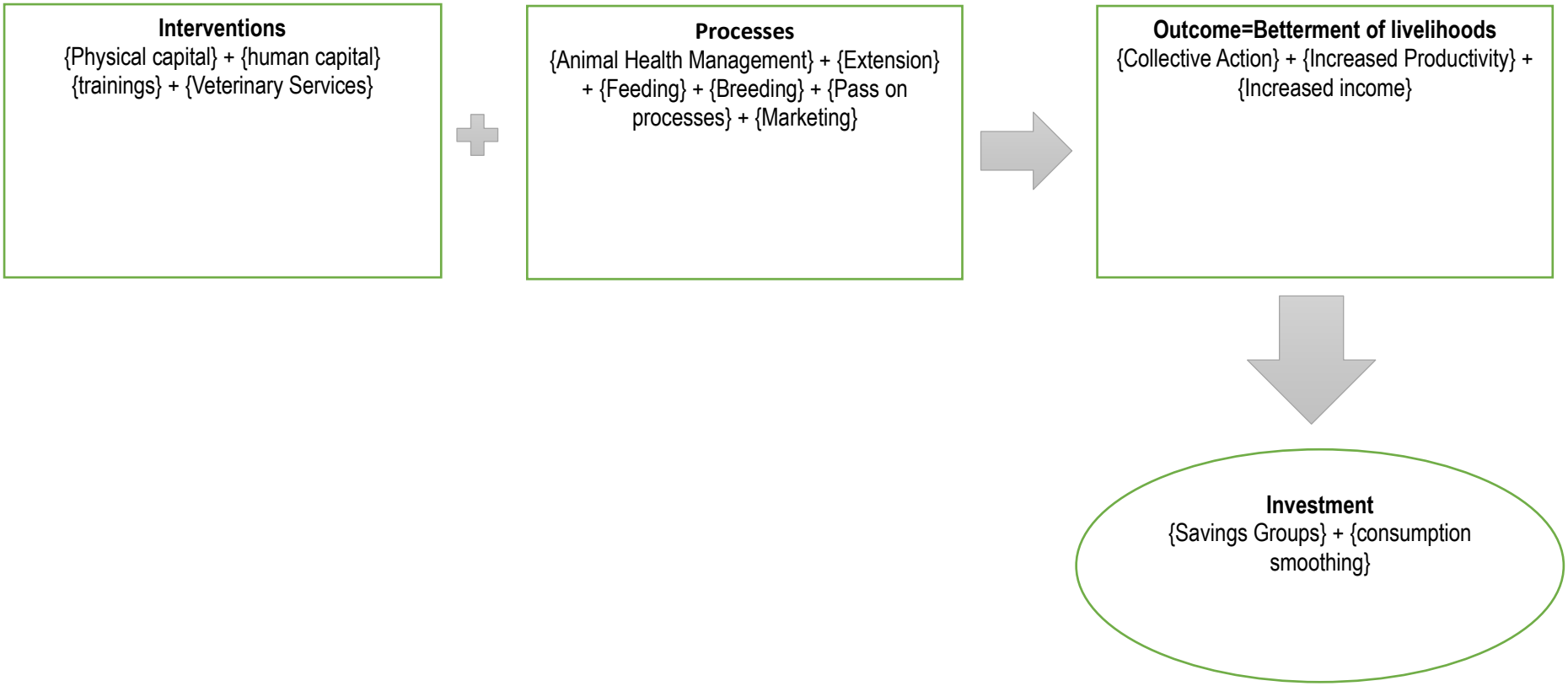

Figure 1.1 **Summary of Theoretical Framework:** Source**: Designed for this study.**

1.7. Operational Definitions of Key Terms and Concepts

A livelihood comprises capabilities, assets (stores, resources, claims and access) and activities required for a means of leaving (Chambers and Conway 1992). Livelihood is said to be sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base (Chambers and Conway, 1992). In this context, the research is going to explore how the assets created through animal donation create the capability for required means of living.

Food and nutritional security were defined by the world food summit plan of action, as it exists when all the people, at all times, have physical and economic access, to sufficient, safe and nutritious food for a healthy and active life (Cheeseman, 2016). Alternatively, it is always access by all people to enough food for an active, healthy life. Food and nutritional security includes at minimum (a) the ready availability of nutritionally adequate and safe foods, and (b) an assured ability to acquire acceptable foods in a socially acceptable way (e.g., without resorting to emergency food supplies, scavenging, stealing, or other coping strategies) (Wheeler and Von Braun, 2013).

Poverty is defined as a denial of choices and opportunities, a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having a school or clinic to go to, not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibility to violence, and it often implies living in marginal or fragile environments, without access to clean water or sanitation" (The UN's Economic and Social Council). For this study a more recent definition by Joseph Rowntree Foundation, which views poverty as, "when a person`s resources (mainly their material resources) are not sufficient to meet minimum needs (including social participation)" (Hirsch, 2013).

Heifer pass on is an international programme that targets poor rural communities and capacitates them through the donation of livestock. Livestock`s offspring are supposed to be passed on to the other poor and vulnerable members of the community. The programme is premised on the belief that transfer of the asset of livestock (physical capital) combined with a set of training (human capital) enhances social capital and productive capacity among beneficiary households (Fitzpatrick and Akgungor, 2017).

Household refers to people living under one roof or occupying a separate housing unit related by law or blood and constituting a family (http;//www.businessdictionary.com). At a household, families are formed, and children are socialized (York Cornwell, 2016). Notably, households are responsible for labour force reproduction, consumption of materials and goods let alone division of labour (Gallie, 2016). This makes a household an important unit in any societal analysis of development, especially when seeking the understanding of a programme that purports to influence their livelihoods.

1.8. Organization of the Research Proposal

This dissertation is organised into six chapters. In Chapter 1, the background, problem statement, justification of the study and objectives are discussed. The research questions to be answered in this study have also been outlined. Key concepts and terms are defined. Chapter 2 contains the literature review relating to Heifer International`s pass on projects. The review relates to study objectives and provides the theoretical perspectives that help deepen understanding of the topic. Gaps in the literature that this research seeks to fill are highlighted. In Chapter 3, the study methodology is explained. The study design, area, data collection processes and sampling procedures are presented. Also included in this chapter are data analyses and ethical considerations. Chapter 4 articulates the HIPP beneficiaries' views and experiences as well as the views and experiences of strategic stakeholders. It is concluded with a discussion of the views and experiences. The chapter 5 focuses on the expectations of the farmers on how the HIPP is supposed to influence their livelihood strategies. The expectations are discussed in detail under the same chapter. Finally, chapter six presented the major findings, conclusion and recommendations of the study.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

In this chapter, the literature reviewed is covered. Journal articles, books and conference proceedings are the principal sources of the literature. The chapter begins with the global overview of Heifer International Pass on Programmes and briefly highlights poverty and food insecurity in the world experienced by rural dwellers which this programme seeks to help. This provides a preamble as to why rural dwellers where the HIPP is implemented are still languishing in poverty and food insecurity with weak livelihood options. The Heifer International Pass on Programme is explained in detail in the context of poverty and food insecurity alleviation and as a livelihood strategy. Community participation in programming, implementation and evaluation of food insecurity and poverty alleviation programmes are discussed in this chapter. The reports of Heifer International on their progress are also reviewed in a bid to find out what the HI and the beneficiaries say about their programmes and livelihood improvement. Reviewing these aspects provides a multi-dimensional understanding of the past and current knowledge on Heifer International programmes in relation to people's livelihoods and perspective towards the programme.

2.2. An Overview of Poverty and Food Insecurity

Throughout the world, about 1.2 billion people live under extreme poverty and hunger (Olinto *et al.,* 2013). From 2012 to 2014, the United Nations Food and Agriculture Organization (FAO, 2016) estimated that about 795 million people in the world suffer from chronic undernourishment, which is a clear indication of the serious level of poverty and hunger worldwide. In addition, the World Bank estimates that there are 702.1 million people who are living in extreme poverty of which 347.1 million (35.2% of the total population) are in sub-Saharan Africa and 231.3 million (13.5% of the population) live in South Asia (Bhalla and Lapeyre, 2016). In addition, the World Bank (2016) has noted that in Africa, although progress is being registered in poverty reduction the region now faces significant challenges mainly because of the global decline in commodity prices and region-specific risks. Despite progress, the share of the population living on $1.90 a day or less remains very high, estimated at 42.7 per cent in 2012.in the eyes of the World Bank, because of population growth, the number of Africans living in extreme poverty is at least 50 million higher in 2016 than they were in 1990.This shows the problem of third world nations in the 21st century, its complexity and manifestation as far as poverty and food security eradication. Since the HIPP is one of the efforts curb the vagaries of food insecurities, there is needed to further investigate it and ascertain whether it is or not a step in the right in providing a remedy these challenges.

2.3 Overview of Poverty and Food Insecurity in the African Continent

Despite several initiatives, by governments, multilateral institutions and non-governmental organisations to eliminate the problem of poverty food insecurity and weak livelihood strategies, the African plight remains pathetic. According to the World Bank (2014), the share of Africans who are poor fell from 56 per cent in 1990 to 43 per cent in 2012. Nonetheless, even given the most optimistic estimates, still many more people are poor, due to population growth: more than 330 million in 2012, up from about 280 million in 1990 (Beegle *et al.*, 2016). According to World Bank (2016), poverty reduction has been slowest in fragile countries, and rural areas remain much poorer, although the urban-rural gap has narrowed. Chronic poverty is substantial. This clearly speaks how Africa as a continent is as far as eradication of rural poverty and strengthening their livelihood strategies. However, the same source has observed that the figures might be much lower because measuring poverty is still a challenge and as such, there is a need for perfecting current strategies used to measure in Africa. This is the gap that this study intends to fill by measuring the influence of the HIPP, using the experiences and expectation which are endogenic and true reflection of reality. Thereby, creating a point of reference to future research in same subject matter.

All developing regions except Africa have reached the Millennium Development Goal (MDG) of halving poverty between 1990 and 2015 (Waage *et al.*, 2010). This demonstrates the uniqueness of the African situation in as far as poverty eradication is concerned. In as much this points to the seriousness of the African situation it needs to be noted that according to Beegle *et al*. (2016) African poverty is not reliable and as such these estimates need to be treated with caution, for example in Zimbabwe some of its data collected from during hyperinflation period is missing. This causes a lot of problems in even addressing the root causes of a problem because in most cases the intervention might have been formulated based on unreliable data. Through seeking the views and experiences of the HIPP beneficiaries in Wanezi Ward of Mberengwa, it will be a step-in creation of reliable data for the ward and the country at large. Therefore, the results will serve as rich and valuable literature for future studies of food and nutritional security of the ward. As such the research will be stepping stone towards availability of current and reliable literature for the ward.

2.4 Poverty in SADC Region

It is indisputable that countries in Southern Africa block i.e. the Southern African

Development Community (SADC) are burdened with poverty. SADC is composed of 15 member states (Mbulawa, 2018). They can be classified into four groups: middle income (Republic of South Africa, Namibia, Botswana, Mauritius, Swaziland), low income (Madagascar, Malawi, Tanzania, Mozambique), fragile (Zimbabwe, Lesotho, Democratic Republic of Congo) and oil exporting (Angola) (SADC, 2011). Food and nutritional security are challenge to many countries within SADC (Schreiner & Baleta, 2015). Majority of the countries in the region struggle with scarcity or unpredictable changes in food availability due to climatic or production factors.

Notably, the region is heavily burdened with the highest number of people affected by HIV (Schreiner & Baleta 2015), with average economic growth rate of 1.4% in 2017 compared to 1.1% in 2016 (SADC, 2017). This calls for sincerity and seriousness when designing programmes to combat these social ills. Despite several programmes implemented by either government, donor organisations or multilateral institutions poverty, food insecurity and weak livelihoods remain a global challenge which has appeared several times on international priority agenda. The rate of progress is not encouraging especially for sub-Saharan Africa.

2.6 Antipoverty Interventions

There are several interventions world over aimed at poverty reduction and strengthening of livelihood strategies of rural smallholder farmers. These initiatives are expected to boost, in one way or the other, income of the poor. Transfer payments like social security and unemployment compensation have historically been used to meet this end. However, sustainable poverty reduction policy should constitute efforts that enable the poor to continually earn enough income so that their daily basic needs are fulfilled. Most of the developing countries of the world started programs of rural credit to develop their agriculture sector. Unfortunately, this policy failed to deliver (Imai *et al.*, 2010) and the efforts of cheap rural credit ceased afterwards. Surprisingly, later this model of poverty alleviation was revived and is even becoming popular than ever. This is premised on the notion that most of the less developed areas have indigenous potential (their human capital) to break the vicious circle of poverty (Imai, *et al.,* 2010) but all they need is microcredit (Armendariz and Morduch, 2010) at affordable rates (i.e. financial inclusion)

Basically, there are three kinds of transfers that are aimed at poverty alleviation and improvement of livelihood in a rural area. These are according to Ghatak (2017), a pure cash transfer, a combination of transfer of livestock assets and skills, and a conditional cash transfer combined with exposure to social interaction with local leaders. These programs are aimed at poverty alleviation in rural communities of most developing nations. There are other

poverty alleviation strategies for the purpose of being focused only those with transfers are reviewed.

2.7 The Sustainanble Livelihood Framework

The framework is underpinned by three insights into poverty which are deeply imbedded in the Heifer International Theory of Change. Firstly, the Department for International Development (DFID) in this framework or approach to rural development realises the importance of economic growth and the associated capabilities that ensues for the poor people which they can capitalise on. Secondly, the approach realised that poverty as perceived by the poor is not limited to low incomes but includes quality of healthy, illiteracy, poor social services among others. The state of vulnerability and powerlessness are not spared. Lastly, the framework notes that the poor themselves knows their situation and needs better and must be involved in all stages of policy and project design that is intended to positively affect them. Figure 2.1 explicitly DFID Sustainable Framework explain the framework that was adapted and used together with the Heifer International Theory of Change.

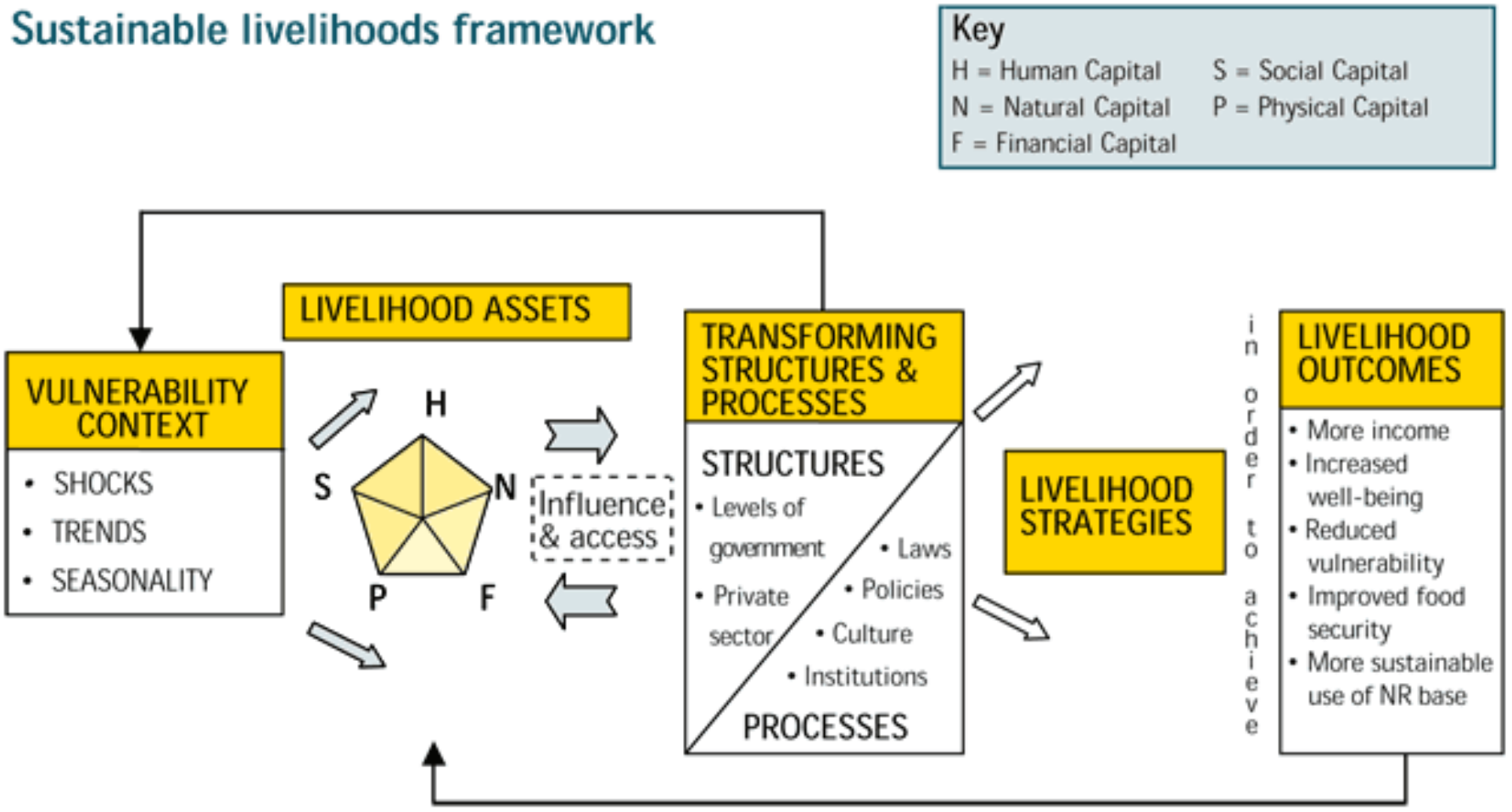

Figure 2.1 Adapted from the Department for Foreign Development (DFID) Sustainable Framework 200

The HI theory of change is anchored on DFID sustainable livelihood framework. The theory posits that, any community challenge should be understood in its own context. The point of departure is ascertaining the vulnerability context of the community in terms of its shocks, trends and seasonality. They are supposed to be understood in their importance influencing the community livelihoods. Trends and seasonality can be either positive or negative as far as livelihood of the community. As such, trends should be used as an advantage that can be capitalised on or as limitation that should be overcome for the improved livelihood of a household.

2.7.1 Vulnerability context

Vulnerability of the community or individual household occurs when they face a threat which they cannot overcome or have the capacity to respond to. However, some communities or households will be at risk. The difference is, risk is the actual occurrence of shock and stress so severe that they can cope up with, while vulnerability is the degree of exposure to shock and stress with uncertainty of the capacity of the household to mitigate the hazard.

2.7.2 Livelihood assets

Livelihoods asset are also known as peoples` strengths which can be converted into positive livelihood outcome. The theory believes that, people require a wide range of assets for positive livelihood to be achieved. As such, the DFID SLF identifies five assets or types of capital that makes a meaningful livelihood which are human capital, social capital, natural capital, physical capital and financial capital.

2.7.3 Policies, Institutions and Processes

The policies, institutions and processes are the enablers for the capitals to be fully utilised for the sustainable livelihoods. They operate at different levels from household level to international level. They are responsible for access, utilisation, decision making processes and proceeds to any given livelihood strategy (DFID, 2000). They directly dictate whether people are included or excluded in programmes that affect their wellbeing. Culture is also included on this list. In some societies culture account for unexplained differences and determines the way of doing things.

2.7.4 Livelihood Strategies

These are wide range of actions and combination of activities that are pursued by people or a community for a living. They are dynamic. They are direct resultant of the capitals that are obtaining to those households or communities. As such their choices is dependent on available opportunities as they are derived from the available capitals determined by polices, institutions and processes of a household or community. Therefore, household or community

members can pursue different trade, temporarily or permanently subject to obtaining capitals (DFID, 2000). Naturally, people compete for resources. This competition can have adverse effects on livelihood strategies of others. Therefore, the livelihood strategy pursued can be weak or strong.

2.7.5 Livelihood Outcomes

These are the results of livelihood strategy pursued by either a household or a community. According to the DFID (2000), they include increased income, improved well being reduced vulnerability improved food security and sustainable use of natural resources.

2.8 Heifer International Theory of Change

The Heifer model of community development asserts that the transfer of the asset of livestock (physical capital) combined with a set of training (human capital) enhances social capital and productive capacity among beneficiary households (Fitzpatrick and Akgungor, 2017). This new productive capacity then stimulates an increase in income (Pimkina *et al*., 2013). It is further assumed that participants, through collective action, will link to markets and sustain advances made in income (Pimkina et al, 2013). The goal is that the intervention catalyses a movement out of poverty for the communities in which Heifer works.

The Heifer model theorises that social capital facilitates the collective action that contributes to economic opportunity especially in an environment of missing markets. Although this link between social capital and increased economic opportunity is frequently cited as important to facilitate endogenous development, there has been limited evidence that interventions have led to a deepening of social capital which, has contributed to economic opportunity. This study tests these two links: the intervention to social capital (activity to output) and intervention to sustainable real net income (activity to outcomes).

What is missing on Heifer International theory of change is the component that captures the intended beneficiary views and their aspiration in programming. Chambers (1992), noted that communities themselves have solutions to their problems. This makes it very important to incorporate the intended beneficiary's views, perceptions and expectations in the programme. Failure of this, will consequently, lead to the wrong programme being planned and executed. As such, for this research seeks to ascertain if, before livestock donation, there was a needs assessment of the programme based on smaller holder farmers` solutions and expectations as far as their programme is concerned.

It has been noted that people in poverty have their own solutions to their poverty and food insecurity issues. As such before designing a programme that is geared towards addressing

people's plight it is of paramount importance to capture these people views, solutions and their aspirations. More importantly, the people`s understanding of their problem, so that a programme that serves a solution will be targeting the real problems of that society rather basing on inferences and suppositions which at times are imaginary and illusionary. The theory is summarised on the figure below

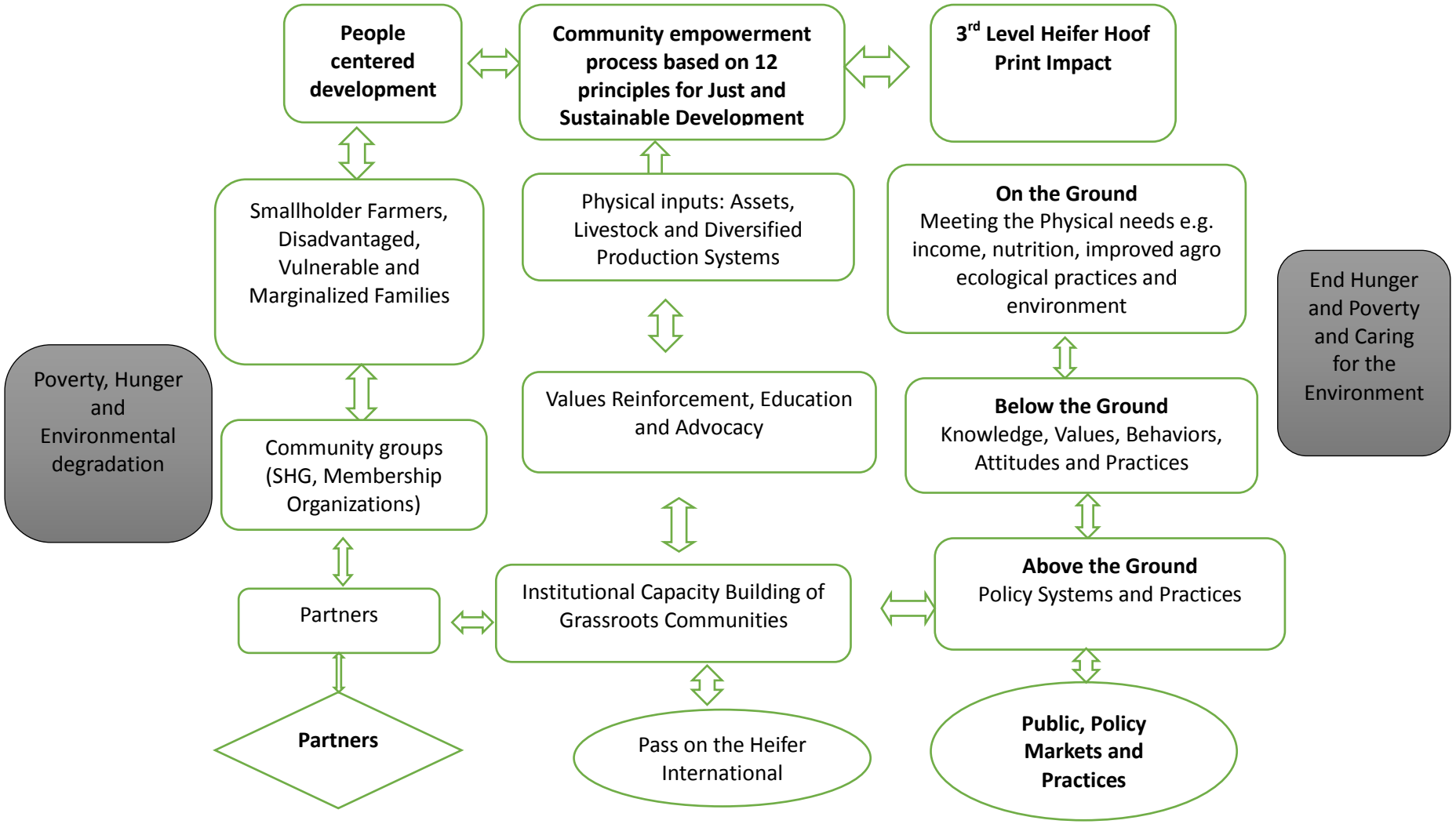

Figure 2.2: The Heifer International Theory of Change

Source: Fitzpatrick and Akgungor, 2017

2.9 Origins of Heifer International Pass on Programmes (HIPP)

Heifer International was founded by the farmer and church worker Dan West who in 1944 in Spain, as a conscientious objector, was doing alternative service in Spain after the civil war there and handing out food (Vies, 2011). Children were given a cup of milk and had to return each day for more. Dan decided it would be much better to give the families involved a cow instead of a cup. One principle of Heifer is to help people get resources to produce for themselves instead of giving them a hand-out. He decided on a second principle, which was to ask everyone receiving an animal to help another family with offspring, thus spreading the benefit and enhancing their dignity. This principle is referred to as Passing on the Gift. Now that it is global, HIPP targets the poorest regions with the highest numbers of vulnerable people (Vries 2011). The HI has helped over 4.5 million families in more than 125 countries, including the Philippines, Poland, Afghanistan, Pakistan, Haiti, Africa, Latin America, Eastern Europe and the United States (Glover, 2017). Not only does the organization give livestock and plants to families in need, but it provides with trainings. Their main intention is to combat poverty, hunger and starvation as well as introducing poor communities into a life of sharing through livestock donation worldwide (Bryant, 2003). Despite all the noble achievements, available literature seems to be silent about the views and even the expectations of the programme beneficiaries being incorporated in the programme evaluations. This creates a gap the research intends to fill.

2.10 Heifer International Pass on Programme in Africa

In Africa the HI have started in the 1990s and intensified with turn of the new millennium (Ransom et al., 2017). This was catapulted by the growing realization of the role that livestock plays in transforming livelihood strategies of rural households in Africa and Asia (Meltzer 1995; Ellis and Bahiigwa 2003; Alary *et al*., 2011). Generally, the pass on projects implemented across Africa differ along six important dimensions which are, targeting and selection of beneficiaries, species, number of cattle loaned, number of cattle to be repaid, actions if loaned animal dies before repayment and additional services available through project (credit, technical training, group support, marketing) (Sumberg and Sabates-Wheeler, 2011). Despite the differences mentioned above the primary goal of these programs in Africa is to add value to the rural asset base and ultimately pull them out of poverty. As noble as this program is towards poverty elimination improving households` livelihoods the problem it seeks to address is still rampant. This program is known to have been implemented in countries like Malawi, Kenya, Ethiopia, Zimbabwe and Rwanda among other countries. From researches conducted and reports of HIPP Africa the views and the experiences of the

beneficiary are missing, let alone participants` expectations. It seems there are no researches which were conducted to capture the beneficiary`s views, perceptions and expectations on program performance on improving beneficiary livelihood and this creates a gap which this research seeks to fill.

In Rwanda, the one conducted focused on the effects of dairy cow and meat goat donation on household nutrition and the impact of HIPP livestock donation program (Rawlins *et al.*, 2014) while in Malawi Fitzpatrick and Akgungor (2017) evaluated the Asset Transfer Program in facilitating sustainable livelihood among the participants and used the Social Network Analysis to determine whether participants` income increased or not. Participants' perceptions, views and expectations were sidelined, and the research opted for a more scientific way of interrogating the improvement of participants` livelihood. In Ethiopia, HIPP is perceived to have improved the participants` livelihood (Coryn *et al.*, 2011). However, this was mainly based on the reports of the Heifer International itself. In as much as this is reliable, it needs to be noted that in most cases implementing organizations have a tendency of writing reports with the intention to facilitate a continuous flow of funds and attracting new funding. So, the real impact should be sought from the intended beneficiaries because they are the ones who really know what they want.

2.11 Heifer International in Zimbabwe

HI officially, started to operate in Zimbabwe in 1997 with a USAID three and half year funded programme (Dierolf *et al.,* 2002). This programme was jointly implemented in Bolivia and Indonesia. To date HI has assisted 76 017 families in Zimbabwe with a variety of animal donations (beef cattle, goats, poultry and rabbits) (https://www.heifer.org/ending-hunger/our-work/countries/africa/zimbabwe.html). Primarily, the organization intends to move 200 000 households out of poverty. Through enabling the participating households to raise their per capita daily living income and be able to consume idea nutritious diet, afford decent accommodation, access basic services and be able to afford education for their children. However, what is missing in Zimbabwe is the introspection of the previous and current projects using the lens of the beneficiaries. This is the gap that this study wants to fill through production of a research report that that exposes how the programme has influenced the participating households` livelihoods.

2.12 Households' Participation in the Heifer International Pass on Programme

Household/community participation is a political principle or practice and may also be recognised as a right and can be borrowed to community development practice and studies. It seeks and facilitates the involvement of those potentially affected by or interested in a decision and implies that the public's contribution will influence the decision. According to Vincent (2016), in Bolivia, the recipients of charity were not consulted or provided a choice regarding the type of aid they received, and Gates' well-meaning donation was culturally and economically inappropriate for several reasons. This creates a gap of interrogating the animal donation which is being done by the Heifer International in Zimbabwe. What happened in Bolivia might be happening somewhere but it's only that the communities are not afforded the chance to air out their views and persecutions towards the programme.

On the same note, Burns *et al.* (2004) postulate that community participation is not the same as consultation and they went on to say that many organizations say that they have a beneficiary participation strategy when they mean that they have a consultation strategy. Vincent and Blasu (2016) observes that community participation enhances effectiveness as communities bring understanding, knowledge and experience essential to the regeneration process. Community definitions of need, problems and solutions are different from those put forward by service planners and providers in most cases. This observation is very important in that it creates a platform which this research seeks to fill. The fact that the people`s voices are missing in Heifer International reports and the people's participation is not clear. When people, participate in these Heifer International programs, it has been observed that people will either be introduced to the programme and confirm the outcome of the programme.

It has been noted that creating a situation where those who are hungry rely on charity is neither a sustainable nor long-term viable option because charity does not empower those who are impoverished by the current state of affairs (Scrufari, 2016). But the question that remains unanswered is why despite this observation Heifer International continues with this strategy which has long been proved unsustainable. Even assuming for the sake of argument that livestock donations provide a viable pathway out of poverty, a donation of animals does little to change the current dynamic that created the poverty in the first place (Lentz, 2014). This demonstrates that some donor organization largely rely on the perceived benefits of a programme and fail to incorporate the people`s views and experiences based on the beneficiary perspective. This might explain the continuous implementation of such programmes despite the availability of evidence that these programmes having little impact on changing a beneficiary`s life on poverty and food insecurity alleviation.

2.13 Limitations of the Heifer International Pass on Programme

Relying on charity does not address the structural inequities of the global food system as the true drivers of hunger (Claeys, 2014). Scrufari (2016) observed that the charitable donation of livestock to poor countries is not always a laudable means of combatting global hunger. This poses serious challenges to the HIPP since it uses the charity model. Coupled with the persistent lived poverty and food insecurity in areas where it is being implemented makes the interrogation of this program urgent. Notably, these scholars do not dispute the importance of cattle donation in poverty alleviation and eradication of food insecurity but just cautions that the outcome is not just obvious.

According to Scrufari (2016), donating livestock is not the most sustainable aid option, as it consumes vast amounts of resources to raise, maintain, and ship the livestock. Weipking (2010) further notes that the care and maintenance of livestock is expensive, something that Heifer International also admits (Clements, 2011). Depending on the type of animal donated and the location of the recipients, high death rates of animals, lack of access to safe water, and the high costs of veterinary care (including artificial insemination for breeding), make the donation of livestock less than an ideal gift for many recipients. This still leaves one wondering as to why HIPP continues with the same modus operandi when there is ample evidence of shortcomings which have been identified already. This creates a gap that this research wants to fill.

According to the World Bank Report (2016), about 78% of the world's poor people are living in rural areas, depending on agriculture for their livelihoods. Therefore, the solution for rural development in most developing countries lies in agricultural investments and development. Increasing farm productivity and resilience, strengthening farmers' links to markets, and providing affordable food are proven ways to end poverty and boost shared prosperity (World Bank, 2016). Unfortunately, this is what the HIPP purport to do but the irony lived poverty and instead of being reduced is increasing. According to the World Bank (2016), although progress is being made both at national and international level, the number of people who are living in poverty has increased by 50 million from what it was in 1990. This clearly shows that if poverty and food insecurity are being eliminated the pace of progress made so far is failing to tally with population and the occurrence of other causes of poverty and food insecurity world over. This calls for paradigm shift in the programmes that are geared towards this cause and the HIPP is not an exception.

Global poverty is a persistent problem, and the traditional methods of addressing the problem have not been effective (Scrufari, 2016) the HIPP is also included in the traditional strategies. A rights-based approach has since gained momentum and is a promising alternative paradigm and is preferable because it empowers and enables people to participate in the food system in ways that promote self-sufficiency and dignity, rather than perpetuating the cycle of charity and poverty. Vincent (2016), referring to the Bolivian debacle, poor people did not need gifted animals because they have dignity, exemplifies HIPP and Bill Gates' flawed assumption: that charity, of any kind, can always be an effective means of solving world hunger and that donating livestock is the best charitable option.

Notably, Heifer International tailors the aid it provides to the needs of specific regions, recognizing that there is no one-size-fits-all approach (Heifer International 2016). However, a closer look reveals that this no one size fits all only applies to variation in animals depending on the climatic conditions and culturally accepted animals. The question that remains unanswered is whether the beneficiaries were the ones who requested for those animals or they were imposed on and could not resist because they had no other option. Often, Heifer International provides aid in the form of donated livestock as part of its strategy to foster local food systems in impoverished regions (Bhandari et al., 2009).

Conley who works for the Give Well, a non-profit organization dedicated to evaluating charitable organizations with an aim towards guiding donors to supporting the top charities so that their dollars achieve maximum impact in saving the most lives advises against donating livestock (Scrufari, 2016). Donating money makes more sense from a food sovereignty perspective. Although a cash gift is still based on a charity model, a cash gift recognizes that individuals are "in the best position to determine their own needs, be it food security, investments, durable goods" (Hirsch, 2016). This is noble in that it views in society as people with different needs and is very flexible.

2.14 Contribution of the Heifer International Pass on Programme to participating households' Livelihoods

In Nepal, Heifer International targets poor households with the intention to provide sustainable livelihoods and a pathway out of poverty for its beneficiaries, focusing on women in particular (Janzen *et al.*, 2016). However, the extent to which this target has been achieved remains illusionary as there still high levels of poverty and at times food insecurity. In addition, Rawlins *et al.* (2014) notes that, the impact of animal donation on household nutrition has not been extensively studied. On the same note, lacking any previous studies

on animal donation specifically, we are forced to infer their impact from the effect of livestock ownership on household nutrition and animal-source food consumption (Rawlins *et al.*, 2014). This points out to the fact that this absence of research on the impact of Heifer International on the livelihood of its beneficiaries might be explaining the contradictions that exist on why there is persistent poverty in areas where these projects are being implemented. This leaves a leeway as to interrogate the contribution of these programs basing on the views of its intended beneficiaries.

Studies in Africa have revealed that there is a relationship between child nutrition and dairy cow ownership (Rawlins *et al.*, 2014). For many of the poor in the developing world, livestock ownership offers a potential pathway out of poverty and malnutrition. In a household facing imperfect markets, there are various channels through which livestock ownership impacts the health and nutrition status of households (Pimkina *et al.*, 2013). What boggles the mind is the fact that the situation in areas where these programmes do not confirm these. The target of ending poverty in the world and in Africa seems to be over-ambitious target especially considering the situation on the ground. World Bank notes that in as much as international and national targets of elimination of poverty are showing progress achieved so far, the number of people living in poverty has is in fact increased with 50 million that it was in the 1990s. This will expose the impact of the HIPP on the improvement of household livelihood. If the programme was doing well instead, they should be decreasing by now. Therefore, interrogation of this programme basing on the intended beneficiaries is most welcome.

2.15 Summary of the Literature Review

Literature has consistently shown that programme beneficiaries' views and experiences are not visible in most of the country of HI. Livestock ownership in all reviewed articles and country reports seemed like one way through which poverty and food insecurity can be eliminated in the world over. However, adamancy on what the intended beneficiaries say about how this programme can be modelled, executed and evaluated is so worrying. In addition, it has been revealed that in most cases HIPP is modelled by the funders without necessarily capturing intended beneficiary's expectations. In addition, the beneficiaries` expectations about the improvement of their livelihood are not coming in the literature. As such, this prompted and let alone justify the conduct of this research. This will ultimately lead to suggestions which are people-centered, which influence programme design, execution and implementation.

CHAPTER 3 RESEARCH METHODOLOGY

3.1 Introduction

The research methodology used to conduct the study is presented in this chapter. The description of the study area is also presented. The research design applied, and sampling procedures applied are outlined. Data collection, and analysis methods and techniques applied are explained in detail. Finally, the reliability and validity techniques that were employed and research ethics that were observed under this study are outlined.

3.2 Description of the Study Area

The study was conducted in Ward 1 of Mberengwa District in Zimbabwe. Mberengwa is a district in the Midlands Province. The district is characterized by erratic and inadequate rainfall, with a drought frequency rate of four out of five years (Masendeke and Shoko, 2014). According to Dziva and Kusena (2013), the main livelihoods options in the district include small-scale mining, cattle rearing and subsistence farming. Notably, even in good farming years very few farming households are left with a surplus. This hampers income generation of the households in the district (Dziva & Kusena, 2013). The district is consistently affected by inconsistent and unreliable rainfall resulting in poor harvest rendering most households food insecure. They often rely on food handouts from both the government and non-governmental organizations.

The district is divided into four sub-districts namely: Mberengwa North, East, West and South. It borders Gwanda in Mberengwa West, and Zvishavane in its northern side, and to the South, it stretches to Neshuro, Chikombedzi and Manyuchi Dam. Ward 1 is in Mberengwa North sub district. This ward was purposely selected because that is where Heifer International initiated the Pass on the Gift programme. In this area (Ward 1), the levels of poverty were very high (22.7%) (ZIMSTAT, 2016). Mberengwa District has an estimated population of 180 623 people as of 2016 while Ward 1 has an estimated population of 4 726 people. Heifer International is not limited to Ward 1 only, but it covers other selected wards in Mberengwa District. Due to limited funds available, the research was only conducted in Wanezi ward better known as Ward 1 of Mberengwa District.

Figure 3.1 Map of Mberengwa District

Source: Mberengwa District AIDS Coordinator's 1st Quarter Report 2018

3.3 Research Design

A multistage integrated approach was followed. In this approach, both the case study and a cross-sectional survey designs were employed. Two sequentially integrated phases were followed. In the first phase, a case study was employed to gather the HIPP beneficiaries and key informants` views and experiences of the programme. The data was gathered using an open-ended interview guide. O`Leary (2017) notes that qualitative research provides insights into the problem or helps to develop ideas or hypotheses for potential quantitative research. This approach was used to uncover trends in thoughts and opinions and delve deeper into the problem as noted by Morse and Field (1995). This design was appropriate for gathering data which helped in the achievement of the first and second objectives, while at the same time creating the platform for the achievement of the final objective. Thus, it was ideal to first use explorative in-depth qualitative techniques as a lack of understanding of the phenomena limits the use of quantitative methods in the second phase. To substantiate the above claim, Green and Thorogood (2004) observed that quantitative research is no longer considered as the ultimate source of reliable and valid data and, in fact, it has been shown to be inappropriate for exploration and in-depth data about on experiences.

Creswell and Green (2011), view qualitative research as a form of inquiry that analyses information conveyed through language and behaviour in natural settings. It is used to capture

expressive information not conveyed in quantitative data on beliefs, values, feelings, and motivations that underlie behaviours. This explains why the qualitative approach was utilized in attempting to make sense of or interpreting HIPP in terms of how people experienced and perceived it as far as its influence on livelihood improvement. The qualitative approach helped to understand HIPP in context-specific setting, such as real-world settings, where the researcher did not attempt to manipulate the Heifer International initiative. Research outcomes on the first phase were not arrived at by means of statistical procedures or other means of quantification. Instead, results were real-world experiences as the HIPP unfolds.

In the second phase of data collection, a survey was employed. Quantification of the qualitative responses was done. This gave the qualitative data real meaning. The triangulation of case study and survey is ideal because the two complement each other`s weakness and ensures reliability and transferability of the results.

3.4 Population and Sampling procedure in the First Phase

On the first phase of data collection, fifteen of 75 initial HIPP beneficiaries in Ward 1 and four key informants participated in the data collection process. Since in 2010 the HI donated livestock to 75 households of in ward 1. It became imperative to select all the beneficiaries as the sample for the study. Cognizant of the fact that the programme beneficiaries has to date bloomed to 341 who received cattle donations. The initial 75 households who benefited from the HIPP in 2010 were purposively selected because of the time and experience they had with the programme. This gave HIPP initial beneficiaries a completive advantage from other households who received cattle as pass on groups. During first explorative phase, data saturation was used as a determinant of the sample size. According to Guest *et al*. (2006), researchers agree that if no new data, no new coding and ability to replicate the study is achieved, data saturation is achieved. This school of thought further posits that data saturation can be reached with as little as six interviews depending on the population size. However, Dibley (2011) warns that it's better to think of data in terms of richness and thickness rather population size. To be on the safe side all these factors were considered to ensure the reliability of the results.

On the same note for the strategic stakeholders, respondents were purposively sampled. This was so because these were known technocrats in the programme. These were Project Coordinator for Heifer International, the Veterinary Services Officer responsible for Ward one, District Social Services Coordinator and the local traditional leader. It is the deliberate choice of a participant due to the qualities the participant possesses (Etikan *et al.*, 2016). In this case, they were chosen because of their strength in the understanding of the programme. Additionally, Etikan *et al*. (2016) notes that, this nonrandom technique do not

need underlying theories or a set number of participants. Bernard (2002) posits that the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience.

3.5 Data Collection Method in the First Phase

In the first phase, a semi-structured interview guide was used to collect data. This was administered to 15 initial HI beneficiaries and 4 key informants. In this respect, face to face interviews was conducted. A checklist of key respondents and programme officials to be interviewed was used to ensure that all key informants have been contacted. Tape recorders were used in this phase of data collection so that all responses could be recorded. All this was influenced by the views of Vasmoradi *et al*. (2013) who posits that "interviews are particularly useful for getting the story behind a participant's experiences". The research intentions and the use of the research findings were explained to the participants. Their voluntary participation in research was deemed to affect not only the dimensions of validity and reliability but also the research's ethical foundations (Spruce and Bol, 2015). As a result, it was treated with the seriousness it deserved. Since this study is predominantly qualitative in nature, the voice recorder and semi-structured interview guide were used.

During the interviews, consent was sought before the responses were recorded using a voice recorder. This was motivated by the observation of Bucher *et al*. (1956) who postulates that apart from the operational problems of obtaining proper audibility and voice fidelity, no verbal productions are lost in a tape-recorded interview. Additionally, comparisons of tape-recorded interviews with written interviews indicate that remarkably large amounts of material are lost in written ones (Bucher et al, 1956). All the recorded interviews were transcribed on an excel spreadsheet and later exported to Atlas ti 8.

3.6 Data Analysis in the 1st Phase

The captured data was stored in an ATLAS.ti 8.4 project file (Hermeneutic Unit or 'HU'). This was where all the project primary documents were stored. Konopasek (2008) posits that because of the ability of ATLAS.ti to serve as an organizational and project management tool, for researchers who adopt it is becoming the preferred tool for qualitative data analysis. Using the array of coding functions such as open coding, code by list and code in vivo, the first layer of data was coded. Additionally, open coding was done on the data where a quotation was captured as a code. Furthermore, several open codes were generated in vivo and later be grouped together based on their relations so that major codes could be generated and emerge as themes of the study. Using the linking and related functions under Network View Manager, nodes were imported to create categories of concepts for eventually looking at a

logical pattern that could explain how the Heifer International influenced livelihoods of households in the ward.

Thematic Network Analysis (TNA) was adopted under this study. According to Rambaree (2013), in a theory-driven approach, for (TNA) researchers can use a theory to design a conceptual framework and, the themes observed from the gathered data can be linked deductively to the already established theoretical concepts to form a network of linkages between the theoretically driven themes. As such, the Sustainable Livelihood Framework which is deeply embedded in the HI has indicators for each capital, which were adopted and used as the themes of the study.

3.7 Research Design for Second Phase

After gaining a deep understanding of the HIPP beneficiaries' and key strategic stakeholders` experiences and expectations during the first phase, a cross-sectional survey was conducted in the same area. The cross-sectional survey was built on the results of the case study. Worth noting is the fact that the survey included 75 participants. This allowed a further understanding and quantification of qualitative data obtained in the first phase of data collection. This triangulation strategy cancelled out the weaknesses and bias of each design hence providing reliable results. This survey gave statistical value to the results obtained in a case study.

3.8 Population and Sampling procedure in the Second phase

A purposive sampling technique was employed in this second phase. There are 341 beneficiaries in the ward inclusive of both the initial beneficiaries and pass groups to date (Heifer International 1st Quarter Report, 2019). Notably, in 2010 the HI had donated cattle to 75 households. These households were purposively sampled because of their time and experience with the programme. The benefiting list from the HI was used to identify the research respondents.

3.9 Data Collection Tools in the Second phase

Data was gathered from the selected 75 HIPP beneficiaries, using a questionnaire. It was on a Likert scale to allow quantification, validating and triangulation of the qualitative data that was gathered in the first phase of data collection. This allowed further understanding and quantification of all qualitative data. This design was preferred because it allowed verification of the results that were obtained during the first phase of data and mathematical manipulation of the qualitative data.

3.10 Data Analysis for the Second Phase

The IBM Statistical Package Social Sciences (SPSS) Version 25, a computer-based software was used to generate descriptive statistics. The descriptive statistics were used to calculate frequencies, mean and mode. Data reduction technique-Principal Component Analysis was used for identification of the major expectation of the participants. In addition, the paired sample t-test was also used for the determination of significant difference of some of the activities that were done before and after participation in the programme.

3.11 Data Integration

Since this research was mainly qualitative in nature but employed a quantitative approach in later stages makes it a mixed research (Driscoll *et al.,* 2017). This called for data integration. Integration is understood to occur by connecting the methods of data collection and analysis (Creswell and Plano (2011). The connection occurs through linking, building, merging and embedding. In the context of this study, data was integrated through the building. Integration through building occurs when results from one data collection procedure inform the collection approach of the other procedure (Creswell *et al*., 2011). Building on this understanding, the case study laid the foundation upon which the cross-sectional survey was premised. Measured constructs were generated from the qualitative results. The items that were derived from qualitative results were used to design a questionnaire with a Likert scale ranking. In this regard, qualitative results were presented first followed by quantitative outcomes. While the qualitative analysis gave detailed explanations, the survey results quantified the variables.

Table 3.1: Summary of the Methodological Approach per Objective

Specific Objectives	Research Questions	Variables	Research Method	Sampling Technique	Data Collection Tool	Data Analysis Tool
To explore the beneficiaries` experiences and views about HIPP	What are the beneficiary's experiences and views about HIPP	Views Experiences	Case study and Survey	Purposive sampling.	Interview guide and Questionnaire.	Atlas ti 8.4
To determine the beneficiaries and the strategic stakeholders' expectations	What are the beneficiaries` and the strategic stakeholders` expectation on HIPP	Expectations	Survey and Case Study	Purposive sampling	Interview Guide & questionnaire	Atlas ti 8.4 Networking trees SPSS version 25 (PCA & paired sample t-test)
To incorporate the beneficiary's views and experiences into HIPP for improved and beneficiary informed programme	What can be factored onto the HIPP for a better programme based on the beneficiaries` voice and experience	Institutional features, Internal and external factors	Analysis of results	Purposive sampling	Semi-structured interview and Questionnaire	Atlas ti 8.4 IBM SPSS

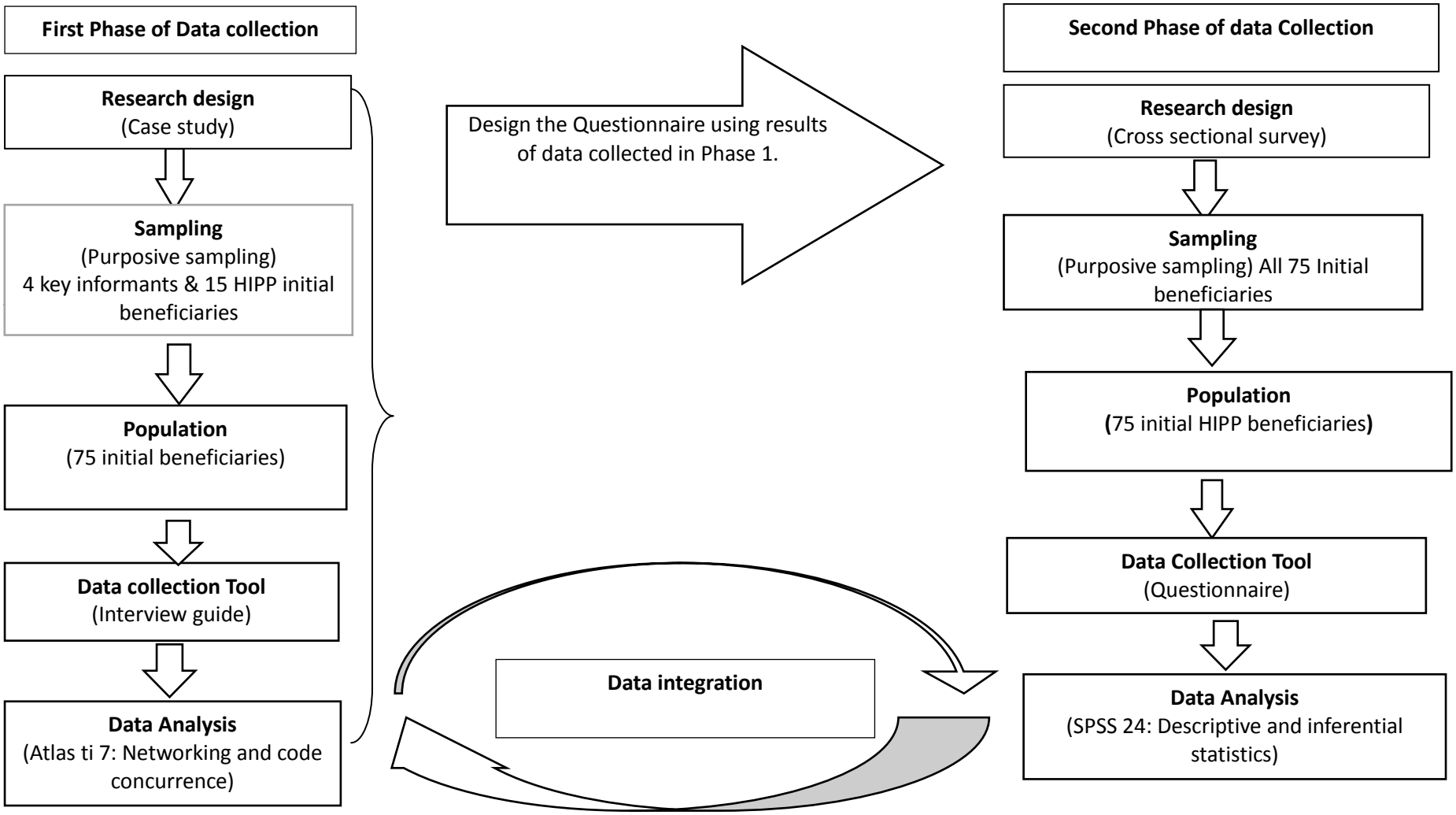

Figure 3.2 Summary of research methodology

3.12 Ethical Considerations

Permission to conduct the research was sought from the University of Venda Research Ethics Committee. Clearance from the responsible authorities, which are Mberengwa Rural District Council was also sought, this allowed the researcher to conduct the research ethically. Informed consent and voluntary participation were sought before conducting the study from research participants. Akbulut *et al.* (2008), observes that ethical violations have increased in studies with the development of computer technology and as such the distribution of data collection electronically was avoided. Avoidance of harm to the participants was also adhered to by ensuring the privacy and confidentiality of the participants' views and perceptions. Participants were not linked to their views and perceptions by not writing their names on the questionnaires provided.

Participants were not coerced into taking part in this research by signing informed consent letters and if they feel not interested during data collection they could withdraw. There were also assured that those who would have withdrawn were not going to be recorded. Most importantly, a detailed explanation of the research purposes, processes and rights of participants was provided in the local language to ensure clear understanding by the participants.

CHAPTER 4: THE HIPP BENEFICIARIES' VOICE ON THE PROGRAMMES' INFLUENCE ON LIVELIHOOD IMPROVEMENT

4.1 Introduction

The HIPP is implemented in several countries in Asia, Latin America, Caribbean Islands and Africa (Vries, 2011). Having started in 1944, by Dan West in Spain after the civil war there and handing out food (Sumberg and Sabates-Wheeler, 2011; Vries, 20111). The programme evolved over time and transformed due its nobleness. A lot has been written about its achievements (Sumberg & Sabates-Wheeler, 2011; Rawlins *et al.,* 2014; Scrufari, 2016). However, the programmes beneficiaries` voice in almost all the available literature is not visible (Coryn et al., 2011; Lentz, 2014; Pimkina *et al.,* 2014. This creates a gap that this research is benefiting from. Cognisant of the fact that, all the efforts that are embedded in this programme are primarily to eradicate poverty and food security of the participants through deliberate empowerment through donation of livestock. This justifies the analysis of the programme using the lenses of the programme beneficiaries.

In this Chapter, the Heifer International Pass on Programme (HIPP) beneficiary`s experiences and views on how the programme influenced their livelihood is presented. The chapter will start with biographical information of the research participants. Both the views of strategic stakeholders and the project beneficiaries are presented in this chapter. A description of the benefits accrued out their participation and how they influenced the livelihoods are outlined. Finally, a discussion of the results is conducted. This is based on empirical evidence obtained through a mixed method approach.

The study was conducted in ward one of Mberengwa district in Midlands Province of Zimbabwe. The District is characterized by erratic and inadequate rainfall (Masendeke and Shoko, 2014). As a result, since most of their livelihoods are agro-based they are affected by these climatic conditions. The main livelihoods options are small-scale mining, cattle rearing and subsistence farming (Dziva and Kusena, 2013). Even in good farming years very few are left with a surplus that can be used for income generation (Dziva & Kusena, 2013). Often, they rely on food handouts from both the government and non-governmental organization. In a bid to find a solution to this situation, the Heifer International chipped in with its livestock in-kind credit scheme.

Livestock-in-kind credit model which is also known or the Pass on Gift model (De Vries 2012). This model is based on the principle that each assisted farmer helps another farming household to obtain the same or similar benefits (De Vries 2012), thus working towards im-

proving the productive asset base of poor and vulnerable populations (Sumberg and Lanko-andé, 2013). In Mberengwa District, the Heifer international under the programme dubbed Food Security and Poverty Alleviation Project 2010-2015 targeted several wards in Mber-engwa District. Poor, food insecure and poverty-stricken households were targeted for ani-mal donation. It was donating indigenous chicken, sheep, goats and cattle. To date, it managed to reach to 1500 households inclusive of all original and pass on groups. For the sake of this research, one ward and farmers who benefited from cattle donations were cho-sen.

In 2010, Heifer International donated cattle to 75 households. The initial beneficiaries of HIPP were the sample for this study. This is because they have been in the programme longer. The cattle were donated to farmers who were organised into small groups. To date, the beneficiaries have grown to a total of 341 farmers. HI used the ABC Continuum Criteria to classify farmers into three categories using the HI baseline data (i.e., handout farmer, passionate farmer and successful farmer). A handout farmer relies mainly on donations from either government or civic organizations. Even during good harvests, a handout farmer hard-ly secures enough for sustenance. Whilst a passionate farmer is innovative and willing to learn new ideas and skills but does not have enough resources and they have an appetite for marketing. Finally, successful farmers are those who have made it and have graduated from using animal labour. Guided by the above-mentioned classification, the HI groups composed of farmers from all categories. Majority of the programme beneficiaries i.e. ¾ of 75 initial beneficiaries were drawn from farmers in the “passionate farmer” category.

4.2 Presentation of Results

4.2.1 Demographic characteristics of the respondents

Out of 75 farmers who participated in the Heifer international Pass-on programme (HIPP), 61.3% were women. Table 4.1 reveals that majority of the respondents (52%) were married, 21.3% were single, 24% widowed and 2.7% divorced. Majority of the people who participat-ed in the research were between the age of 30 and 50 years and constituted 56% of the population. Youths below the age of 30 years were 18.7% of the population of the initial HI farmers. The elderly of age between 51 and 60 as presented on table 4.1 were the same number as the youths (18%) of the participants. The participants who were above 60 years of age constituted 6.7% of the farmers who participated in this study. This reveals that the programme covered people from all age groups, but with varying degrees.

On education, majority of the farmers (34.7%) had completed Advanced Level Certificate of Education, and 32% had an Ordinary Level Certificate of education. At the primary and ter-

tiary education levels, only 16% and 17.3% respectively completed. There were no illiterate people among those who participated in the study. Table 4.1 reveled that communal farmers were the majority and they constituted 42% of the study sample. Out of the 75 farmers, 24 were self-employed farmers and they composed 32% of initial farmers. The remaining 12%, 10.7% and 2.7% were pensioners, retrenched workers or formally employed individuals who benefited from the Heifer International respectively.

In terms of the household size, most farmers were from households with a range of between 4-7 members (46.7%). While 30.7% of the sampled households had members, which ranged between 8-10 members. Households with >3 members and <10 constituted 6.7% and 16% respectively. This is summarized in table 4.1 below.

Table 4. 1 Demographic Profile of Respondents who participated in the survey

Demographic characteristics		Frequency	Per cent (N=75)
Gender of the respondents	Male	29	38.7
	Female	46	61.3
Age of the participant	<30 years	14	18.7
	31-40 years	24	32.0
	41-50 years	18	24.0
	51-60 ears	14	18.7
	>61 years	5	6.7
Marital Status	Married	39	52.0
	Single	16	21.3
	Widowed	18	24.0
	Divorced	2	2.7
Educational level	Primary	12	16.0
	Ordinary level	24	32.0
	Advanced level	26	34.7
	Tertiary	13	17.3
	No education	0	0
Employment status	Self employed	24	32.0
	Formal employment	2	2.7
	Pensioner	9	12.0
	Retrenched	8	10.7
	Communal Farming	32	42.7
Number of Household members	<3	5	6.7
	4-7	35	46.7
	8-10	23	30.7
	>10	12	16

4.2.2 Views of Strategic stakeholders

ABC Criterion was used to select programme participants. This criterion classified farmers into three categories based on their livelihood options. The three categories were “hand out” farmers, “entrepreneurial” farmers and “successful” farmers. All the stakeholders believe that organising farmers into Heifer benefiting groups allows sharing of information and ideas amongst farmers. One of respondents had this to say during the interview conducted, “*...asking for advice was made easier by the formation of groups by the Heifer International. It is even easier and convenient to ask for advice and information from peers than extension workers who are sometimes rude and stubborn.”* The stakeholders who participated in this

study viewed groups as a learning platform with potential of ensuring sustainability of the programme. This was because the beneficiaries were the main actors in determining their livelihood. The stakeholders perceived the selection criterion as insensitive to the plight of other vulnerable members of the community like People Living with Disabilities (PLWD) and Orphans and Vulnerable Children. They argued that the criteria did not have a quota or any other special preference for such vulnerable people. Finally, according to stakeholders, there was no self-selection of beneficiaries in the benefiting groups.

The strategic stakeholders viewed the already existing social groups like burial societies, church groups and support groups as the basis upon which the HIPP will deepen cohesion and mutual understanding with the community. They viewed the establishment of benefiting groups as a “social lubricant” for wealth distribution and uniting the society. In addition, the trainings were perceived as conduits to the full exploitation of other livelihood capitals. It was one way through which farmers could be empowered and become autonomous in the quest for food and nutritional security of participating farmers. Through these training, income generation was broadened due to the skills acquired. In short, HIPP stakeholders` view on the training as the backbone of the programme.

The stakeholders perceived cattle ownership as the chief driver for infrastructural development. They believed cattle ownership was increasing income, yield and even the land under cultivation. This leaves farmers with a surplus which can be used to buy other physical assets. These infrastructural assets allowed farmers to increase production and productivity. While household assets improved the standard of living of the participating farmers. More importantly, they believed that possession of cattle guaranteed the farmers with the supply of manure. However, they lamented overgrazing and land degradation due to the increased number of cattle. Some farmers were sharing water with their animals especially during times of drought. Finally, the strategic stakeholders believe that cattle donation and ownership availed several income generations opportunities to the participating farmers such as cattle sales, selling milk, hiring cattle labour and extension services. Through the income and other assets acquired through cattle donation by the HI, the farmers were able to access financial services.

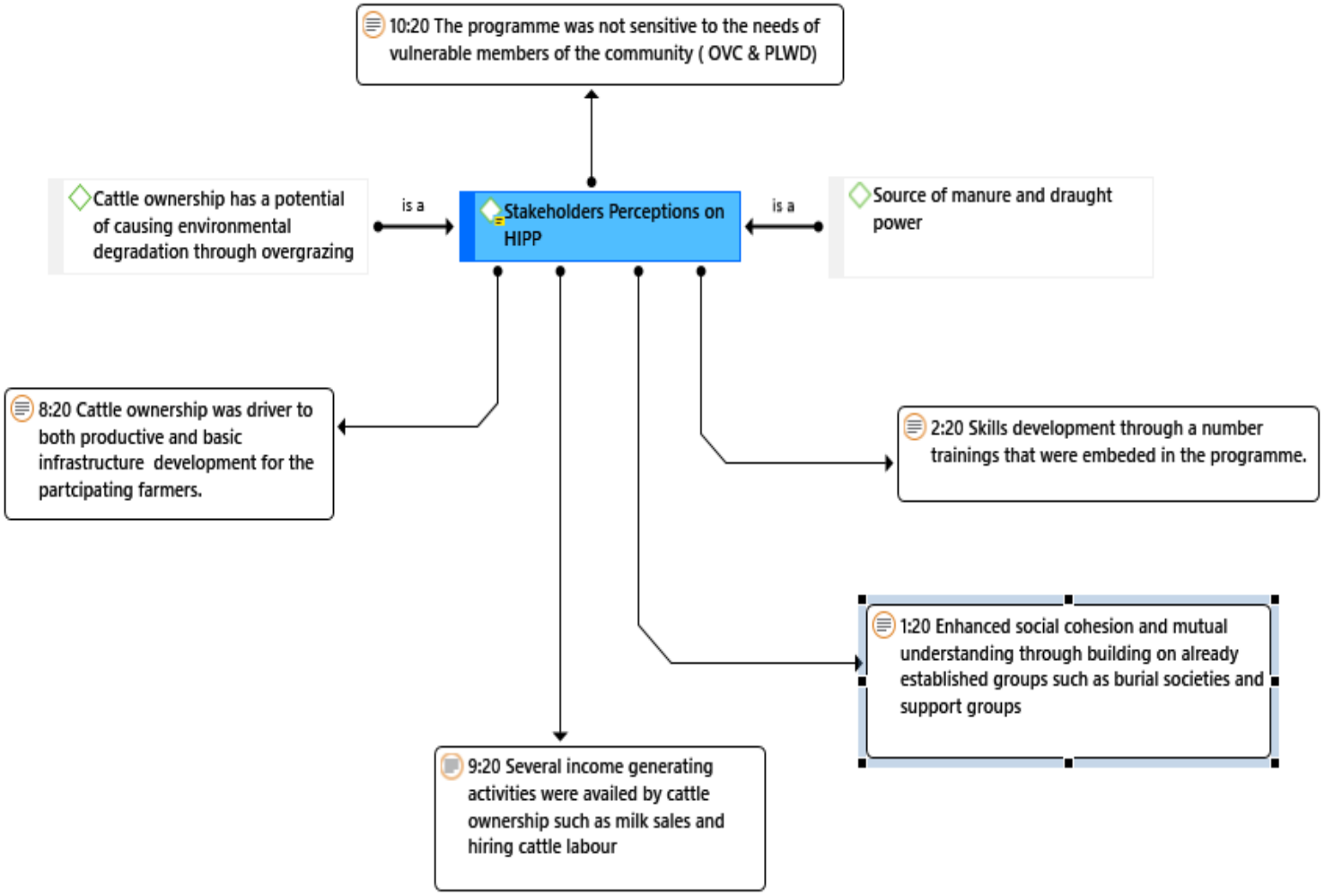

Figure 4.1 Stakeholders Perceptions on HIP

4.2.3 Views of the HIPP Beneficiaries on livelihood Improvement

The Heifer International beneficiaries referred to are those who received Heifer cattle donation in 2010. These farmers, like the strategic stakeholders on the HIPP, have some views on the programme. They emanate on the selection criterion used, socio-economic and environmental influences the programme had on the individual household livelihood. It is these views, which are going to be explained. To begin with, the farmers seemed not to be sure of the selection criteria used for their selection. This was demonstrated by different methods when asked about how they were selected. Some mentioned that they were randomly selected after their names had been submitted to Heifer International, while some mentioned the ABC Quantum Criterion. However, overall, they were not satisfied with the way they were selected. Majority of them are of the view that the programme was supposed to target the poorest members of the community and did not see the justification for adding farmers from A and B category. In addition, the farmers felt that they were supposed to be given the opportunity to select each for a group. Some groups are not doing well because farmers were grouped with individuals whom they are not comfortable to work with due to historical experiences. For instance, one of the farmers said, *"… It was difficult to work with some people who are always lazy and ever giving excuses when it is their time to herd the cattle or to go to the dip tank. Had the programme sought our views during initial stage of groupings, I think I would have chosen to better work with people from my village. In this village, we know each."*

Socially, before participating in Heifer International farmers proffered to the existence of social community-based groups like burial societies, support groups and church groups but believes that they were not properly organised. It is noteworthy that some farmers proffered ignorance of such an organisation during this time. However, since the HIPP inception there was a proliferation of community-based groups and networks. These include credit, savings (*mukando*), Para Vets, and cattle herding (*madzoro*) groups. Through these groups and networks, there was the proliferation of ideas, skills and knowledge. More importantly, it was noted that through these groups the farmers were able to be connected to government, multilateral institutions among other networks. In addition, were grouped into benefiting groups the farmers and this perceived as the noblest idea of the programme by the farmers. According to them, this created symbiotic and mutual relationship were established out the benefiting groups.

On human development, the farmers avowed ignorance on receiving any kind of formal animal related training. There were only on trained conservation agriculture by CARE Interna-

tional which was based on crop production. In 2010, the HI introduced several pieces of training such as Basic Animal Healthy, Cattle Marketing, Para Vets (Community Animal Health Workers) and Mixed farming training. In addition, the trainings were perceived to be simplified and tailor-made to accommodate even the least educated farmers. The skills acquired, helped them to maximise production thereby increasing the income base. Some of these training were certified courses like Para Vets and Master Farmer Training this makes them recognised outside the HIPP and exposing the farmers to employment opportunities. It was noted that in terms of human development the HIPP had trickle down effects. Some farmers who could not send their children to school started from the proceeds of the programme.

The presence of weak livelihoods on the HI farmers before the programme inhibited them to buy decent property, decent bread basket and construct new infrastructures- such as a new house and toilets. The only stable livelihood was income generated from remittances from migrant labour but did not cover most households. In the ward there was there was over-reliance on government and donor handouts due to the weak and unsustainability of the livelihood pursued. However, after cattle donation from the Heifer International the farmers managed to buy other livestock like goats, pigs and chicken among other animals out of the proceeds of either cattle labour, access to cheap credit lines or sales. In addition, there was noticeable infrastructural development in the form of construction of new houses and toilets. There was acquiring household gadgets such as radio and television sets. Household gadgets like cell phones, radio and television set enhanced access to information and communication within the farmers. Farmers were also buying production equipment such ox-drawn ploughs and cultivators. Their standard of living improved because cattle physically produced milk, meat and manure. However, they viewed the donation as not the most appropriate because they preferred more drought resistant and small livestock which are resilient to devastating climatic conditions of the area. Nevertheless, the concept of the donation was perceived as the most appropriate in combating food and nutritional vagaries of rural communities in Mberengwa.

The HIPP farmers indicated that before the programme there was land underutilisation and rampant land degradation. The services of Agricultural Extension workers were overwhelmed and compromised by lack of of resources. Notably, after the programme farmers minimised the use of firewood because were now embracing and affording the use of clean energy sources like solar and Liquid Petroleum Gas. The high need for water by livestock and human beings compelled farmers to explore and exploit underground water through the drilling of boreholes. The availability of draught power after cattle donation enabled the farmers to fully exploit the land. This was aided by the availability of manure soil fertility.

Financially, the participating farmers contend that after participating in HIPP they had increased access to loans and credit because cattle served as collateral security. In addition, the mere possession of cattle increased their buying power through the production of surplus which could be sold for a price. The hiring of animal labour, crop production, growing of small vegetables and fodder production earned the farmers extra income. On the same note, it was revealed that before the HIPP farmers could not afford to renovate their houses and some could not build a toilet for themselves. The income generation activities were weak so much that some could not raise enough for sustenance. The major income generation were piece jobs (*maricho*), harvesting mopane worms, gold panning and reliance on diaspora remittances.

4.2.4 Experiences of Heifer International Programme Beneficiaries

The beneficiaries were asked to identify and describe the social groups and networks that they were involved in before and after their participation in HIPP. They identified the credit groups, the community animal health groups, the savings groups and the community cattle herding groups that participated in the programme. The farmers were also asked to confirm or deny their participation and involvement in the social groups and networks that had emerged from the interviews. Table 4.2 illustrate participants' responses in this regard.

Table 4. 2 Social Groups and Networks

Variable	Per cent (N=75)
Credit lending groups	68.0
Community Animal Health Workers (Para Vets)	57.3
Social Savings Groups	76
Community cattle herding groups (Madzoro)	86.7

As demonstrated above in table 4.2, 68% of the beneficiaries participated in credit lending groups. This was attributed to their participation in the cattle donations as an enabling factor. However, it was not all farmers who wanted to access credit. Some of them wanted to save their proceeds for future. This led to some beneficiaries establishing savings groups known as *mukando* as the platform to accumulate savings. More than three quarters (¾) of the farmers were members of the community savings groups created because of their participation in the HIPP. As indicated above, cattle herding groups were created due to group ownership of livestock and 86.7% of the farmers are participating in this group. Finally, to enable effective training on basic animal health, the HI farmers grouped themselves so that they can share information and ideas pertaining to animal health. This group is known as Community

Animal Health Group and was affiliated to by 57.3% of the 75 farmers who participated in the study. The high number of trainees was because of the bulk training of participants by Heifer International. These trainees anticipated that they would serve as trainers in subsequent groups.

In addition, the HI farmers identified several pieces of training that ensued cattle donation during the interviews. The respondents` views were captured and analysed using Atlas ti 8 and the following pieces of training came out Primary Animal Health Care (PAHC) training, Mixed Crop and Animal Farming, Marketing and Animal Entrepreneurship, Rainbow Gardening, Master Farmer Training, Growing the Vitamin Fortifying Crops and, Conservation and Smart Agriculture. The synthesized and summarised responses are presented in Figure 4.1.

Figure 4.2 Heifer International Training

In a bid to ascertain the quantum and the level of participation of HI farmers in the mentioned trainings, a survey was conducted. From the survey, farmers partook in all types of training availed as indicated on Figure 4.1. Out of all HI provided training programmes Conservation and Smart Agriculture was the most popular with participants. This was because it aimed to boost production and productivity of the community gardens. More than ¾ of the farmers (76%) participated in this training. For, Primary Animal Health training and Mixed Crop and Animal Farming, 66.7% and 65.3% of the farmers were trained respectively. Finally, 45.3% of farmers have trained incorporation of Vitamin Fortifying Crops and fodder production.

Economically, 69.3% of the HI beneficiaries were accessed loans and or savings due to participation in the programme. Cattle donation programme by the HI presented a lot of income opportunities for the farmers. Livestock sales earned income for 65.3% of the farmers while, 81.3% of the farmers through the hiring of cattle labour, 82.3% of the beneficiaries through crop production and 50.9% from fodder production. On investment and savings, farmers were either participating in credit organisation for soft loans or investing in buying new animals. Results revealed that 69.3% of the HI farmers were engaging credit organisations for short term loans. More importantly, some were buying new livestock. There is four major livestock they were investing on which are cattle (72%), pigs (52%), goats (70.7%) and chicken (78.7%). The selection of animals seems to be informed on the type of livestock that the HI is donating in the area.

It became apparent to determine the approximate amount of income they were accruing out of the aforementioned activities. As shown in the preceding table cattle sales and crop production were the main sources of income with more people who were raking more than USD500 annually as compared to other income-generating activities. Therefore, these were the most lucrative income generation ventures for the communal farmer in wad one. As for investing in loaning associations, hiring cattle labour and fodder production all of them had less than 5% in each category who managed to earn more than USD 500 per annum. Whilst, the majority of the farmers earned an annual income which ranged between USD100 and USD 300. Finally, on financial earnings, 69.3% of the farmers received money from community lending associations as credit or loans because they could use their livestock as collateral security. As presented in the table below, only 4% of the farmers had managed to access loans which were worth more USD500. Majority of the beneficiaries (29.3%) accessed loans and credit ranging between USD201-300 per year. Table 4.3 presents the range of monies against the levels of participation and annual incomes per each activity that could be accessed through loans. Overall majority of the beneficiaries earned amount that ranged from >USD100-300.

Table 4. 3 Level of Participating and Annual income per Activity

	Cattle sales	Loans and savings	Hiring of Cattle labour	Crop Production	Fodder Production
% participating farmers	65.3	69.3	81.3	82.3	50.9
>USD100	4.0	20.0	4.0	0	17.3
USD 101-200	2.7	16.0	13.0	12.0	18.7
USD201-300	12.0	29.3	26.7	21.3	13.3
USD301-400	1.3	2.7	17.3	4.0	1.3
USD401-500	10.7	1.3	18.7	16.0	4.0
<USD500	33.3	4.0	2.7	30.7	1.3
Not applicable	36.0	26.7	17.3	16.0	44.0

Table 4.4 Paired sample t test of income

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Standard Deviation	Standard Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Earnings before the HI Current Earning after HI	-2.000	2.296	.265	-2.528	-1.472	-7.545	74	.000

The difference between what was earned before and after the programme was sought through conducting a paired sample t-test. This test indicated a p-value of 0.000 as indicated on table 4.4 below. This statistically means that there was a significant difference because p≤0.05. Statistically, the significance level was acceptable.

Investment in productive equipment was one of the experiences that were proffered by the HI farmers. The buying of new livestock was influenced by the participating farmers. For instance, 72% of the farmers bought cattle so that they could increase their draft power. To augment the cattle gifts from the HI, 68% of the participating farmers bought ox-drawn ploughs and 62% of them preferred cultivators. Cattle handling facilities were by 41.3% of the farmers.

Besides investment in productive assets, HI farmers had basic infrastructural developments. There was the construction of toilets by 85.3% of the farmers. Solar panels were bought by 54% of the farmers who initially benefited from HI. In addition, some farmers even bought radio and television sets out of the proceeds from cattle domestication. This was professed by 65.3% of the participating farmers. More importantly, 48% of the farmers have either drilled a protected well or a borehole out of the proceeds from cattle ownership.

There was an increase in the land that was now being cultivated. This was demonstrated by the estimated land that was put under cultivation before and after participating in the HI. Results on table 4.5 reveal that 83% of the beneficiaries were ploughing between 1 and 4 hectares of land before the programme. While after receiving cattle gifts from the HI the percentage was reduced to a mere 13.3% for those in the same category. For those who could cultivate between 5 and 9 hectares was 17% of the beneficiaries but after participating in the programme they increased to 63%. Worth noting is the fact that before HIPP, none of the respondents could plough more than 10 hectares. However, after participating in the programme, 24% of the respondents reported that they were able to plough more than 10 hectares. Finally, a paired t-test was conducted on this data and there was a significant difference between the hectarage tilled before HIPP and after (p<.000). The average mean hectarage before participating in HIPP was 1.17ha while after benefiting was 2.1ha.

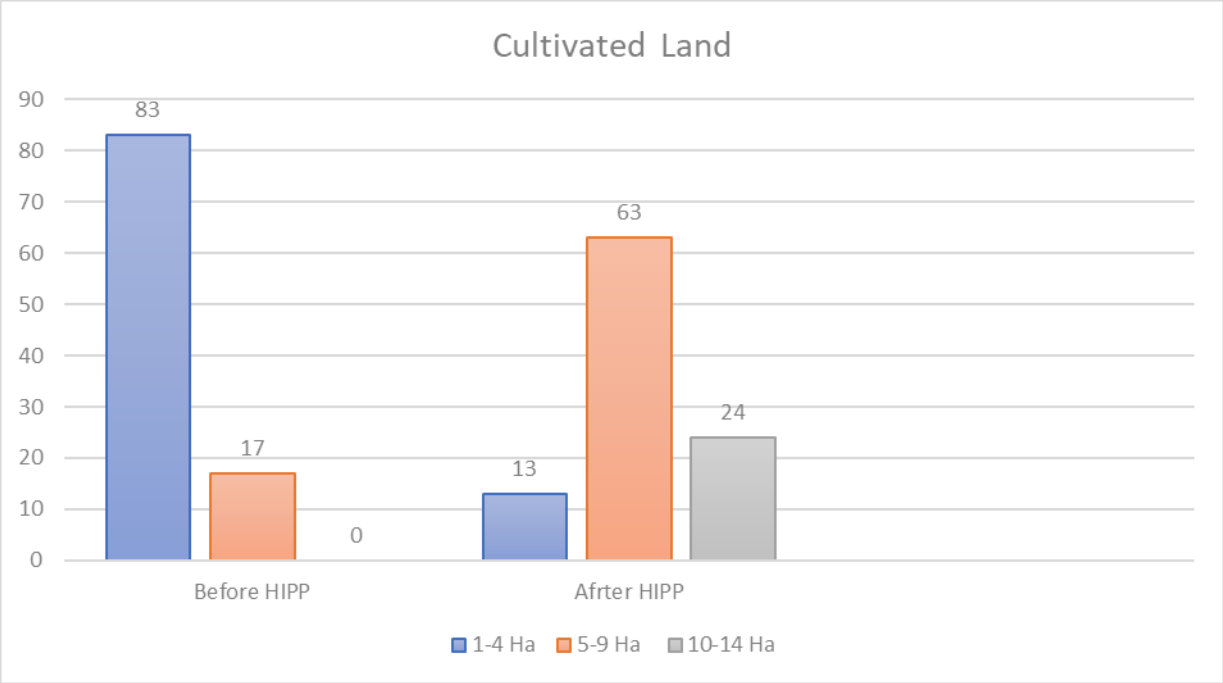

Figure 4.3 Land under crop cultivation

Figure 4.4 Crop Yield

Increase in yields attributed to the availability of draft power, availability of manure and training offered by the programme employees and agricultural extension officers was noted. Results also revealed that 54.7% of the HI farmers were harvesting a tonne of millet during each farming season before cattle donations from HI, and they dropped to mere 6.7% after the HIPP. Worth noting is that 40% of HIPP farmers were harvesting approximately two tonnes annually before HI, while 38.7% were in the same category after the HI. Finally, 54.7% of the initial beneficiaries of Heifer International were harvesting 3 tonnes of millet after participating in the programme as compared to 5.3% of the farmers who were in that category before the programme. This is summarised on the table below.

A paired sample t-test was performed on this data set. Results confirmed that there was a significant difference in the yield before cattle donation and current donations ($p<.000$). The average mean before receiving cattle donation from Heifer international was 1.51 tonnes per hectare. This improved after the HI donation to 2.48 tonnes per hectare.

4.3 Accrued Benefits

4.3.1 Income Generation Opportunities

The participants of the HI programme were presented with several income-generating opportunities including livestock sales, hiring out cattle labour and through crop production. More than, 65% earned income through livestock sales, 81.3% through the hiring of cattle labour, 82.3% of the beneficiaries earned income through crop production and 50.9% from fodder production. The difference on incomes earned before and after participating in the HIPP is presented in table 4.5. This is based on the range of income the farmers were falling into during these two different times. The results show that most of the beneficiaries were earning between USD100 and USD300 before participating in the programme. This demographic dividend changed to over USD600 after benefiting from the HIPP.

Table 4. 5 Beneficiaries` Earnings

Earnings of Farmers who participated in Heifer International Programme				
Income range	**Earning before HIPP**		**Earnings after HIPP**	
	Frequency	Percentage (%)	Frequency	Percentage (%)
>USD100	5	4.0	1	1.3
USD201-300	44	58.6	10	13.3
USD301-400	10	13.3	2	2.7
USD401-500	7	9.3	6	8.0
<USD600	6	8.0	55	73.3
Not applicable	5	6.7	1	1.3
Total	**N=75**	**100.0**	**N=75**	**100.0**

In a bid to determine if there was a meaningful difference between incomes that were earned before joining the HI programme and after participation, a paired sample t-test was conducted, and the results are shown on table 4.4. Paired sample t-test was used to determine the mean difference between the income earned before participating in the HI programme and income earned after the programme. It was revealed that p<.000 implying statistically that there was a significance difference between income that was earned before the programme and after involvement with the programme. Statistically the significance level is ≤0.05, and it this case it was p is less than 0.05. Therefore, there was a significant difference between the incomes earned because it falls within the acceptable range.

4.3.2 Enhanced Asset Position of the Farmers

Cattle donation programme by the HI has improved the asset position of the farmers in ward one of Mberengwa District. Out of the proceeds from donated cattle, some beneficiaries increased the number of livestock ownership as presented in table 4.6 that cattle increased from 24% to 100%, pigs from 17.3% to 52%, goats from 33.3% to 70.7% and chicken from 53.3% to 78.7%. Worth noting is the fact that some were buying productive assets. For instance, ownership of ox drawn ploughs rose from 6.7% to 68%, while for those who secured cultivators increased from 4% to 62%. Cattle handling facilities were built by 41.3% of the households after HIPP as compared 1.3% who had such facilities before the programme. Interestingly, 85.3% of farmers either replaced or built new toilets at their homes out of the proceeds that accrued from cattle domestication. While 65.3% and 54% were owning a radio or television set and solar panels respectively after participating in the HIPP unlike before where 24% and 13.3% respectively owned such gadgets. New water sources like a protected well or drilling of borehole were accessed by 48% of the farmers that participated in this programme unlike before where 13.3 accessed clean water. This is well illustrated in table 4.6.

Table 4. 6 Percentage of Beneficiaries who Accrued Assets

Type of asset secured by the farmers	% of farmers owned the asset (N=75)	
Cattle	**Before HIPP**	**After HIPP**
	24	100
Pigs	33.3	70.7
Chicken	53.3	78.7
Ox-drawn ploughs	6.7	68.0
Cultivators	4.0	62.0
Cattle handling facility	1.3	41.3
Toilet/ house	24	85.3
Radio and Television	33.3	65.3
Solar panels	24	54.0
Well or borehole	13.3	48.0

4.3.3 Food and nutritional benefits

The food and nutritional status of the participating farmers improved due to their participating in HIPP. Animal Source Foods (ASF) such as meat, milk and times eggs were the major components that shaped food and nutritional status of the participating farmers. Besides owning cattle from donations, beneficiaries bought some small animals such as goats, pigs and chicken out of the proceeds from donated cattle. Unlike cattle, these small animals could be slaughtered for consumption more often than cattle. This enabled the farmers to access to animal source nutrients.

Through improved incomes, the HIP beneficiaries enhanced their nutrition by growing fruit trees like oranges and increased maize production which is a staple food in the coupled with increase in crop yield. This is demonstrated by the increase in an average of the yield from 1.7 tonnes before the programme to 2.48 tonne. This was reinforced by a $p<.000$ on the paired sample t-test conducted. Statistically, if the p-value is $\leq .05$ it means that there is a significant difference between the two variables that are compared. In this case, it means the increase in yield was significant enough to affect the livelihood of the farmers. Therefore, to argue that an increase in yield helped the farmers to produce what was enough for their consumption thereby contributing to the food and nutritional status of the farmers.

4.3.3 Capacity building and Education

Through several pieces of training offered by the HI, the farmers acquired several skills and competencies that were vital for their household livelihood improvement. For instance, 76% of the farmers were trained on Conservation and Smart Agriculture. Under this training farmer, were trained on soil healthy, texture and fertility (Sims & Heney, 2017). This was very vital for the farmers to get the best out the available resources and the HI was cognisant that the HIPP was not the Magna Carta to the livelihood challenges of rural communities. As it was very important for the programme to incorporate other aspects which ensure the success of the livestock donated.

The farmers were trained in primary animal health care. This where the farmers are trained on good animal management practices, undertaken on an ongoing daily basis by the livestock handler, that are required to maintain health and production. 66.7% of the farmers were trained in these aspects. This ensures the success of the programme because the animal was donated to ignorant farmers. More importantly, the skills were used by some farm-

ers especially the Para Vet for income generation purposes. They could be hired by other farmers for services like dehorning, dosing and castration.

The farmers were trained on Mixed Crop and Animal Farming by the HI. 65.3% of the farmers confirmed to have participated in this training. World over, mixed farms produce over 70% of the milk supply and 60% of the meat from ruminants (Herrero *et al*., 2010). This provides incomes and livelihoods for millions of people. Besides providing food and income, farm animals often provide enriched fertilizer for the farm, support smallholders by pulling ploughs and help transport crops to the local market. Therefore, being trained on such activities was beneficial to the participating farmers since it allowed for livelihood diversification.

4.4 Discussion of results

HIPP farmers participated in several community groups and networks. These include money lending groups (68%), savings groups (76%), cattle herding groups (madzoro) (86.7%) and groups of Para Vets (57.3%) as presented on table 4.2 above. Through these interactions, social capital which is a productive and collective resource was created (Bourdieu 1986; Coleman 1988 & Putman1993). These social contacts between individuals and groups increase the productivity of individual households in the same way as human and physical capital does (Putman, 1993). Since the HIPP managed to bring programme candidates together in community groups and networks, and they used their collective ideas to increase production and productivity. In communal societies like Mberengwa, people take strong responsibility for each other and extend relationships with each other (Hofstede, 1985). Therefore, through these groups, a new sense of belonging was inculcated which lubricated mutual understanding and co-existence in the communities.

The groups established the potential to activate reciprocal interactions which could strengthen social capital (Svendsen & Svendsen, 2000: Quisumbing *et al.,* 2015). This helped in the accomplishment of tasks that could not be accomplished individually, especially for households experiencing abject poverty among the rural communities (Galey & Kaoru, 2016). This view is supported by Kumar *et al.* (2018) who asserts that communal societies give more value and preference to the group interests than their self-interest (Kumar *et al*., 2018). Thus, they interact, help and take responsibility for each other (Hofstede, 2018). Additionally, steady social capital has potential to improve livelihoods of the households by a facilitating a productive environment for livelihood improvement (Crowley & Green, 2016). This empowers the participating farmers to be more productive.

More importantly, these groups are vital because more benefits are accrued beyond the issues of farming. Friendship and relationships are established through interactions. For in-

stance, HIPP farmers participated money lending groups (68%), savings groups (76%), cattle herding groups (madzoro) (86.7%) and groups of Para Vets (57.3%) as shown on table 4.2. This is important because these relationships and friendships provide safety nets in whenever the farmers are exposed to vulnerability (Tirivayi *et al.,* 2016). They, in addition, create a good platform for sharing farming related knowledge and ideas (Hansen & Greve, 2015). This is vital for the sustainability of animal husbandry as there will be readily available knowledgeable farmers within the groups which are readily available and accessible to farmers when the need arises.

Furthermore, through the groups and networks created, collective action dimension of social capital was strengthened. Farmers from different backgrounds and circumstances were brought together to plan, decide and chart course of action for the success of the group established. This was accomplished through acting collectively through payment of subscriptions for being a group member, partaking in assignments and abiding by agreed rules set in the group. Cognisant of the fact that social capital has a vital role to play in enhancing community productivity and development (Ahmad & Sadaga, 2016). Coupled with findings of Narayan (1997) that social capital brings prosperity and reduces poverty. This demonstrates beyond any reasonable doubt the influence the programme had on improving beneficiaries' households' livelihoods.

Results on table 4.2 revealed that the HIPP beneficiaries that participated in credit lending (68%) and savings groups (76%). This was vital because it provided important banking and saving services which conventional banks in the country shun due to lack of trust. Demirguc-Kunt *et al*, (2014) lament that smallholder farmers are known to have limited access to financial institutions which avails loans and other financial assistance due to unavailability of collateral security and stable sources of income. Through farmers` participation in this programme, cattle donated served as collateral security. As such, HIPP directly addressed the challenge of limited access to financial access and aid. According to Xu *et al*. (2015) & Thulstrup (2015), access to cash credit offers better opportunities for livelihood strategy diversification and economic activity. The mere fact that the programme enabled farmers in credit and savings groups is stepping in the right direction towards livelihood diversification and unlocking potential of the other livelihood opportunities.

Various types of training programmes were offered to Heifer International beneficiaries. The major ones included: Basic Animal Health training, Conservation and Smart Agriculture. Through the training, the farmers acquire new skills, knowledge and information (Bhandari, 2013). This is critical especially, in Zimbabwe where the percentage of people who acquire formal education is higher in urban areas than in rural areas (ZIMSTAT, 2014). Therefore,

this created a platform for communal farmers to catch up with their counterparts in urban areas. This sentiment is augmented by Bhandari (2013) who argues that smallholder farmers in rural areas make the most use of unskilled household labour for carrying out agricultural activities. Therefore, the HIPP managed to identify the gap that was to be filled for an effective transformation of their livelihoods. As a result, the human capital portfolio of the participating farmers was improved. Importantly, some of the programmes are certified and they could be used beyond the household farm to be employed.

These training created new opportunities for the participating HIPP beneficiaries (Kiptot *et al.,* 2016). For instance, the Basic Animal Training empowered the participants with the skills and competencies to stock, sell and administer basic animal drugs on the basic animal diseases. This same sentiment was echoed by Ngoepe *et al.* (2016) who observed that most community pieces of training are focused on production practices, marketing, financial planning and resource management skills. As a result, they create some form of employment and source of income for those who would have participated. Skills such as animal dehorning, dosing and vaccination were prominent in generating both income and part-time employment for the farmers.

Income increased amongst the communal farmers. Marketing, animal entrepreneurship and increased production and productivity were the major drivers of the income increment. This can be attributed to the skills and competencies gained through HIPP. The acquired skills and competencies enabled participating farmers to treat and diagnose the disease of their animals (Bhandari, 2013). Human capacity of the households was improved through the skills acquired. This is concurring with the findings of Hahlani & Garwi (2014) who found out that in Mayfield Dairy Settlement Scheme farmers gained a lot of valuable knowledge and skills on animal production through the training. This empowered them with the skills and knowledge required for successful farming there improving their households.

The other dimension of human capital was the impact that the programme on the health and wellness of the farmers. It was attained through the growing of vitamin fortifying crops such as orange maize. This crop was for either animal fodder or human consumption. It is being cultivated by 45.3% of the farmers. Pixely *et al.* (2013) argue that orange maize is both a source of vitamin and income to communal farmers. For instance, in Zambia, it was observed that, if the crop is adopted sugar fortification with performed vitamin could be reduced or eliminated (Tanumihardjo *et al.*, 2017). This has the potential of reducing high liver stores of vitamin A in participating communities (Mondloch *et al.*, 2015) while at the same time reducing the cost of vitamin fortificants. All this can be made possible through cattle ownership

and availability of draft power thereby curbing food and nutritional insecurities (Hoddinott *et al.,* 2015: & Slavchevska, 2015)

Various studies recommend growing of biofortified varieties of orange maize (Pixely *et al.,* 2013, Mondloch *et al.,* 2015, Tanumihardio *et al.,* 2017). They agree that such crops are a reliable source of income (Pixely *et al.*, 2013) for the farmers and they can be sold to fortificants firms. It is undoubtedly that orange maize is nutritious and contributes to the ensuring of a balanced diet in the household. Babier *et al.* (2016) reiterate this sentiment by arguing that, cattle domestication for people living in rural areas and in poverty-stricken help them grow nutritious crops for their diet, generate income to buy food and produce surplus due to the use of draft power. They have further argued that cattle donation has proved to be a solution to food and nutritional challenges of most poor communities.

Cattle ownership has ripple benefits through the provision of milk to the diet and generation of income which can be used to buy diverse nutritive foods (Hoddinot *et al.,* 2015). This was confirmed by 53.3% of the farmers. This echoes the findings of Hoddinot *et al.* (2015) who notes that that smallholder cattle ownership enhances the nutrition of children of the participating households. This enables the participating farmers` children to participate effectively in school activities which are another Human Development Indicator. Khan and Rahama (2016) reinforced this sentiment when they argue that smallholder farmers utilise a significant chunk of revenue towards education.

Through capacity building trainings embedded in the programme, farmers were trained on several aspects and as a result, they gained several skills and competencies. Through the acquired skills and competencies, farmers were empowered to create some form of self-employment for themselves. Although, the employment opportunities were not significant, but considering rural employment challenges (Dube, 2016). The contribution was, however, in the form of piece jobs to assist in animal-related chores. This contribution is vital, especially considering the views of Bhandari (2013), who suggests that smallholder farmer relies on unskilled household labour for their agricultural activities.

Furthermore, the acquired skills and competencies enabled the exploitation of other livelihood options. This is comparable to what Hellen Keller International`s Enhanced Homestead Food Production achieved in Burkina Faso between 2010-2012 (Quisumbing, 2015). Through its various training programmes, participating women were empowered with several skills in agriculture and improved nutrition (Quisumbing *et al.,* 2015). This is testified by the increase in land under cultivation, yield and income.

Financially, 63.9% of the farmers invested either in money lending association or buying of productive and infrastructural equipment. This concurs with the findings of Ulrich *et al.*

(2012) who noted that cattle farmers produce a surplus which can be invested in other economic activities of the households. This will be primarily to accumulate wealth, which can be used for the betterment of their lives and cushion them in droughts and dry spells. Additionally, “access to cash markets offer better opportunities for diversification of livelihood strategies and economic activities.” (Thulstrup, 2015). Undoubtedly, this will avail opportunities for more lucrative livelihood opportunists.

Interviews conducted revealed, cattle donated served as collateral. This allowed accessing loans from community financial institutions like SACCO and *mukando groups.* In the subsequent survey, 69.3% of the farmers confirmed to have accessed financial aid from either *mukando groups* or community credit organisation. However, Demirguc-Kunt *et al.* (2014) notes that smallholder farmers are known to have limited access to financial institutions which avails loans and other financial assistance due to unavailability of collateral security and stable sources of income. This illustrates that the HIPP rightly addressed the challenge of limited access to financial access and aid that is common to smallholder and communal farmers. According to Xu *et al.* (2015) & Thulstrup (2015), access to cash markets offers better opportunities for livelihood strategy diversification.

Results in table 4.4 reveal that participating households had some financial benefits accruing through various income generating ventures. Before participating in HIPP most of the farmers were seemingly earning between US$100 and US$300. After cattle donation, their range changed to between US$401 to US$500 and this covered 73% of the farmers. The pair sample t-test revealed that indeed there was significance difference ($p<.000$). This is in sync with the findings of Ayanwuyi *et al.* (2012) and Rao *et al.* (2016) who believes that cattle farming is a stable source of income for communal farmers. The same sentiment is echoed by Ulrich et al, (2012) who reiterates that cattle farming is known for generation of revenue that can be used to support various household needs. This demonstrates that cattle farming as a livelihood option creates avenues for income generation, thereby allowing farmers to exploit other livelihood options due to the availability of money.

Physically, the farmers used their proceeds to buy productive equipment. Cattle, ox-drawn ploughs and cultivators were bought by the farmers. This was kind of asserts was used to support livelihood (Bhandari, 2013). Productive assets are acknowledged as critical resources for accumulating wealth and managing vulnerability for smallholders (Quisumbing, 2013). Furthermore, the same sentiment is shared with Wang *et al.* (2015) & Yusoff, *et al.* (2016) who concurs that productive assets can influence the current and future well-being of an individual or household in other ways such as increased wealth accumulation and improved livelihood.

Additionally, participating farmers had their access to solar energy, borehole water and households' structures and toilet quality improved. This is vital because it facilitates social, economic and environmental facets of the life of a household (Donohue & Briggs, 2015). This is reiterated by Milbourne (2012) who believes that the quality of the material used for a housing structure can be used a measure of poverty for rural dwellers. This goes on to explain that the improvement in building used can be linked to reduced poverty levels. Furthermore, the presence of a toilet at a household is important because is also an indicator of the wellbeing of a household. This is in conformity with the findings of Cairncross *et al.* (2010) & Curtis *et al.* (2011) who notes that improved housing structures and toilets contribute to the health and wellbeing of the farmers and reduces susceptibility to bad weather and epidemics.

The increase of cattle herds is very important for rural households because it's a form of wealth. Cattle can be sold, bartered, or slaughtered for consumption depending on the needs of the household (Orchard *et al.,* 2017). This is vital especially after noting that cattle serve as saving in rural communities due to mistrust and lack of financial services in rural areas (Ellis, 2000). Besides being used sorely for draught power, could also as collateral security to access financial services. This had the potential of improving and enhance of livelihood diversification of the participating households.

Livelihoods activities preferred after benefiting from the HI programme have had an influence on natural capital. Unlike other capitals, natural capital is not man made, but its access, quality and availability are heavily dependent on human activities (Perman *et al.,* 2003). Cattle ownership heavily relies on natural vegetation, water and land for production and feeds of animals (Hlekani, 2017). There is no doubt that through these cattle production activities, the natural resource base was either positively or negatively affected. Results revealed that the programme empowered the farmers to maximise the use of the land. For instance, a number of farmers who were cultivating between 1-4 hectares reduced from 83% to 13.3% after participating in the programme. This makes it logical to conclude that the HIPP helped the farmers to fully utilise the available land.

The use of manure enhanced soil fertility of the participating household thereby boosting productivity. This same sentiment is reiterated by Masvaya *et al.* (2017) who argued that the use of manure of field crops by smallholder farmers enriches crop fields at no additional cost to the household. This implies that the participating farmers saved a lot of money which could have been for buying fertilizers and use it for other households' requirements.

4.5 Summary

In summation, the chapter managed to present the biographical data of the participants. Giving a picture of the gender, age marital status among other biographical indicators of the participants. The views of both the strategic stakeholders were presented in detail. The socio-economic and environmental experiences with of the participating farmers were articulated. Thereafter, the benefits that were accrued by the farmers were presented in brief followed by the discussion of the results.

CHAPTER 5: HIPP BENEFICIARIES` EXPECTATIONS ON LIVELIHOOD IMPROVEMENT

5.0 Introduction

In this chapter, the expectations of the beneficiaries of Heifer International Pass on Programme (HIPP) on livelihoods improvements are presented. In order to help unpack the beneficiaries' expectations, the DFID sustainable livelihood framework was used to categorise livelihoods based financial capital, physical capital and social improvements of the project beneficiaries. A detailed explanation of the beneficiaries' livelihood improvement expectations is outlined as well as a summation of the major expectations for the programme.

5.1 Background

Globally, Heifer International plays a crucial role in transforming rural poor people's lives (Vries, 2011). It compliments individual and government initiatives towards eradication of rural poverty. Ironically, rural poverty seems to be deepening and an estimated 1.1 billion people in rural areas are extremely poor (FAO, 2010). Ironically there are several efforts and initiatives by several organisations, including those of HI. Unfortunately, the literature seems to be sterile of any attempts to seek expectations of the beneficiaries on their livelihood improvement. Especially, using programme beneficiaries` expectations of the benefiting individuals and households as the basis of analysis. Available literature confirms that, rural poor people have expectations (McCord, 2004). These expectations mirror the nature of the solutions they aspire for their transformation. Since the literature is mum on interrogation of a developmental program based on the programme beneficiaries` expectation on the programme, it became prudent to seek the expectations of Heifer International in Ward 1 of Mberengwa District.

It is undisputable that cattle ownership is associated with benefits, such as the provision of milk, meat, income, and draught power for farm activities, social security, and bearer of value which can be easily converted to cash and integral part of ceremonies (Mepekula *et al*., 2009). As such, cattle ownership can play an important role in addressing the various livelihood needs of households if properly managed. It is against, this background that Heifer International (HI) designed and implemented the HIPP. Surprisingly, the programme beneficiaries` expectations are not located anywhere in their programming. Additionally, there seems to be gap on the expectations as perceived by the recipients of the programme. This is the gap that this chapter seeks to close, through presenting HI beneficiaries' expectations on livelihood improvement by the programme.

In order to fully achieve the second objective of this research, data was gathered in two different phases in the same ward Mberengwa District. In the first phase, a total of 19 participants were interviewed. Fifteen were initial HIPP beneficiaries, who had benefited from the programme in 2010. They were purposively sampled. These farmers had had more time than any other most of the farmers that benefited from the programme. As a result, they are rich in understanding the dynamics of the programme in terms of what they expected from the programme.

The other remaining four participants were key stakeholders. Key strategic stakeholders were either individuals or representatives of an institution who had worked with the HI throughout its operation and dedicated a substantial amount of time and resources towards the success of the programme. They acted either on their own capacity or as deployed members of well-established institutions to complement the efforts of the HI in the ward. They are also known as technocrats. In this case, they were chosen because of their strength in the understanding of the programme due to their proximity. According to Etikan *et al.* (2016) this is a deliberate choice of a participant due to the qualities that they possess. These were Project Coordinator for Heifer International, the Veterinary Services Officer responsible for Ward one, District Social Services Coordinator and the local traditional leader.

After gaining an insight from the interviews conducted a more rigorous questionnaire was designed with the intention of quantifying all the expectations that came out from the first phase. This helped in the determination of the major expectations on livelihood improvement of the participating farmers. This questionnaire was administered to all 75 HIPP beneficiaries of 2010. These farmers were selected because of their time and experience with the programme compared to other farmers. This enabled the researchers to identify the expectations of informed and experienced farmers in HIPP.

Where the Heifer International is operating, it uses the Theory of Change as a guiding theory for practical intervention among rural community members. It uses it`s theory of change and its tenants as the basis of analysis for its programmes. The HI theory is an off-shoot of the DFID Sustainable Livelihood Framework. Therefore, it was going to be used inconjuction the DFID sustainable livelihood framework. The HI`s theory of change asserts that the transfer of the assets of livestock (physical capital) combined with a set of training (human capital) enhances social capital and productive capacity among beneficiary households (Fitzpatrick and Akgungor, 2017). The new acquired productive capacity help to stimulates increase in income (Pimkina *et al*., 2013) among the programme beneficiaries. This places the livelihood of the community or individual household central to addressing the challenges of poverty and food security. Therefore, the expectations of the farmers will be livelihood based and orient-

ed. As such, it is inevitable to seek the expectation of the beneficiaries, without linking them to their beneficiaries' livelihoods and the associated capitals.

5.2 Financial Capital Development Expectations

5.1.1 Creation of income generation opportunities

Both the HIPP beneficiaries and strategic stakeholders indicated that they anticipated the programme to contribute towards the creation of income generation opportunities for the participating farmers. Cattle donation was perceived to have the potential of capacitating the farmers to engage in *piece jobs (Maricho)*. Through participation in piece jobs the participating farmers saw an opportunity for income since they would charge a price for the work, they would have done using their livestock unlike before when they did not own cattle. More importantly, some of the smallholder farmers in the programme were expected to be enabled to participate in social savings groups and credit lending organisation. This activity was deemed to have the potential in the eyes of the farmers to provide them with the much-needed access to financial services. In deed this expectation was achieved as is demonstrated on results on table 4.3. It was demonstrated beyond any reasonable doubt that the programme` beneficiaries` income revenues per year rose for a range between USD100 and USD 300 to over USD600. This change was significant as was demonstrated by the t-test conducted and whose results are presented on table 4.4

5.1.2 Investment and Asset Accumulation

As presented in Figure 5.1, investing in buying new livestock, was also expected by the farmers who participated in HIPP. Through the proceeds of their work with livestock, more animals were expected to be bought by the participants. This was deemed to complement the donated stock by the Heifer International. Consequently, this will act means of generating income through the sale of animals, animal products among other things. In addition, buying of new livestock from the proceeds of animal labour was expected to increase their asset base. This was one way through which they could invest their wealth. This expectation was realised as presented on table 4.5, where the number of livestock they owned before shot by the time they started to participate in the HIPP.

5.1.3 Participating in cattle markets

Cattle donation from the HI were expected to enable the farmers to participate in livestock auction markets. Traditionally, participating in these lucrative markets was a preserve of those who own livestock. Since the programme has now donated cattle, they could now partake in such markets. As a result, this is one way through which the Heifer International beneficiaries expected the programme to empower them financially. Cattle auctions are com-

petitive and have the potential of giving the farmers the best value for their livestock. Financially, they can raise a lot of money out of this activity. Notably, this expectation was achieved because results presented on table 4.3 shows that 65.3% of the HIPP beneficiaries are participating in cattle sales. Importantly this investment allowed the programme beneficiaries to earn more than USD500 per year. The results of a t-test conducted to determine whether this change was significant or not presented on table 4.4 shows it was statistically significant. Therefore, investment and asset accumulation were achieved as demonstrated by their lived experiences.

5.1.4 Animal Entrepreneurship

The programme stakeholders expected that skills and knowledge to be acquired from the training were anticipated to facilitate the generation of revenue for the participating farmers. For instance, some participating farmers anticipated to stock, sell and treat sick animals of other farmers for a price. Consequently, the trained farmers were even expected to earn revenue through the payment of their services to the other local farmers. Notably, the donated livestock was anticipated to serve as a "live bank" for the participating smallholder farmers and they will serve as collateral security whenever they needed loans. As presented on table 5.1 86.7% confirmed that animal entrepreneurship was done as a result of the HIPP.

Table 5.1 Percentage of Households who agreed to expectation fulfilment

Variable	% (N=75)
Piece jobs	68.0
Credit and money lending	57.3
Cattle sales	76.0
Animal Entrepreneurship	86.7
Selling of produce	68.3

Table 5. 2 Frequency of financial Improvement Expectations

Expected Income Generating Activity	Level of Expectation (N=75)			
	Strongly Expected	Partially Expected	Neutral	Not Expected
Piece Jobs (maricho)	41.3	54.7	1.3	2.7
Credit and money lending organisation	44.0	50.7	1.3	4.0
Cattle sales	42.7	49.3	4.0	4.0
Animal Entrepreneurship	48.0	46.7	1.3	4.0
Selling of surplus produce	33.3	50.7	5.3	10.7

5.1.5 Surplus Production

Finally, they anticipated that through cattle ownership, production and productivity was bound to increase. This will ultimately result in the selling of surplus produce thereby generating the much-needed income for the participating farmers. During the interviews, one of the farmers said,

> *"One of the challenges that hampered production was unavailability of draught power. You know, even if you resort to hiring from those with cattle, it's difficult for them to leave their fields and come to plough for me. They will only come when they are done. At the time we could plant our crops when the rains had long gone. This affected our harvest as well. Now that we have livestock to till the land, we can do it on time and even produce a surplus for selling.*"

This demonstrates that with cattle donations, the programme beneficiaries anticipated surplus production because of the presence of draught power. Finally, they will earn money out these sales.

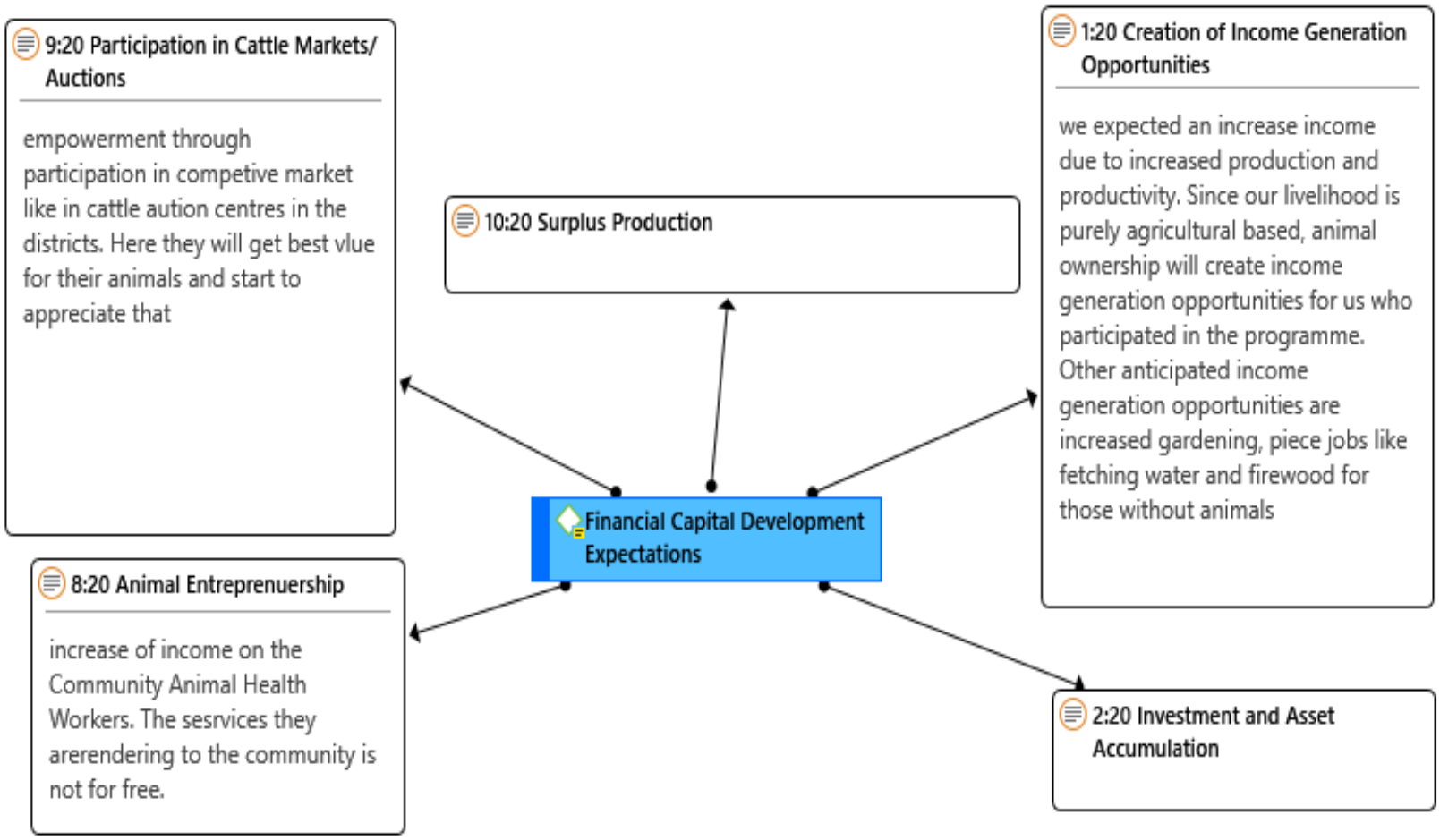

Figure 5.1 Financial Capital Expectations

Building on the expectations gathered using an interview, a questionnaire was developed and administered with the aim of ascertaining the magnitude of the Heifer International farmers` expectations. They ranked their expectations based on how they prioritised them. As presented in the table below, 41.3% of the farmers strongly expected the HIPP to help them earn income through “piece jobs” (*maricho)*. On the same note, 54% of the respondents partially expected to partake in piece jobs. On the same expectation, only 2.7% did not ever expect such a development. However, 1.3% chose to be neutral, as far as whether the HIPP would enhance their participation in piece jobs as a livelihood option or not.

Money lending was expected to generate income for the farmers in ward one. With 44% of the smallholder farmers that had benefited from the HIPP, they strongly expected this development. Over half of the participating farmers partially expected the programme to facilitate their participation in money lending institutions, thereby allowing them to earn income. It is worth noting that, 1.3% of the farmers decided not to disclose their expectation to this regard and 4% did not expect the programme to enable them to participate in money lending activities.

Economic activities like participation in cattle auctions and sales were expected to earn income for the participating farmers. This was premised on the understanding that ownership of cattle through donations from HI will enable the smallholder farmers to participate in livestock auctions which offer lucrative prices. The table shows that 42.7% of the initial beneficiaries of HIPP strongly believed that cattle donation will enable them to generate income through livestock sales at the auction markets. The same sentiment was partially expected with 49.3% of the farmers that participated in this research. However, 4% still did not expect such.

Animal Entrepreneurship was one way through which, the participating farmers were expecting to generate income from. It is defined as the capacity and disposition of the smallholder animal farmers to develop, organise and manage their enterprise along with any risk with the intention of maximising and making a profit. This expectation was strongly expected with 48% of the participated farmers, while 46% partially expected this venture to generate income for the participating households. It was not expected with 4% of the smallholders who participated in this research. With 1.3% of the farmers not willing to share their views on the subject matter.

Finally, increased production and productivity was expected by the HI beneficiaries. This was anticipated on the perceived benefits of cattle ownership to the smallholder farmer in rural areas. Results on table 5.8 below revealed that 33.3% strongly expected an increase in their production and productivity due to the cattle donations from the HI. Over half of the par-

ticipating farmers (50.7%) partly expected this development. It was only 10.7 % of the participating farmers who were not expecting such. It is important to note that 5.3% of the respondents did not speak out their mind on this matter. These results are summarised on the table below.

5.3 Physical Capital Development Expectations

The smallholder farmers in Mberengwa District expected several physical developments as means of livelihood. These were an increase in land utilisation, enhanced soil fertility, donation of drought resistant and local breeds of livestock, buying of new other livestock and increased production and productivity. Additionally, they expected to construct new and better houses and toilets and buying of radio and television sets. Ox-drawn carts, ploughs and cultivators were among implements that were expected to be bought out of the proceeds of owning cattle out of cattle donation from Heifer International. Over 40% of the respondents indicated that they anticipated the programme to improve their level of land cultivation. Improved soil fertility using manure was expected by the HI programme recipients. Physically, the farmers expected the donation of local breeds. Increased land utilisation was expected. On the same token, donation of drought-resistant breeds was strongly expected by 9.3%. Interestingly, donation of local breeds was anticipated for, by over 65% of the farmers.

Principal Component Analysis was later performed to reduce variables and extract major physical expectations of the farmers that participated. The Kaizer Mayor-Olkin test was done for determination of the appropriateness of the analysis and sampling adequacy. The KMO was 0.532. Bartlett`s Test of sphericity indicated an approximate chi-Square of 19.618 with 10df. The level of significance p=0.03 was extracted. Thus, it was appropriate to continue with the test.

As presented below, productive infrastructural development factor was measured by the ability of farmers to migrate from the use of manual labour to the use of animals. This factor had a factor score of 0.537, followed by the need for donation of dairy cows which had a factor score of 0.647. The final variable is the need for a healthy life which had a factor score of 0.543. The second factor had only one variable- the ability to construct new houses and toilets. It had a factor score of 0.417. Worth noting is the first factor had an Eigenvalue of 1.520 while the second factor had an Eigenvalue of 1.217. The total % of the variance was 54.758.

Table 5.3 KMO and Bartlett`s test

Kaiser-Meyer-Olkin of Sampling Adequacy	0.532	
Bartlett`s test of sphericity	Approximate Chi-Square	19.618
	Df	10
	Significance	0.03

Table 5. 4 Major Physical Development Expectations

Variables	**Factor 1 (productive asset development)**	**Factor 2 (basic infrastructural Development)**	**Communalities**
Graduation from the use of an animal to machinery	0.54		1.00
Donation of dairy cows	0.65		1.00
A healthy life	0.54		1.00
Construction of houses and toilets		0.42	1.00
Eigenvalues	**3.41**	**2.35**	**Total variance (%)**
% of variance	**28.09**	**26.67**	**54.76**

5.4 Socio-economic Expectations

Socially, smallholder farmers who benefited in the Heifer International Pass on Programme (HIPP) expected the bridging of the gap between the rich and the poor, fostering unity, enhance social cohesion and cooperation, and self-selection of beneficiaries. All these came from the interviews conducted. On the subsequent survey conducted the farmers ranked these expectations in order of priority.

As indicated in table 5.3 the participating farmers expected several issues to be fulfilled by the programme. Firstly, the farmers expected the programme to empower the poorest members of society. This was endorsed by 38.67% of the smallholder farmers who participated in this study. In addition, 64% of the respondents expected the programme to facilitate in uniting community members. The need for enhancement of social cohesion and cooperation with 46.67% strongly expecting this development. The need for inclusion of the programme beneficiaries in the selection process was among the least expected social development with 10.67% farmers strongly expecting it. The inclusion of the vulnerable members of the community like child-headed families, people living with disabilities and orphans and vulnerable were expected to be included on the programme beneficiaries. It was strongly expected by 9.3% of the research participants. The need for increased property right was expected through the training of the Heifer International and capacity building on animal health issues. This was expected by 46.7% of the farmers who benefited from Heifer International in 2010. Presented below are the results of the survey.

Table 5. 5 Heifer International beneficiaries` social expectations

Expectations	Level of participation (N=75)			
	Strongly Expected	Partially Expected	Neutral	Not Expected
Empowerment of the poor members of the community	38.67	46.67	10.67	4.00
Unite the community members	64.00	29.33	2.67	4.00
Improve social cohesion and cooperation	46.67	42.67	4.00	6.67
Involvement of community members in the selection processes	10.67	16.00	17.33	56.00
Targeting the poor of the poorest	8.00	16.00	14.70	61.30
Inclusion of vulnerable members (OVCs and PLWD)	9.30	13.30	12.00	65.30
Increased property rights	46.70	37.30	8.00	8.00
Capacity building on animal health	46.70	38.70	4.00	10.70
A healthy life due to the availability of animal source foods	41.30	54.70	1.30	2.70
Enhanced food security	52.00	42.7	1.3	4.00

Table 5. 6 Major social expectation

Variables	Factor 1 (Trust and Solidarity)	Factor 2 (Cooperative action and co-operation)	Commonalities
The targeting of vulnerable members of the community (PLWDs & OVCs)	0.94		0.908
Targeting the poorest of the poor	0.96		0.915
Involvement of community members in the selection process	0.94		0.888
Uniting community members		0.80	0.698
Social cohesion and cooperation		0.75	0.561
Eigenvalues	**2.86**	**1.33**	**Total % of variance**
% Variance	**47.61**	**22.20**	**69.81**

To determine the appropriateness of using PCA and sampling adequacy, the Kaizer Mayor-Olkin test was performed for the determination of the appropriateness of data reduction technique. The KMO was 0.699, while Bartlett`s test of sphericity reflected an approximate chi-square of 25.971 and the significance level was p=0.00. According to Williams *et al.* (2010), the KMO index should range between 0 and 1 with 0.5 considered suitable for factor analysis. Furthermore, Bartlett`s test of sphericity should be significant (p<.05) (Williams *et al.,* 2010). What are you testing with this? Thus, it was appropriate to proceed with PCA. The Eigenvalue rule was applied to extract factors. Only factors with eigenvalues above 1 were extracted. A Principal Factor Analysis (PCA) with Varimax rotation produced a two-factor structure. The structure explained a total variance of 69.805. The factor was labelled trust and solidarity due to high loadings by three factors. These included the inclusion and targeting of people with disabilities and OVCs (0.942), targeting the poorest of the poor members of the society (0.957) and self-selection of beneficiaries (0.942). The factor explained the variance of 47.607. The second factor was named Cooperative action and cooperation. It explained the variance of (22.199). It consisted of two factors namely fostering unity (0.795) and Enhancement of social cohesion and cooperation (0.749).

Table 5.7 The KMO and Bartlett's Test

Kaiser-Meyer-Olkin of Sampling Adequacy	0.699	
Bartlett`s tes of sphericity	Approximate Chi-Square	25.971
	Df	9
	Significance	0.00

5.5 Human Capital Development Expectations

The smallholder farmers in Ward 1 of Mberengwa expected human capacity developments to enable them acquire knowledge and skills, enhanced food security, a healthy life, basic training on animal health, partaking in exchange visits and excursion and improvement of property rights. Asked on the expectation of acquiring new knowledge, skills and training through participation in the HIPP, over 53% of initial beneficiaries believed this expectation was strongly expected. On the same expectation, 38.7% partly expected this development. Only 8% of the smallholder farmers who participated in this research either reserved their views or did not appreciate the importance of this expectation.

Another human development expectation that came out was the anticipation of enhanced food security. More than 50% of the research participants strongly expected this. With 42.7% partially expecting it. Only 1.3% and 4% were either neutral and did not expect it re-

spectively. On the same note, the participating farmers were expecting to partake in excursions and several training programmes. This was strongly expected by over 40% of the smallholder farmers who participated in this study. Under this expectation, the only activity which was least expected was attendance and partaking in exchange visits which was strongly by 13% followed by Animal health training which was expected by 10.7%.

A further analysis was conducted to reduce variables and extract major factors. The Kaizer Mayor-Olkin test was performed for determination of the appropriateness of the analysis and sampling adequacy. The KMO was 0.543, Bartlett's test of sphericity showed an approximate Chi-Square of 120, 25 and the level of significance p=0.00 with 10 df. As alluded earlier by Willians *et al.* (2010) both the KMO and Bartlett`s test of sphericity meets the agreed acceptable values. Two factors were extracted that is, the creation of the enabling environment and the need for training stood out. The first factor extracted creation of enabling environment which had Eigenvalue of 2.305. It was formulated from two extracted variable – empowered through the exchange of knowledge, skills and training received coupled with health and wellness of farmers as presented on the ensuing table. The second-factor need for education. It had an Eigenvalue of 1.336 and 26.729% of the variance. The total variance was 72.862%. This was computed using the need of adopting Indigenous Knowledge Systems on treatment and controlling of animal's diseases, and participation in Exchange visit organised by the Heifer International.

5.6 Discussion

Socially, the smallholder farmers in ward 1 of Mberengwa District expected the programme to inculcate trust and solidarity among the farmers. This was motivated by the understanding that beneficiaries could relate more with each other through sharing similar experiences. Ultimately, mutual friendships and other relationships were established. The established relationships and friend would act as a safety net with the potential of helping each other during times of crisis. Tirivayi *et al.* (2016) reinforce this idea when they argued that, friendship and relationships established through benefiting together from the programme provide a safety net for the farmers in the event they are exposed to vulnerability. This explains why the farmers expected the entrenchment of trust and solidarity as the major expectation socially with an Eigenvalue of 2.856. Therefore, it can be concluded that socially, trust and solidarity was expected to be achieved through targeting the people with disabilities and Orphans and Vulnerable Children (OVC), the poorest members of the community and through self-selection of benefiting group members. As this is deemed to enhance internal bond and external networks of the participating farmers (Woolcock & Narayan, 2000: Galey & Kaoru, 2016).

Inculcation of cooperative action and cooperation were the second major social expectation of the participating farmers. This factor explained 22.199 % of variance from the first factor. This factor was computed using the farmer`s expectation of social cohesion and fostering unity. This was important because strengthening social cooperative and cooperation had the potential to accomplish tasks that could not be achieved individually (Galey & Kaoru, 2016). Ultimately, cooperative action and cooperation would act as a facilitator of a productive environment and en route to human development (Crowley & Green, 2016). With a potential of income increase and lowering transactions costs.

Through cooperative action and cooperation established, farmers will create synergies for financial and material help in times of need. This is explained by the anticipation of farmers to participate in excursions where knowledge, skills and other related activities could be shared (Hansen & Greeve, 2015). This has the potential of ensuring the sustainability of livestock enterprise among the communal farmers since there will be knowledge banks which are readily available and accessible to farmers during the time of need. In short, the farmers anticipated that if ever the programme was going to meet their expectations were supposed to inculcate the spirit of cooperative action and cooperation.

Smallholder farmers in Ward 1 of Mberengwa District anticipated that cooperative actioncould be achieved through payment of a subscription by participating members in their respective benefiting groups. Through such anticipated values, financial commitments from the farmers would work collectively, giving each other responsibilities and governing themselves through their constitutions. Therefore, subscription payment would act as a social lubricant towards the inculcation of cooperative action and mutual understanding within the smallholders of the district.

Creation of an enabling environment through farmers` participation in HIPP was expected in Mberengwa District. This was to be achieved by the empowerment of the farmers through training, skills and knowledge exchanges. Enhancement of farmers` health and wellbeing through the availability of nutritious foods from Animal Source Foods (ASF) was also anticipated. This explains the 46.098 % of the variance on a two-factor rotated matrix extracted on PCA. This factor was expected to manifest itself through the ability of the farmers to buy new assets, sending their children to school and live a healthy life as variables. This fits well into the findings of Hoddinot *et al*. (2015) who argues that smallholders farming activities enhances the nutrition and health of the participating households. If this is the case, this will unlock the potential of exploiting other livelihood options that are the disposal of the farmers.

In addition, enabling environment was expected to be created through training on environmentally friendly practices. This is coupled with simple pieces training like castration, de-

horning and dosing would make it easier for the smallholder farmers to generate income out of such skills. Stradling (2016) reiterates that skills within the smallholder farmers help them to choose a stronger livelihood strategy which is sustainable and resilient. Therefore, piece jobs were expected to be the livelihood of choice of the anticipated skills to be acquired. As such, the smallholder farmers in ward 1 of Mberengwa District anticipated that training to be a part programme for a conducive and enabling environment to be created for a sustainable livelihood.

Training on several aspects of the livestock donated was expected by the farmers. This was largely motivated by the belief that there was a knowledge deficit on the part of farmers from both the farmers and the programme implementers. They both strongly believed that cattle donation was a good intervention but should be aided with some skills development on the participating farmers. This conforms to the findings of ZIMSTAT (2014) who posits that formal education is accessed more in urban areas than in rural areas. As such, farmers in rural areas rely much on training offered by organisations. This is in line with the findings of Khan and Rahama (2016) who noted that communal farmers in rural areas utilise the bulk of their income on education. This explains why the farmers were expecting the programme to include an education component in their programme.

Physically, two factors stood out. These are productive infrastructural and basic infrastructural development. The first extracted factor, productive infrastructural development was expected to be achieved through the graduation of the farmers from the use of human labour to the use of draught power, donation of dairy cows and living a healthy life. Productive infrastructural is used for production and productivity (Thulstrup, 2015). This enables farmers to venture into various production-based livelihoods strategies. This is explained by a 54.758% of variance from the second extracted factor.

The second major factor, the basic infrastructural development was expected to be achieved through the construction of new houses and toilets. On the extracted two factors, the construction of houses and toilet variable had 0.417-factor score value. This means that both the manifest and latent variables showed a strong positive relationship, justifying the strength of the extracted factor. To the argument that over 85% of the farmers confirmed to have expected the construction of these of infrastructures. It is arguably believed that ownership of basic infrastructure enables a household to venture into various agricultural livelihood strategies (Wang *et al.,* 2015).

The exploitation of cattle labour is one way through which the farmers in Mberengwa are expected to generate income. However, it's worth noting that this expectation could only materialise after participation in the HIPP. This expectation was confirmed by 54% of the partici-

pating farmers. The farmers indicated that by mere possession of cattle they can plough effectively in their vegetable and sell the surplus. Some even went further indicate that they can do some piece jobs for other community members for instance harvesting, fetching water and ploughing in return for a token. This sentiment fits well into the views of Ayanwuyi *et al.* (2012) who argues that a stable source of income is one of the benefits of cattle ownership for the communal farmers. This, therefore, explains why the farmers were too optimistic about the benefits of the programme.

Income was also expected to be generated through the embracing of animal entrepreneurship i.e. farmers to treat cattle ownership as a business, thereby maximising every financial opportunity they proffer. Results revealed that 48% of the participating farmers were expecting such. Considering that, Mujeyi *et al*. (2015) found that communal farmers in Zimbabwe are selling their cattle to butcheries, abattoirs, and auctions and to other community members confirms that animal entrepreneurship is real in rural communities. Cattle sales had the potential to generate a lot of revenue for the participating farmers. As a result, this had the potential of transforming rural smallholder farmers` livelihood strategy.

Through the training that was anticipated by the beneficiaries, several skills were going to imparted and this will them to generate income. The skills acquired could be anticipated to empower the participants to stock, sell and administer animal drugs in exchange for money. In addition, livestock was deemed to have the potential of generating income through animal labour, sales and animal products like milk and meat (Mujeyi et al., 2015). Therefore, income that could be generated through such activities was perceived to be very vital towards transforming the livelihoods of the participating households.

Since the HI participants were predominantly into mixed farming, so cattle ownership through a donation from the Heifer International was deemed to have the potential of increasing production and productivity. This was anticipated by 33% of the farmers. This was in tandem with the findings of Kumar and Singh (2016) who argues that cattle ownership enables the expansion of communal farming whilst contributing to the strengthening draught power base and source of animal source foods. Availability of draught power and manure from the cow dung were the potential drivers of production by the participating farmers. Therefore, production and productivity were expected to increase thereby impacting on the participating households` livelihood.

In addition, cattle ownership was expected to provide collateral security for the participating farmers. They have had limited access to financial assistance from financial institutions due to an unstable source of income and lack of collateral security (Demirguc-Kunt *et al.,* 2014). Malik & Gautam (2016) posits that participation in cattle donation projects offers opportuni-

ties such as access to informal loans which farmers give to each other. This means that the farmers in Mberengwa were anticipating that some farmers will be empowered to the extent of offering a loan to other farmers due to the income generated from cattle use. The other farmers will have the capacity to repay the loan from the same activities.

5.5 Summary

In summation, the Heifer International`s programme expectations were described and explained. It came out that the farmers expected the programme to influence the socio-economic and environmental aspects of their livelihood. However, it is worth noting that these expectations were based on the lived experiences of the participating farmers. Finally, the explained and described results were discussed. It emerged that most of the expectations were related to the observed experiences. It remains to be seen whether the programme expectation was incongruent with the lived experiences. This will be used to determine the level of influence the programme had on the transforming and meeting the beneficiaries` expectations.

CHAPTER 6: SYNTHESIS OF THE RESEARCH FINDINGS

6.1 Introduction

Food and nutritional insecurity, and poverty are the most common problems facing rural households in the global South (Lawson *et al.,* 2017). They are a result of numerous factors. They are rampant in many countries in the developing world. Climate change and variability effects have exacerbated the situation through exerting more pressure on the natural resource base (Dube, 2016). Globally, about 900 million people are poverty stricken (FAO, 2016). To eradicate this global challenge, various international development organisations have availed aid to affected regions (Lawson *et al.,* 2017). However, this approach is unsustainable in the long run and creates dependency syndrome. In addition, currently, aid is viewed as the primary cause of poverty and underdevelopment in Africa especially in Sub Saharan Africa (Carmody, 2016).

In Zimbabwe, smallholder agricultural production is a key livelihood strategy for most rural households. It is vital for the attainment of food security (Ericksen et al., 2009). Globally, through this livelihood strategy farmers have attained various social benefits (O`Brien & Cook, 2016) for instance in India, Bangladesh, Ethiopia, Uganda and Kenya. Additionally, this livelihood strategy has the potential to provide more benefits as compared to crop production through increased market participation and productivity (Al-Atiyat, 2014).

6.2 The Influence of the Heifer International Pass on Programme on the Household Livelihoods

6.2.1 Social Influence of the HIPP

The farmers expected enhancement of trust and solidarity within the participating households as part of the social capital. On the social expectations of the programme, the need for the inculcation of trust and solidarity is the major factor with a percentage of variance 47.607 % on a two-factor structure on a rotated matrix. It was computed from the inclusion of people with disabilities and Orphans and Vulnerable Children (OVC), targeting the poorest members of the society and self-selection of the programme participants as variables. However, when compared to the lived experiences of the farmer's none of the mentioned variables was mentioned by farmers. Therefore, in as much as the farmers expected the inculcation of trust and solidarity the programme falls shorts of this expectation.

Entrenchment of cooperative action and cooperation is the major factor second factor on the rotated matrix of the Principal Factor Analysis. This factor was computed using the need to foster unity and entrenchment of social cohesion and cooperation among the project beneficiaries. This expectation was achieved through the establishment of social groups and net-

works. In this case, the farmers who benefited from the Heifer International have confirmed to participate in Credit lending groups (68%), Para Vet (57.3), Saving Groups (76) and cattle herding groups (86.7%). Through the interactions in the established groups and networks social capital –a productive and collective resource was established (Bourdieu, 1986). These groups and networks created a platform on which the participating households were either giving or receiving livestock related advice. Borrowing or lending money was made possible through the establishment of Credit lending association to which the participating farmers were affiliates.

Social cohesion inculcation was one way through which the HIPP has influenced the livelihood of the poor farmers in Ward one of Mberengwa District. The grouping of beneficiaries into Heifer International groups, allowed farmers to be brought together and work closely ultimately knowing each other better. In as much, this was not one of the major expectations of the farmers, but its influence on the improvement of their live livelihood cannot be underestimated. Friendships and relationship were established, and this provides safety nets when exposed to vulnerability (Tirivayi *et al.,* 2016). Knowledge, information and ideas are being shared among the participating farmers. This acts as a social lubricant for social cohesion within the participating farmers.

6.2.2 Human development influences of the HIPP

The HIPP created an enabling environment for the participating farmers. This was attained through the empowerment of the participating households. New knowledge and skills were imparted through various training that were offered by the HI. The HIPP offered Primary Animal Health Care, Conservation and Smart Agriculture and Mixed farming. Coincidentally, this is the major expectation of the on the human development of the HI farmers in Ward one in Mberengwa district. This factor was computed from the health and wellness expectation aspects and empowerment through the impartation of new knowledge, skills and technical training as the dependent variables. Over 53% of the farmers confirmed to impartation of new knowledge, skills and training through the HIPP. To this regard, the HIPP managed to meet the beneficiaries` expectations and positively influencing the improvement of the livelihood strategy of the communal farmers.

In Zimbabwe, formal education is accessed more by urban dwellers than their rural counterparts (ZIMSTAT, 2014). Therefore, there was a knowledge deficit in rural areas of Zimbabwe. However, the Heifer International programme was packaged with training which bridged this gap. The informal training included Primary Animal Health Care, Para Vets training, Mixed Agriculture and the growing of the Vitamin Fortifying crops. In addition, the same development was expected by the participating farmers, with an Eigenvalue of 1.336 and

26.729% of the variance. Therefore, the HIPP addressed the needs and expectations of the farmers.

6.2.3 Physical influences of the HIPP

There was productive asset development on the participating farmers of the HIPP. According to Tulstrup (2015), this is vital for production and productivity in households. This was both expected and lived by the farmers in Ward one of Mberengwa. Before the programme farmers were expecting the HIPP productive asset development. Based on their expectations, this was the major expectation with an Eigenvalue of 30.410 and 28.086% of the variance. This was extracted from migration from the use of animals to machinery which had a factor score of 0.537, the donation of dairy cows 0.657 and need for a healthy life (0.543). However, based on the lived experiences there was no migration of farmers from the use of animal-drawn implements to machinery noticed. In addition, there was no donation of dairy cows, but the standard of life improved. This is demonstrated by accumulation of several physical assets such as radio and television sets, livestock and farming implements.

The donation of livestock physically increased land utilisation than it was the programme ($p<.000$). This also demonstrated with an increase in mean hectarage from 1.17ha before the donation to 2.1ha. This, therefore, demonstrates beyond any reasonable doubt that the cattle donation by the Heifer International influenced the physically by increasing the land utilisation by the participating farmers in Mberengwa.

Cattle donation by the Heifer International physically influenced positively the increase of the crop yield. The results revealed that there was a significance difference between the yield before and after the HIPP ($p<.000$). With an average mean difference of 1.51 tonnes per hectare and 2.48 tonnes per hectare. Therefore, cattle donation in Ward one of Mberengwa District influenced the improved land utilisation which resulted in maximum yield per the same piece of land owned.

Basic infrastructure development was also positively influenced by the cattle donation by Heifer International. Results revealed that the beneficiaries of the Heifer International were expecting the construction of the new houses and house from their participation. This extracted value had a factor score of 0.417. This was confirmed with 85.3% of the farmers who constructed either a toilet or house out of the proceeds from the cattle donation by the Heifer International. Worth noting is the fact that on basic infrastructural development the programme surpassed the expectation construction of water sources by 48% of the beneficiaries, solar panels were bought by 54%, radio and television sets are were secured by 65.3%. Therefore, the HIPP influenced that positively on the infrastructural development of the beneficiaries.

6.2.4 Financial influences of the HIPP on the Participating Households

The HIPP increased the access to financial market through the provision of the much-needed collateral security. Recent studies had revealed that rural communities in Zimbabwe, smallholder farmers are known for limited access to financial institutions which availed loans due to unavailability of collateral security and stable sources of income. This explains the increased number of farmers who were now participating in either credit lending (68%) and savings groups (76%) after benefiting from the programme. Therefore, it will be prudent to conclude that, through the participation of the farmers in the HIPP, access to financial facilities was influenced positively and contributed to the improved standard of living.

More importantly, the HIPP enhanced and strengthened the income generation opportunities of the participating farmers. Firstly, the cattle ownership enhanced production and productivity of the smallholder farmers. Income was earned due to the selling of the surplus produce. Secondly, through the ownership of cattle farmers were now capable of doing “piece jobs” (*maricho*). This was done using cattle labour and earned the farmers extra cash for the households. Thirdly, income was earned through participating in lucrative livestock sales, something could not be performed before by many of the smallholder farmers in Ward one of Mberengwa District. Finally, the Para Vet who was trained by the programme earned income through stocking and selling animal treatment drugs to the local smallholder farmers. Some even could hire their service based on their expertise on dosing, dehorning and general animal disease treatment. Basing on the aforementioned income-generating opportunities, it's plausible to conclude that cattle donation by the HIPP in the Ward of Mberengwa offered several income generation opportunities.

Increased production and productivity through livestock ownership and use earned the smallholder farmers income through the selling off of surplus. Results revealed the through the ownership of livestock donated by the HI, more land could be tilled and yield per hectare increased. This was attributed to the presence of draught power and organic manure from cow dung. This meant that the surplus could be produced by these farmers. As a result, the sale of the surplus earned the smallholder’s farmers in Mberengwa income.

6.2.5 Influences of the HIPP on the Natural Resource base of the Participating Households

The HIPP improved the natural resource access of the participating farmers. This was expected to be achieved through an increase in hectares ploughed, access to ground and clean water, and increased yield output. However, based on the experiences of the HIPP beneficiaries, there was a significance difference between the land that could be ploughed before and after the programme, access to access groundwater and improved soil fertility.

The level of significance is was displayed with p<.000. Cattle was now used for production manure for soil fertility enhancement; draught power for land tillage and the proceeds could be used for drilling of boreholes or wells by the participating farmers. Therefore, the HI programme has managed to help the participating farmers to access natural resources at their disposal.

6.3.1 Recommendations for policy and practice

a. Smallholder farming is a key livelihood of the farmers in Ward one of Mberengwa district. Therefore, the programmes and policies for supporting, encouraging and modernising it should be put in place. Such policies will enhance the sustainability of livelihood and productivity concurrently. However, this should be done with careful consideration of other farmer's livelihood strategies.
b. Both the government and Non-Governmental Organisations should consider getting involved in supporting livestock donation to rural communities and help improve and strengthen household's livelihood strategy.
c. In future, efforts should be made to sensitive to the needs of other vulnerable (include people living with disabilities and Orphans and Vulnerable Children) members of the society. Both the government and NGOs can use this strategy to ensure access to land by the marginalised and secluded groups.
d. Due to limited land for animal grazing, persistent and recurrent droughts in Mberengwa District, there is need to consider for a shift on animals to donate. Preferably, small and drought resistant livestock should be considered for this model.

6.3.2 Recommendation for further research

a. This study took place only in Ward 1 of Mberengwa District. A nationwide survey should be carried out to understand of the influence is having thereby helping in decision making at a national level.
b. There is a need to carry out similar studies on other livelihood strategies that are pursued in the ward for other than. This will help in determining the best alternative livelihood strategy for the rural communities and how best household capital can be strengthened.
c. There is need to determine the capital that is most affect livelihoods of more beneficiaries. Resolving this question helps both the implementers and beneficiaries in determining areas of innovating more and thereby achieving best out their work.

6.4 Conclusion

A sequentially integrated approach was used to determine the influence of the HIPP on the livelihood of the participating household in Ward 1 of Mberengwa District. The study was guided by the Sustainable Livelihood Framework. The approach reveals the importance of using an integrated approach or mixed method on the comprehensive understanding of the research phenomenon. Of interest is starting with an inductive standing point and finalising with a deductive approach to the understanding of the phenomenon. The current research findings reveal that the HIPP influences all the capitals of the livelihoods of the participating farmers. Thereby confirming the notion that cattle ownership can be used as an avenue of encountering the multi-dimensional rural development challenges. It was further revealed; cattle ownership empowers the rural communities and dismantles continuous dependency on government and NGOs as farmers will be able to confront their challenges with the benefits availed to them by cattle ownership. There is no doubt that cattle ownership through the animal in-kind programme can be used to achieve SDG number two of ending hunger, achieve food security and improved nutrition and promote sustainable agriculture for rural communities. Therefore, smallholder animal farming as a livelihood strategy can be used to complement other livelihood options a household is pursuing. Thereby, contributing to the sustainability of household livelihood.

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Appendix 1 Letter of informed consent

My name is **Ranganai Chidembo**. I am a master's student at the University of Venda registered for the Master of Rural Development (MRDV). My research focuses on **Exploring Views and Experiences on how the Heifer International Pass on Programme Influenced the Livelihoods of Households: The Case of Nyamhondo Ward in Mberengwa District, Zimbabwe.** I am inviting you to participate in this study. Please note that any information you will provide will be treated as private and confidential and therefore will not be divulged to anyone without your consent. Note that your participation is voluntary, that is you are free to pull out at any time should you feel uncomfortable during the study. I am also requesting to conduct the study at your premises.

Signature of the researcher …… Date ……

I have read and understand the contents and terms of this invitation to participate in this study. I do hereby declare that I am voluntarily participating in this research.

Participant Signature …… Date ……

I am also requesting to record the interview as well taking pictures. I therefore kindly request your consent to do so.

Participant Signature …… Date …….

Appendix 2 Data collection Tool for Programme beneficiaries

My name is Ranganai Chidembo. I am a student at University of Venda in South Africa. As part of my master's degree studies, I am carrying out a research on the **Influence of Heifer International`s Pass-on Program On the rural Households' Livelihoods in Mberengwa, District**. In order to get an understanding of the programme, I would like to conduct an interview with you as programme beneficiaries to this programme on the influence this programme has had on your individual households` livelihoods since its inception in the District. The information you provide will be treated with the strictest confidence and will only be used for my master's studies. Unless permitted by the relevant authorities, no specific names of individuals who provide the information will be divulged. Participation in this interview is voluntary. Should anyone decide to withdraw, they are free to do so. If you have any questions relating to this process, please feel free to ask me at any point of the interview. If you are free and ready to participate, may you kindly sign the consent letter provided.

Section A. Background Information

1. Position in the Programme: _____
2. Gender: _____
3. Highest Educational level (choose one)

1-None ☐
2-Primary School ☐
3-Secondary School Ordinary Level ☐
4- Secondary Advanced Level ☐
5-Tertiary ☐

4. Age group

15-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	Above 60

Section B: Programme Beneficiaries'

1. When did the programme start?
   a) _____
2. How were you selected for the programme?
   a) _____
   b) _____
3. Did the programme selection criteria used catered for every needy member in your ward?
   a) _____
   b) _____
4. How many cattle were given to each household?

a) _____

NB: On the table below, you are kindly requested to answer the provided questions in a bid to capture your views and experiences with Heifer International Pass on Programme. Bearing in mind that, the research intends to unravel the influence of the program on the livelihoods of your households.

Objective 1: To explore the beneficiaries` experiences and views on how the HIPP influenced their livelihoods		
Livelihood capital	**Since the HIP Programme started**	**Before the HIP Programme started**
What nature and types of social networks or groups you were involved in?	a) b)	a) b)
What kind of trainings did you receive?	a) b)	a) b)
What physical asserts did you acquire?	a) b)	a) b)
How the natural resource base and environment was affected?	a) b)	a) b)
What are or were the sources of income?	a) b)	a) b)

Objective 2: To determine the beneficiaries and other stakeholders' expectations on livelihood improvement by the HIPP.

1. In your opinion what did you expect the programme to influence on the livelihoods?
2. Were your programme expectations met?
3. In your opinion what factors do you think affected the programme?
4. What do you think could have been done better for the programme to meet your expectations?

Thank you.

Appendix 3 Data Collection Tool for Key Informants

My name is Ranganai Chidembo. I am a student at University of Venda in South Africa. As part of my master's degree studies, I am carrying out a research on the **Influence of Heifer International`s Pass-on Program On the rural Households' Livelihoods in Mberengwa, District**. In order to get an understanding of the programme, I would like to conduct an interview with you as a strategic stakeholder to this programme on the influence this programme has had on the rural households` livelihoods since its inception in the District. The information you provide will be treated with the strictest confidence and will only be used for my master's studies. Unless permitted by the relevant authorities, no specific names of individuals who provide the information will be divulged. Participation in this interview is voluntary. Should anyone decide to withdraw, they are free to do so. If you have any questions relating to this process, please feel free to ask me at any point of the interview. If you are free and ready to participate, may you kindly sign the consent letter provided.

Section A. Background Information

5. Position in the Programme: _____
6. Gender: _____
7. Highest Educational level (choose one)
   - **1-** None ☐
   - **2-** Primary School ☐
   - **3-** Secondary School Ordinary Leve ☐
   - **4-** Secondary Advanced Level ☐
   - **5-** Tertiary ☐

8. Age group (Please insert a tick below your age group space provided in the table below)

15-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	Above 60

Section B: Programme Beneficiaries'

5. When did the HIPP programme start?

   b) _____

6. What is the criteria that was used to select the project beneficiaries?

   c) _____

   d) _____

7. What else do you think could have been included in the beneficiary selection criteria?

   c) _____

   d) _____

8. How many cattle were given to each household as a beneficiary?

   a) _____

9. On the table below, please answer all questions as honestly as you can regarding the Heifer International beneficiaries Wanezi Ward of Mberengwa District.

Objective 1: To explore the beneficiaries` experiences and views on how the HIPP influenced their livelihoods		
Livelihood capital	**Since the HIP Programme started**	**Before the HIP Programme started**
1) What is the nature and types of social networks or groups were the beneficiaries were involved in?	a) b)	a) b)
2) What kind of trainings did the beneficiaries receive?	a) b)	a) b)
3) What evidence do you have of the beneficiaries improved physical asserts base that they own?	a) b)	a) b)
4) In your opinion, how did the HIPP affected renewable and non-renewable resources of the program recipient communities?	a) b)	a) b)
5) What would you say is the evidence of the beneficiaries` improved incomes?	a) b)	a) b)

10. To what extent do you think the HIP Programme achieved the stakeholder's expectation on improving livelihoods?

a) _____

b) _____

11. To what extend do you think the HIP Programme achieved the beneficiaries' expectation on livelihoods improvement?

a) _____

b) _____

12. What do you think the programme could have done better to achieve intended results in improving the beneficiaries` livelihoods?

a) _____

b) _____

Thank you!