Evaluating the Impact of Land Reform: case of Community Based Rural Land Development Project (Machinga District, Malawi)

by

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DEDICATION

This work is dedicated to my late mother Lucy, who by her intrepid and never say die spirit inculcated in me, the spirit of persistence to remain steadfast in the battle front. All successes are first achieved in the mind and only actualized on the ground. Sleep in solemn peace.

DECLARATION

I Madaika Cosmas Luwanda declare that the dissertation, which I hereby submit for the degree Master of Science in Agriculture Extension at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

Signature: _____

Date: _____

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"Fiat voluntas Dei"

ABSTRACT

EVALUATING THE IMPACT OF LAND REFORM: CASE OF COMMUNITY BASED RURAL LAND DEVELOPMENT PROJECT (MACHINGA DISTRICT, MALAWI)

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A study was conducted in Machinga District, Malawi, to evaluate the impact of Community Based Rural Land Development Project (CRLDP) two years after the project phased out in 2011. The objective was to establish the project's effectiveness on land tenure status, food security and income of beneficiary households in Machinga District. The study argues that adequate post-settlement support and effective collaboration of all role players are necessary preconditions for effective performance and functioning of land reform beneficiary groups.

While the study found that land holding sizes for previously landless and land poor beneficiaries increased significantly, household food insecurity remained high among beneficiary households. The project managed to relocate more than 15 000 beneficiaries planned by the project. Land holding sizes, on average, increased by over 400%. However, 84.5% respondents were found to be food insecure. Similarly,

average agricultural incomes fell from MK88 004, observed at project phase out in 2011, to MK60 117. The study therefore shows that increased access to land by landless and land poor smallholder farmers is necessary but not sufficient to enable profitable and sustainable agricultural production and hence greater household income and access to food.

The study demonstrate that the post settlement support package was inadequate. This is demonstrated by difficulties to access agricultural inputs, credit, markets, extension services and infrastructure to support agricultural production. The challenges arose because of weak institutional and organizational arrangements for ensuring effective coordination of role players. The study shows that adequate post –settlement support is a necessary precondition for effective performance and functioning of land reform beneficiaries. It further confirms that effective collaboration of all role players is key to provision of sustained and coordinated complementary support to land reform beneficiaries. Adequate and sustainable post settlement support remains a far-fetched dream if institutional mechanisms for effective coordination of role players are not properly defined, communicated and supported.

The policy and operational implications of the study are that an interactive institutional framework is needed for coordinated provision of post settlement support. In order for land reform beneficiaries to develop into sustainable enterprises, there is need to actively strengthen institutional and organizational capacity for coordination of role players. This entails putting up enduring systems and structures and supporting them to effectively carry out their roles. This can enhance a comprehensive approach to responding to beneficiaries' needs. Emphasis need to be

placed on farmer organization development to enable beneficiaries gain greater control over their own development. In this regard, it is crucial to balance between technical and organizational/institutional capacity needs of the farmers.

In addition, it must be acknowledged that land reform programmes occur in broad categories of land delivery and post settlement support in which the latter phases in as the former phases out. Discrete budgets must be made available to avoid one phase overshadowing the other. As evidence has shown, conditions may not be the same for different areas and as such “one size fits all plans” may not work for all circumstances. It is critical for land reform projects to be flexible to respond to emerging needs and demands by having unallocated funds for such purposes.

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ADMARC	Agricultural Development and Marketing Corporation
AEDO	Agricultural Extension Development Officer
AGRITEX	Agriculture Training and Extension
AHL	Auction Holdings Limited
ADD	Agricultural Development Division
ASP	Area Stakeholder Panel
ANOVA	Analysis of Variance
BES	Block Extension System
BG	Beneficiary Group
CBRLDP	Community Based Rural Land Development Project
DA	District Assembly
DAET	Department of Agricultural Extension and Training
DADO	District Agricultural development Office
DAECC	District Agricultural Extension Coordinating Committee
DAESS	District Agricultural Extension Services System
DAPS	Department of Agriculture Planning Services
DEC	District Executive Committee
DSP	District Stakeholder Panel
DLO	District Lands Officer
EPA	Extension Planning Officer
FA	Field Assistant
FBO `	Farmer Based Organization
FISP	Farm Input Subsidy Program
FTLR	Fast Tracked Land Reform
GDP	Gross Domestic Product
GOM	Government of Malawi

IBM-SPSS	International Business Machines- statistical Package for Social Scientists
KSS	Knowledge Support Source
LAC	Land Administration Component
LADF	Land Acquisition and Farm Development
LEAD	Leadership in Environment and Development
LDF	Local Development Fund
MARDEF	Malawi Rural Development Fund
MASAF	Malawi Social Action Fund
MK	Malawi Kwacha
MLAR	Market Led Agrarian Reforms
MLHS	Ministry of Lands, Housing and Surveys
MNLP	Malawi National Land Policy
MOAFS	Ministry of Agriculture and Food Security
MU	Management Unit
NGO	Non-Governmental Organization
NSO	National Statistical Office
NTAC	National Technical Advisory Committee
PMC	Project Management Committee
PMU	Project Management Unit
PRA	Participatory Rural Appraisal
PCILPR	Presidential Commission of Enquiry on Land Policy Reform
PMME	Project Management, Monitoring and Evaluation
SMS	Subject Matter Specialist
SP	Stakeholder Panel
TA	Traditional Authority
T&V	Training and Visit
VDC	Village Development Committee

VSL	Village Savings and Loan
WSWB	Willing Seller Willing Buyer

CHAPTER 1

BACKGROUND AND PROBLEM

1.1 INTRODUCTION

Chapter one sets out the context underlying the need for this study. It reflectively provides a brief overview of land reform and redistribution in selected countries in Africa. Focusing mainly on southern Africa, the chapter briefly dwells on experiences with different approaches of land reform and how successful they have been. The aim is to build a case as to why it has been important that land issues should receive priority attention by governments. The nexus of land reform, poverty and food security is also examined. The chapter narrows down to the agrarian situation in Malawi that necessitated the implementation of the pilot land reform programme implemented from 2004-2011. Finally the chapter gives the justification and objectives of this study.

1.2 EXPERIENCES OF LAND REFORM IN SOUTHERN AFRICA

Most countries have implemented land reform programmes to address challenges of poverty and inequality pervasive in rural areas. The land question, triggered by colonialism where most of the prime land for agricultural production was expropriated by white settlers, started as early as the 1600s in the case of South Africa and late 1800s as in the case of Zimbabwe and Malawi. With attainment of independence, the growing population of indigenous people and the need to provide opportunities for economic and social development for all, governments had to revisit land tenure patterns to ensure equity and security of tenure. This has been an

imperative because, for most of these countries, rural livelihoods remain predominantly agro-dependent with land as a primary productive resource. Approaches to land reform have varied considerably across countries with countries like Zimbabwe evolving from one approach to another over time. In the case of South Africa a combination of restitution, tenure reform and redistribution was opted for at one go. Progress has tended to vary across countries depending on how well post settlement support was implemented to complement increases in land holding sizes for beneficiary households. The following sections briefly capture the historical overview and experiences of land reform in Zimbabwe, South Africa and Malawi.

1.3 LAND REFORM IN ZIMBABWE

Spanning a period of 30 years, Zimbabwe's land reform evolved from an expropriation approach under the influence of white colonial settlers, through the market assisted land reform to the fast tracked land redistribution implemented from the year 2000.

Under colonial domination, white settlers identified suitable land for commercial agriculture. The result was displacement of local people who were resettled with their chiefs in "communal lands (Pazvakavamba and Hungwe, 2009). Apart from losing their land, communities also lost their social and cultural ties which later fueled the liberation struggle. Pazvakavamba and Hungwe (2009); Moyo and Nyoni (2013), state that at independence in 1980, the new government inherited a skewed agricultural sector that consisted of a trimodal structure dominated by white farmers, alongside proportionally smaller numbers of peasant families and small-scale black

commercial farmers. The trimodal structure is illustrated by Pazvakavamba and Hungwe (2009) as follows:

- A large scale commercial sub-sector owning 45% of prime agricultural land in high potential regions I, II, and III.
- A small scale commercial farming sub-sector owning 5% of agricultural land mostly in the drier natural regions IV and V.
- A communal subsector involving a large proportion of peasant farm families on 50% agricultural land, in the lower potential regions IV and V. In all these, heavy state support was directed more towards the white settler farming community and none to the locals. As such, agricultural production favoured the former.

This setup necessitated reorientation of the land redistribution program in order to address the ills created in the colonial era. The post-independence approach to land reform exclusively adopted the Willing Seller-Willing Buyer (WSWB) approach. Implementation was done using four models. The models emphasized uniform family based holdings (known as Model A), collective co-operatives (Model B), links between satellite producers and centralized commercial crop and livestock production and processing (Model C) and resettlement that suited populations in the semi-arid livestock keeping areas (Model D) (Kinsey, 1999).

Pazvakavamba and Hungwe (2009) further explained the four post-independence models as follows:

- Model "A" involved individual allocations of approximately five hectares to beneficiaries that consisted displaced and landless poor households. Beneficiaries were allocated land as communities.

- Model "B" targeted farms with developed infrastructure such as irrigation facilities. Here, all property, land and equipment were held by groups on a cooperative basis.

- Model "C" targeted farms with export potential. These were coined "core farms" and had out-growers that surrounded the core estate. It was expected to grow crops outside the boundaries of the estate and sell them to the core estate which was run by a cooperative community or by the Agricultural and Rural Development Authority.

- Model D was earmarked for areas deemed amenable to livestock production with an approach based on communal grazing of cattle without necessarily relocating the people.

With the passage of time, only model A proved successful. Model B failed because people were not familiar with the cooperative approach. Model C was abandoned after implementing it in one case because it failed miserably and model D never went beyond the conceptual and pilot phases (Pazvakavamba and Hungwe, 2009).

In general, the early land redistribution program for small scale farmers in Zimbabwe proved successful. Success was attributed to the fact that planning moved ahead of settlement of beneficiaries. Furthermore, essential social infrastructure to service new settlers e.g. schools, clinics, dip tanks and rural service centres was established in

concert with the redistribution program. The programme achieved visible gains in productivity and production in the resettlement areas (Pazvakavamba and Hungwe, 2009). Despite notable achievements in the Willing-Seller-Willing-Buyer (WSWB) approach, the need for further land redistribution remained evident. 68% of the families were yet to be resettled and population density in the "communal areas continued to multiply (Pazvakavamba and Hungwe, 2009). Consequently, the need for accelerated land redistribution in Zimbabwe heightened with political pressure from war veterans and opposition political parties. Moyo and Nyoni (2013) recount of unprecedented political conflicts that emerged within and outside the ruling Zanu–PF, while external pressure in domestic politics mounted. The consequence was a declaration by President Robert Mugabe effectively launching the Fast Track Land Redistribution in the year 2000. Empowered by the constitutional amendment of 2000, the Government was legally mandated to compulsorily acquire agricultural land needed for resettlement (Pazvakavamba and Hungwe, 2009).

The amendment placed the responsibility of paying for compensation of the acquired land in the hands of the British Government most likely because the settlers also acquired the land free of charge. On its part, the Zimbabwean Government was obligated to pay full compensation for the improvements made on the acquired land (Pazvakavamba and Hungwe, 2009). By 2010 only about 300 white farmers remained in agriculture after Government allocated land to over 150 000 families in two types of schemes under the Fast Track Land Reform Programme (FTLR) (Moyo and Nyoni, 2013).

Under the FTLR, the approach was bimodal consisting of two schemes. A1 schemes promoting small-scale family farms (≤ 5ha) and A2 schemes promoting medium and large scale capitalist farms averaging 100ha.

The manner in which the Fast Tracked Land Reform took place affected the performance of the program and the national economy in general. As Moyo and Nyoni (2013) noted, land settlements happened without proper technical assessments and adequate post settlement support. The consequences were increased food shortages, declining foreign currency earnings, shrinking import capacity and high inflation and interest rates.

1.4 LAND REFORM IN SOUTH AFRICA

Consistent with other southern Africa countries, South Africa's land problems originated from colonial dispossession mainly by the Dutch and British Settlers (Lahiff, 2009). The extent and temporal persistence of land problems in South Africa have notably been greater than any other country in Africa, spanning a period of over 300 years. Lahiff (2009) shows that by the end of apartheid, about 86 million hectares of commercial farmland i.e. 86% of all farmland, belonged to the white minority demonstrating the seriousness of land ownership issues in South Africa. Meaningful land reform, in favour of the black majority only started in earnest after transition to democracy in 1994. A three pronged approach characterized the land reform framework for South Africa. A better illustration of the framework is given by Lahiff (2009), as crafted in the "White Paper on South Africa Land Policy of 1997.

- *Restitution:* This was aimed at restoring land rights by providing relief for certain categories of victims of dispossession.

- *Tenure Reform:* This was intended to secure and extend the tenure rights of victims of past discriminatory practices.

- *Redistribution:* This was based on a system of discretionary grants to help certain categories of people acquire land through willing seller willing buyer transactions.

The restitution path followed the enactment of the Restitution of the Land Rights Act of 1994. Lahiff (2009) states that this occurred under three broad categories of relief: restoration of the land under claim, grant of alternative land and financial compensation. A greater proportion of urban claims had been settled by cash compensation by the year 2003. However, less than half of the rural claims have been settled through restoration of land meaning that a lot of work remains to be done (Lahiff, 2009).

Tenure reform was aimed at strengthening the rights of occupiers of privately owned farms and estate land. It was also meant to restructure the system of communal tenure prevailing in the former homelands (Lahiff, 2009). Under this approach, farm workers and tenants residing and working on privately owned farms and estates were protected by law from illegal displacement. Provisions were put in place to eventually make them own a piece of land. Despite the efforts made, a number of problems remain yet to be resolved. Almost all land in rural areas of the former homelands still remains owned by the state in trust for the communities. Furthermore, these areas are

bedeviled by severe overcrowding and numerous unresolved disputes among groups of land users (Lahiff, 2009). Illegal evictions also continue to occur. More than 2 million farm dwellers in independent production were displaced between 1994 and 2004. This is more than the number of people displaced in the last decade of apartheid (Wegerif *et al.*, 2005 in Lahiff, 2009). These failures were attributed to lack of dedicated budgets for tenure reform and lack of enforcement of the law by police, prosecutors and the courts (Lahiff, 2009). Redistribution policy focuses on provision of grants to assist suitably qualified applicants to buy land in rural areas mainly for agricultural purposes and also residential purposes (Lahiff, 2009).

1.5 HISTORY OF LAND ISSUES IN MALAWI

Similar to the Zimbabwe and South Africa's experiences, inequality in land distribution in Malawi owes its origins to the colonial land policy in the early 19th century that appropriated all land to the British sovereign to facilitate access by the settler community on the basis of private title (GOM, 2002). The colonial policy eventually led to the conversion of customary land into other land tenure categories such as leasehold, public and freehold. For nearly four decades up to 1994, the post-colonial agricultural development strategy maintained the colonial framework of land tenure and ownership as the independent Malawi went without a comprehensive land policy (Ng'ongola 1982 cited in Chinsinga 2008).

The situation led to exploitative labour practices and land shortages for Malawians through labour tenancy and expropriation of customary land (Peters and Kambewa, 2007). Amid the then skewed agrarian structure, several challenges emerged in the ability of land markets to correct the situation. GOM (2009a) observe that the

problem of landlessness in the midst of the idle land could not be solved by spontaneous migration, acquisition of land by former tenants, land markets or returning the estates back to public or customary land. This was so because of lacking a land policy aimed at correcting the historical wrongs. Land markets could not automatically transfer land to other users because smallholders had no resources to buy land and some estates could not attract investors (GOM, 2009a). The socio-political consequences of having underutilized land on large estates on one hand and overcrowded customary lands on the other were the eruption of localized tensions in most rural areas, encroachment on private land and protected areas. Such violent acts were based on popular beliefs that estates had far too much land for their needs and the widespread feeling that government cared more for wild animals than human beings. Land reform only began to be viewed differently after transition from one party dictatorship to multiparty democracy in 1994 (Peters and Kambewa, 2007).

1.6 THE AGRICULTURAL LANDSCAPE IN MALAWI

Malawi has one of the highest population densities in Africa (GOM, 2002). By 2008, the human population in Malawi was estimated at 13 077 160 with population densities averaging 139 people/ km^2 and an annual population growth rate of 2.8%. The southern region of Malawi stands the most densely populated with 184 people/ km^2 followed by the central region (155 people/ km^2) and northern region (63 people/ km^2) (GOM, 2010b). 84.7% of the population is rural based with an average household size of 4.6 members. The country's population composition disaggregates into 51% women and 49% males. Literacy is relatively high with 64% of the

population able to read and write. 83.2% of the total working population in the rural areas of Malawi is engaged in subsistence farming (GOM, 2010b).

This implies an economy that is predominantly agro-based, making agricultural land stand as the most basic resource for social and economic development. For this reason, problems of land tenure patterns and ownership in Malawi have often ignited emotive scenes and discourses (Chinsinga, 2008). While the agriculture sector in Malawi continues to make the greatest contribution to the economy, contributing around 36% of the GDP, 85% of employment and 90% of foreign exchange earnings, land distribution is starkly unequal (GOM, 2009a). Smallholder production is mainly on customary land where rights to cultivate and transfer land is entrusted in traditional chiefs. With growing population, customary land has become more fragmented and the land holding sizes have declined (GOM, 2009a). Land pressure under customary tenure system is particularly high in the southern region of Malawi. On average, landholding sizes are as low as 0.1ha compared to average landholding sizes of 5-10ha and 10-15ha in the central and northern regions of the country, respectively (GOM, 2009a).

While smallholders have limited access to land, there are significant areas of unused lands, belonging to medium and large estates or Government agencies. In fact, GOM (2002) estimated that substantial land was held in some 30 000 estates, with average landholding sizes ranging from 10 to 500ha under leasehold and freehold tenure systems. It was actually projected that 2.6 million hectares of suitable agricultural land remained uncultivated in the estate sector accounting for approximately 28% of the country's total land area lying idle. Given annual population growth rates at 2.8%

(GOM, 2008), land pressure for agricultural purposes has tended to increase in recent years. In order to ensure sustainable economic growth as well as equity in the use of agricultural land in Malawi, land reform programs were deemed necessary to address these challenges. To provide a legal framework upon which land reform programs could be based, the Government of Malawi passed the Malawi National Land Policy of 2002.

1.7 THE MALAWI NATIONAL LAND POLICY

At the advent of multiparty democracy in 1994, a Presidential Commission of Enquiry on Land Policy Reform (PCILPR) was established. This commission was tasked to recommend a national land policy after careful study of the existing situation. Studies conducted for the land sector between 1996 and 1999 revealed a number of challenges. These included tenure insecurity on all categories of land (especially customary land); poor access to land especially by vulnerable groups and poor land-use and land governance (GOM, 2009a). A report by the commission observed that large areas of land had been converted from customary to private or public land with most freehold land in rural and urban areas still owned and controlled by non-indigenous Malawians (PCILPR, 1998 cited in Sintowe *et al*. 2011). It also noted that rural freehold estates were concentrated in the tea growing areas of Mulanje and Thyolo which have some of the highest population densities in the country. The severe land pressure in the southern districts of Mulanje and Thyolo was seen by the commission as a "historical wrong" blamed on "the acceptance of Certificates of Claim and the consequent legitimization of title to land to which they

related". In the eyes of the commission, this was to be redressed by some kind of land reform.

The work of the PCILPR culminated into the Malawi National Land Policy (MNLP), which was approved by cabinet in 2002. The overall objective of the 2002 MNLP is to ensure tenure security and equitable access to land to attain social and broad-based economic development (GOM, 2002).

1.8 OVERVIEW OF COMMUNITY BASED RURAL LAND DEVELOPMENT PROJECT (CBRLDP)

The Government of the Republic of Malawi, implemented the CBRLDP from 2004 to 2011, in the pilot districts of Mulanje, Thyolo, Mangochi, Machinga, Balaka and Ntcheu. This formed an integral part of implementing the 2002 MNLP. Implementation was done through the Ministry of Lands and Natural Resources (MLNR).

The aims of the project were to improve land delivery systems of accessing, titling and registration; addressing security of land tenure; increase agricultural productivity and increase household incomes (GOM, 2004).

The objectives of CBRLDP were as follows:

a) *To improve land delivery systems* through provision of land acquisition and farm development grants to support community-initiated land purchases from willing estate owners who would offer their estate or part of it for sale. Under this objective, project funds were to be used to cover relocation costs, construction of shelter, basic amenities, land surveying, defining property rights, land registration and other transaction costs (GOM, 2004). Each

eligible household was allocated an equivalent of US$1 050 for land acquisition, resettlement and farm development. Of this grant, 62% was for farm development, 30% for land acquisition and 8% for resettlement allowance. As such, this objective involved redistribution processes.

b) *To address security of tenure*. Security of land tenure as an objective was premised upon the observation that customary land was continuously under threat of dispossession, by local chiefs and wealthy people, largely due to absence of a strong legal framework for its protection. As such, land bought through this project was expected to be registered as a customary estate belonging to a particular beneficiary group or Trust (GOM, 2004). This objective centered on implementation of tenure reforms as reflected in the MNLP.

c) *To increase agricultural productivity and household incomes*. This objective was to be achieved through provision of support for farm inputs and tools to beneficiaries for a prescribed period of two years after which beneficiaries were expected to stand on their own. Support for farm inputs and tools, was covered under the 62% allocation for farm development. To achieve the same objective, the project was to provide support for farm and production management, productivity improvement, extension services and produce marketing (GOM, 2004). Notably, this objective hinged on provision of post settlement support.

Progress on achievement of these objectives during and immediately after implementation of the project in 2011 has been inconsistent across the objectives and temporal dimensions. Findings from interim studies conducted in 2008 observed

insignificant changes in agricultural productivity and farm incomes (ECIAfrica, 2008 cited in Chirwa, 2008). The studies attributed the findings to the fact that the beneficiaries had not yet established themselves as farmers to generate significant income and productivity gains from project inputs as well as lack of institutionalized and sustained support to the beneficiary groups after the initial year of relocation. This is despite the fact that there was significant progress already made on improving land delivery systems of accessing, titling and registration as well as addressing security of land tenure.

The baseline study by ECIAfrica (2008) reported 63% of the project beneficiary groups receiving most of their income from performing piecework, while only 15% of the control groups received income from agriculture. Another study by Chirwa (2008) showed positive effects in overall better welfare for new beneficiaries that underwent only one season of farming under the programme due to increased investments in farm inputs. However, the positive effects were mainly attributed to the complementary financial resources and assistance provided in the first season rather than changes in land tenure only. The study extolled the importance of complementary investments and institutional support in order for land reform programs to have significant impact on poor smallholder farmers. The interim study findings may not have adequately addressed sustainability issues of project investments since project support was still flowing.

These findings were justified for the time since most of the interim studies were carried out in 2008 when beneficiary groups had just undergone one or two cycles of production.

1.9 PROBLEM STATEMENT

Most studies conducted to establish the impact of CBRLDP over time came up with mixed findings. For instance, the Annual Independent Project Evaluation Report by Pricewaterhouse (2007) reported 86% increase in annual incomes for beneficiaries within first year of relocation. The mid-term review of 2007 reported a dramatic increase in agricultural production and incomes. Findings from interim studies conducted in 2008 observed insignificant changes in agricultural productivity and farm incomes (ECIAfrica, 2008 cited in Chirwa, 2008). At the close of the project, an independent project impact evaluation by Sintowe *et al.* (2011) reported significant improvements in beneficiaries' food security, asset holding and agricultural income levels in the short term, which tended to decrease over time. Such loss of gains of project investments over time puts a threat on the sustainability of the changes created by the project and casts a big question on the management of the whole process.

Absence of a critical analysis of the long-term impact of the project, including lessons and best practices learnt, may render justification and successful implementation of land reform initiatives in Malawi difficult. It is against this background that the study was conducted in Machinga district to fill the knowledge gap regarding the status of impact of the pilot land reform program, two years after it phased out in 2011.

1.10 PURPOSE STATEMENT

The purpose of the study was to assess the impact of the CBRLDP on previously landless communities in Machinga District and to make policy and operational recommendations for future improvement of similar programs.

1.11 RESEARCH QUESTIONS AND OBJECTIVES

The study focused on answering the following questions

- To what extent has the CBRLDP addressed land tenure issues for landless communities?
- What is the contribution of the pilot land reform program to overall agricultural production and income security of beneficiary households?
- To what extent had the *structural* and *institutional* post-settlement support contributed to effective performance and functioning of beneficiary groups?

Specifically, the research sought to:

a) Determine the perceived effectiveness of CBRLDP on addressing land tenure, food security and household income of beneficiary households in Machinga District.
b) To identify and analyze the efficacy of post settlement support rendered to beneficiary households (what? who? when? how?)
c) Establish the extent to which intervening processes and role players promoted or obstructed attainment of end results.
d) Make recommendations (policy and operational) for future improvement of the land reform programme.

1.12 HYPOTHESES

H1: Increased access to land by landless and land poor smallholder farmers enable more efficient, profitable and sustainable agricultural production and hence greater household income and access to food.

H2: Adequate post-settlement support is a necessary pre-condition for effective performance and functioning of land reform beneficiary groups.

H3: Effective collaboration of all role players is important for the provision of sustained and coordinated complementary support to land reform beneficiaries.

1.13 ACADEMIC VALUE AND INTENDED CONTRIBUTION OF STUDY

Approaches to implementation of Land Reform programs have tended to vary across different countries. While some countries have opted for market assisted land reforms as is the case with Malawi's pilot land reform project, other countries have had less successful experiences with it. Again, the nature and extent of support provided to land reform beneficiaries as well as land sizes allocated to individual beneficiaries have been variable across countries much so with the impacts thereof. Country specific experiences therefore, offer the opportunity to add to the pool of knowledge regarding what can work well or not in different circumstances.

Due to the significance of the project and its newness in the context of Malawi's land situation, it was critical that an objective, rigorous and systematic evaluation takes place for beneficiary groups in the pilot districts. Despite the interim studies conducted to monitor performance of the project during and immediately after implementation, an *ex post* evaluation was important in order to assess the sustainability of impacts after phasing out. Apart from determining the performance of key outcomes of land tenure, food security and income which has been the centerpiece of most studies, this study felt it necessary also to assess the efficiency and effectiveness of intervening processes in order to enhance understanding of the end results. This assertion is supported by the World Bank when it agonizingly

observed that few of market based land reforms around the world and none in sub-Saharan Africa have been empirically evaluated in such a way that would enable a robust understanding of who benefits and how (Gayatri *et al*, 2009). It further saw rigorous evaluations as especially important for policy makers given that land reforms require vast financial and human resources as well as political will. For instance, in Zimbabwe's 30-year experience of land reform, the productivity of small producers, demonstrated incremental growth with output escalating recently and the poor gaining more than previously believed (Moyo, 2011).While some studies show that households with smaller land holdings who tend to be poorer are less able to obtain sufficient home production, there is also a general dispute that small land holdings are not synonymous to poverty (GOM, 2006). It is felt that this follow up study after phase out of the project provides a realistic measure of project end results that can inform future designs and scaling up of similar programs in Malawi since this was a pilot phase.

1.14 CONCLUSION

The background set for the study shows that land reform has been experienced in many countries in southern Africa and beyond. For southern Africa, the need to institute these reforms originate from the colonial era where settlers expropriated land from the local communities. Different countries have followed different models of land reform and for the same reason, progress on achievement of expected results have tended to differ across the models with some performing much better than others. The CBRLDP which was a pilot project for the implementation of the MNLP in Malawi also had its own experiences. While interim and end of project evaluation

showed good progress to have been achieved, testing of whether these gains still exist years after phase out of the project was necessary in order to ascertain the sustainability of the impacts and the effectiveness of processes put in place by the project.

1.15 STRUCTURE OF THE REPORT

Chapter two reviews some of the concepts that underpin implementation of land reform projects. This is meant to provide views and perspectives that need to be considered in designing land reform programmes. The chapter also details a historical overview of land reform in Malawi to provide a background to the CBRLDP. Finally, the chapter gives the overview of the CBRLDP.

Chapter three outlines the research design and methodology used to conduct this study. Chapters four, five and six give the results of analysis conducted and discuss the results. Chapter four hinges on social profile and land tenure status of beneficiary households. Chapter five provides results on perceived effectiveness of CBRLDP on food security and household income status of beneficiaries. Chapter six provides results and discussion on the perceived efficacy of post settlement support, role players' involvement and the intervening processes to CBRLDP beneficiaries. Chapter seven gives the key conclusions derived from the findings and also generates recommendations for improvement of similar programmes in future.

CHAPTER 2

LAND REFORM IN MALAWI AND AN OVERVIEW OF CBRLDP

2.1 INTRODUCTION

For most rural communities that depend on agriculture, land is a critical asset for supporting livelihoods. Landless and land poor households face serious challenges to achieve food and income security especially when they do not have other livelihood strategies to support themselves. It is because of this that most countries with land problems have been designing land reform programs to assist those most in need of land. Several studies and land reform project reports in the past have uncovered key observations on the applicability and performance of land reform initiatives as they affect overall livelihoods, income and food security of those benefitting from the project.

Chapter two reviews the literature on land reform and its importance to rural livelihoods and smallholder farming both in Malawi and beyond. It also attempts to illuminate on some of the constitutive elements that have affected land reform performance. Finally, the chapter gives an overview of the Malawi's pilot land reform project to offer the context upon which the research was anchored.

2.2 LAND REFORM AND RURAL LIVELIHOODS

The conceptual understanding of poverty and its causes that underpins sustainable livelihoods approaches has influenced thinking and practice throughout the development world (Carney, 1999). Moyo (2007) stresses the prominence of land in

rural livelihoods as it relates to the practice of agriculture. He sees land as a basic source of livelihood for the majority of southern Africans; as a means for the development of agriculture; and argues that economic development is distorted by skewed agrarian structures (Moyo, 2007). This does not discredit the sustainable livelihoods concept which states that rural people do not exclusively depend on agriculture for their survival. It is common for rural producers to diversify their productive activities to include both on and off-farm activities (Hussein and Nelson, 1998). That is why a livelihood is understood as comprising the capabilities, assets and activities required for a means of living (Serrat, 2008). Acharya (2006) further defines livelihood as adequate stock and flow of food and cash with an individual or a family to meet its basic needs. He proceeds to identify four ways in which livelihoods are acquired by rural households namely: (a) production-based livelihood, (b) labour-based livelihood, (c) exchange or market-based livelihood (d) transfer-based entitlements. In all these ways, one finds that agriculture links with each one of them showing its prominent role in the livelihood parlance. Moreover, because of the rural numbers involved in agriculture, its performance certainly has a knock on effect on other ways of livelihood.

Sustainable livelihoods is defined as a means of living that can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets both now and in the future while not undermining the natural resource base (Hussein and Nelson, 1998). The sustainable livelihood concept therefore tries to emphasize that the concern is not only on the "current scenario" but also the future. That's the reason why success of livelihood projects must be judged by the footprints left many years

after phasing out. The attempts by individuals and households to find new ways to raise incomes and reduce environmental risks are termed livelihood diversification. Underscoring the importance of land and farming to rural livelihoods, Ellis *et al.* (2003) observe that multiple constraints faced by rural poor Malawians can only be addressed by some combination of raising agricultural productivity, diversifying farm output to reduce risk and diversifying livelihoods towards non- farm enterprises. As long as agriculture remains the dominant activity for the rural household, land will still remain a *sine qua non* for addressing rural poverty. How then, can rural development initiatives deliver successful livelihood interventions?

Ashley and Carney (1999) suggest that because of the complexity and diversity of causes of poverty, sustainable livelihoods approaches demand collaboration between sectors even if interventions are sectorally anchored because no single expert can understand all aspects of livelihoods. Sustainable livelihood approaches implemented collaboratively provide a means of integrating differing perspectives and structuring existing lessons (Ashley and Carney, 1999). In light of land reform programs, this can be a useful approach for the identification of complementary technological, institutional and organizational innovations to support land reform beneficiaries in an integrated and sustainable manner. Leeuwis and van de Ban (2004) see innovations as having a collective dimension in that they require coordinated action between different actors. This calls for careful planning prior to implementation. Attfield *et al.* (2004) advise on the need for land reform programs to be introduced in ways that give good prospects of sustainable livelihood outcomes being secured. They observe that poorly planned land reforms fail to generate sustainable livelihoods.

2.3 RELEVANCE OF LAND REFORM TO SMALLHOLDER FARMERS

A number of authors on land reform have established positive links between land reform and poverty reduction among smallholder farmers. For instance, Attfield *et al.* (2004) while noting that land reform does not constitute an overall solution to poverty, still considers it as a crucial part of the solution. Binswanger *et al.* (1995) found that redistribution of land from wage operated large farms to family operated smaller ones increased agricultural productivity. This was linked to existence of conspicuous labour surpluses among smallholder farmers. Land redistribution to smallholder farmers led to higher output, higher labour absorption and a more equitable income distribution, thus contributing to the alleviation of poverty (Giovanni, 1985). The obvious expectation for the landless and land poor smallholder farmers is that with increased land holding sizes made available to absorb the excess labour, agricultural productivity should increase. This perspective has been supported by Moyo (2005); Moyo (2007) when he observed resettled African farmers contributing substantially to domestic and export markets as a result of adequate access to land. He saw this to be counter to the colonial notion that Africans only aim to secure home consumption and residence and that for them large sized land was unproductive. Similarly, Moyo (2013) in his assessment of redistributive land reform in Zimbabwe noted a net transfer of wealth and power from a racial minority of landed persons to mostly landless and land poor classes and a substantial number of low income earning workers as a result of land redistribution. Benefits did not only accrue in food security and economic terms but also in socio-political and cultural domains (Moyo, 2013). Land alone may not perform the miracle if adequate supportive mechanisms are not in place to bring the best out of the land and people

not benefitting from it. That is the reason why land reform discourses have placed a corresponding emphasis on post settlement support.

2.4 POST SETTLEMENT SUPPORT AND LAND REFORM PERFORMANCE

Adequate post settlement support has been reported by many authors on land reform as one of the most critical success factors of land reform programs. Deininger (1999) in his assessment of land reform experiences in Colombia, Brazil and South Africa found that programs that were limited to the mere transfer of land without training and technical assistance made it difficult for beneficiaries to reach high levels of productivity and savings. He further observed that providing beneficiaries with access to land but not with access to markets for output and credit, failed to make them better off than before due to multiple market imperfections in the rural environments. Similarly, Dorward (2007) observed that failures in produce markets also prevented smallholder farmers from producing more profitable crops and buying maize for food. These findings lend credence to the importance of a robust and well-coordinated service provision to land reform beneficiaries as well as the strengthening of backward and forward linkages in agricultural commodity chains. For effective and packaged delivery of services that comprehensively meets the needs and demands of beneficiaries, there is need to assemble and support a cross functional team of role players from the public, private and NGOs. Adams *et al.* (1999) reported stagnation in livelihoods of incoming settlers due to the predominance of the imperative to repossess and redistribute land, while paying insufficient attention to post settlement planning and support. This is the question of wanting to quickly jump

to results without due regard to the process. But it is usually said, "The process is as good as the result." Support services such as credit facilities and advice systems are certainly necessary and these should be supplied if proper planning is put in place (Attfield *et al,* 2004).

South Africa's experience provides another good lesson on the need for well-coordinated post settlement support. Land reform programs which commenced in 2004 after the fall of apartheid constituted of restitution component, settlement/land acquisition component (SLAG) and land redistribution component. The land redistribution component, which is more in conformity to Malawi's land reform pilot project, evolved from a predominantly pro-poor model to a commercial model. From 1995 to 1999, the South African Government made available settlement/land acquisition grants (SLAG) amounting to R16 000 to poor households to enable them to purchase land. This model was criticized for reproducing overcrowding since beneficiary households were settled as groups. The model also failed to link acquisition of land to support and resources to enable people to generate a livelihood out of it (DLA, 1997; Hall, 2004). To overcome the latter challenge, Saturnino and Borras, (2003) recommend that a portion of the cash grant given to beneficiaries to be able to develop their farms must be spent on privatized-decentralized extension services that are strictly demand driven. With this provision, beneficiaries would hire consultants, like NGOs and Cooperatives, to assist them with project plans. This approach was seen by government as efficient since accountability between beneficiaries and service providers is direct and the process transparent. They saw widespread credit and investments coming quickly because land is acquired through

outright purchase and so land titles are honored as collateral for bank loans. However, provision of grants to farmers for privatized extension can work well in those countries where private sector extension is well developed. Another path may be to provide this grant directly to an NGO based on an approved proposal for service provision.

2.5 LAND AND SMALLHOLDER AGRICULTURAL PRODUCTIVITY IN MALAWI

Since the 1970's, the agricultural sector in Malawi has been beset by poor performance due to low growth rates in productivity. Productivity in most crops only grimly increased at rates that could barely match population growth. GOM (2011) estimated percent yield gaps to range from 30-50% for cereals and 40-75% for legumes. Several challenges have been germane to low agricultural productivity. GOM, (2011) mentions inadequate access to agricultural credit, output and input markets, small land holding sizes and failures in technology development and transfer as some of the challenges. Without these challenges, Makombe *et al.* (2010) found that an increase of 0.25 hectares of land per capita of cultivated land could decrease the likelihood of food insecurity by 22, 24 and 27 percent in the north, central and southern regions of Malawi respectively. Makombe *et al.* (2010) further observed the critical importance of infrastructure i.e. roads that link farmers to markets as well as government investments in extension services as prerequisites for sustainable food security. He observed that the former translated into reduction in production and marketing costs and the latter reduced food insecurity by 7.3 and 5.2 percent in central and southern regions respectively. These results point to the fact that land

redistribution is not the only solution to increased productivity and food security due to the existence of multiple influences to agricultural productivity.

Failures in produce markets also affect farmer's choices of agricultural enterprises to undertake (Dorward, 2007). Market failures were found to prevent smallholders from producing more profitable crops and buying maize for food. These observations taken together suggest that effective implementation of land reform programmes require holistic support to resettled communities.

2.6 PROBLEMS FACING RURAL AREAS IN MALAWI

The rural areas in Malawi continue to be faced by complex, diverse and dynamic set of challenges. As reported by Dorward and Kydd (2004), these problems range from low productivity activities to poor infrastructure, services and communications leading to high costs in physical movement of goods and services in and out of rural areas. In such environments, the impact on agricultural development has usually been poorly functioning input, output and financial markets and marginalization of such areas in terms of service provision. To deal with these challenges there is need for innovative structural and institutional arrangements for providing services aimed at driving agricultural development. One avenue for achieving this is to strengthen stakeholder coordination for rural development through establishment of effective networks of role players for the agro-food sector. Murdoch (2000) asserts that this entails both "vertical" and "horizontal" networks. According to Dorward and Kydd (2004) the "vertical" commodity chain networks look at the nature of production process, economic and social organization of food production, use and management of labour, the role of scientific research and extension activities as well as the

organization of marketing and distribution activities. The "horizontal" spatial networks attempt to coordinate a range of activities located within an area so that the capacity of local actors to gain access to markets and other economic opportunities is enabled. Such bi-dimensional approach would possibly ensure a holistic approach for adequately dealing with the challenges affecting the agri-food sector in rural settings. However, most development projects face rigidity problems in their implementation arrangements and this makes it impossible to adjust to changing situations. Leeuwis *et al.* (2004) noted that many projects formulate goals in advance thinking that it is possible to organize a rational process, which can eventually result in achieving desired outcomes. He further observes that many methods of project planning reflect this kind of control oriented thinking. But as can be appreciated from the myriad of challenges facing rural areas, there is need for flexible and innovative ways for dealing with complex problems facing rural areas (Leeuwis *et al.* 2004). The extent to which networks of role players are put in place, institutionalized and supported for land reform programmes is crucial for effective provision of post settlement support. The challenge though is how to develop and strengthen stakeholder coordination for effective post settlement support?

2.7 LAND REFORM AND THE ROLE OF EXTENSION

The term 'extension' has evolved into a generic term referring to the variety of systems or approaches and providers that have emerged for communicating and transmitting information and technology to farmers and other rural populations (Rivera and Sulaiman, 2009). The subject of land reform is certainly the rural farming households and its object is predominantly increased agricultural production. This

puts extension at the center of all land reform actions. Perspectives on the nature and role of extension have changed in scope and emphasis over time, from agricultural production to helping farmers organize themselves, and linking farmers to markets (Rivera and Sulaiman, 2009). Extension is perceived to be a driver of structural and institutional arrangements for propelling the process by which new knowledge, information or technology is developed, adapted, diffused and used to lead to social and economic change (Rivera and Sulaiman, 2009). Extension holds a pivotal role of building the capacity of land reform beneficiaries, organizing role players for effective post settlement support and eventually the successful achievement of land reform deliverables.

2.7.1 Structure of Ministry of Agriculture and Food Security (MOAFS) in Malawi.

MOAFS has five technical departments namely Agricultural Research Services, Animal Health and Livestock Development, Crop Production, Agricultural Extension Services and Land Resources Conservation. Excluding the Agricultural Research Services, all the other departments are essentially part of wider agricultural extension services.

The structure of MOAFS reflects the operational organization of the institution. From the headquarters, the Ministry has eight Agricultural Development Divisions (ADDs) which replicate the activities of the departments. The ADDs are divided into 28 District Agricultural Development Offices (DADOs), which are further subdivided into 187 Extension Planning Areas (EPAs) consisting of 3004 agricultural sections. Agricultural sections consist of a number of villages within a given agro-ecological

zone to which a field extension worker (Agricultural Extension Development Officer) responsible for providing wide ranging services to smallholder farmers.

2.7.2 Brief history of extension in Malawi

Malawi was previously known as the Nyasaland protectorate under the British colonial administration from 1891. The indigenous farmers were growing maize and other food crops only on subsistence basis (Kabuye and Mhango, 2006). Since no extension system existed at that time, farmers practiced whatever farming technologies they learned from experience passed down through generations. The present day extension service in Malawi was established about 1949/1950 basically as a direct response to the severe drought and famine that occurred in the country in the 1948/1949 season (Kabuye and Mhango, 2006). The famine was so devastating that government was forced to revisit the policies that existed at the time relating to agricultural production in general and agricultural extension in particular.

2.7.3 Implementation approaches of agricultural extension services

2.7.3.1 The Master Farmer Approach

The colonial government introduced the Master Farmer approach which saw the emergence of a group of smallholder farmers that were considered as early adopters or very responsive to adoption of improved farming technologies (Kabuye and Mhango, 2006). The selected farmers officially known as Master Farmers were expected, in the long run, to entice other smallholder farmers to follow suit and adopt improved farming technologies. Kabuye and Mhango (2006) observe that many non-participating farmers did not adopt the improved farming technologies contrary to what was expected. Firstly, non-participating farmers resented the Master Farmers'

prosperity feeling that they succeeded because they received government support in terms of inputs and extension services (MOAFS, 2000). Secondly, the program was politicized in that Master Farmers were viewed as stooges of the colonial Government (Kabuye and Mhango, 2006).

2.7.3.2 Individual Approaches

After attaining independence, in 1964, the Department of Agriculture Extension and Training (DAET) was formed within the Ministry of Agriculture. Major extension policy thrust in service delivery emphasized the individual approach with the view to developing progressive smallholder farmers (Kabuye and Mhango, 2006).

The expectation was that these would in turn act as focal points for disseminating extension messages to the rest of the farmers for the overall development of smallholder agriculture (Kabuye and Mhango, 2006). Unfortunately, the individual approach was found to be segregative and in favour of a relatively rich minority of progressive farmers. The Ministry of Agriculture was compelled to change the extension policy from individual to group approach to enable extension programs to embrace as many smallholder farmers as possible (Kabuye and Mhango, 2006).

2.7.3.3 The Group Approach

In 1981, the Department of Agriculture Extension and Training (DAET) decided to issue an official policy guide that gave emphasis to group extension methods than the individual methods (Kabuye and Mhango 2006). The group methods used included meetings, group discussions, demonstrations, agricultural shows and field days used to optimize extension contacts with farmers for the purpose of disseminating

information. This method was useful because it made direct interaction possible between extension staff and farmers; and between farmers themselves (Kabuye and Mhango, 2006). However, the group approaches, only succeeded in the major donor funded projects than the non-funded areas as these were beset with constraints ranging from inadequate funding of operating costs, poor staffing, vast areas with rugged topography to be covered, poor road infrastructure in rural areas to poor transport availability to enhance staff mobility (Kabuye and Mhango, 2006). This led to the adoption of the Block Extension System (BES) to support the group approach.

2.7.3.4 Block Extension System (BES)

Consistent with the Training and Visit System (T&V) promoted by the World Bank in the 1970s, BES, a modified T&V system was adopted in 1981 with the aim of improving farmer coverage (MOAFS, 2000). BES required a field assistant (FA) to sub-divide his area into eight geographical units called blocks. The FA would then arrange scheduled meetings and demonstration sessions with all farmers of each block at least once a fortnight at a specified place, date and time. As Kabuye and Mhango (2006) observe, BES emphasized group approach, scheduled visits, systematic staff and farmer training and proper supervision of extension programs.

This was the first major paradigm shift from the individual contact approaches followed during the colonial times. The main idea of the system was to have competent, well-informed village level extension workers who could visit farmers frequently and regularly with relevant technical messages and bring farmers' problems to research (Benor and Baxter, 1984). However, this was a typical linear approach where technologies were generated by research channeled to the extension

workers who were supposed to make farmers adopt them. This was not only happening in Malawi, AGRITEX – Zimbabwe (1998) also notes that until recently, development in rural Africa mainly consisted of farmers and communities being told what to do, often by institutions which had not taken the time to understand their real needs. The basic features consisted of continuous training and regular fixed visits by staff, built in supervision, continuous upgrading of staff, monitoring and evaluation of all extension activities and minimal office and paper work (Benor and Baxter, 1984). However, as MOAFS (2000) noted, the majority of resource poor farmers were not reached with extension messages because of its top-down approach. Consequently, adoption rates of improved agricultural technologies did not improve. Apart from its top-down approach, the T&V extension system recommended a fixed number of farm families (800-1000) to whom a village extension worker was responsible (Benor and Baxter, 1984). To sustain this approach it was necessary that resource allocation to extension and the number of village extension workers should increase in relation to the increase in population of farming households. Lack of sustainability after donor funding was observed in most of the regions because of high operating costs and inadequate government funding (MOAFS, 2000). The system also assumed that all farmers within a block were homogeneous and that the extension messages being delivered would be found relevant to all (Kabuye and Mhango, 2006).

2.7.3.5 The Pluralistic and Demand Driven Agricultural Extension Services System (DAESS)

MOAFS (2000) observes that the supply driven system of training of individual farmers that used to work effectively in the 1970s is no longer appropriate. With the

agricultural sector faced with growing farming population, collapse of the farmer club system and deaths and retirement of extension workers, the old systems could no longer hold. The situation also got compounded by inadequate training of new workers, failure to retain existing workers and declining resource allocation to the agricultural sector (GOM, 2009b). Leeuwis *et al.* (2004) suggests that under the current environment, one of the challenges that extension organizations face is to devise innovative ways of both working with limited resources and of accessing new sources of income.

Additionally, the transfer of technology approaches practiced for over two decades were no longer consistent with the current socio-economic and political environment facing Malawi (MOAFS, 2004). These included decentralization, market liberalization and shrinking public sector resources among others (MOAFS, 2000). On the other hand, the sector also experienced the emergence of non-governmental organizations; private sector and farmer based organizations increasingly taking the lead in providing extension services and allied training for smallholder farmers. To accommodate these changes, MOAFS in the year 2000, reoriented its extension policy towards pluralistic and demand driven services.

The current extension services system encourages use of participatory approaches to involve farmers more meaningfully in problem solving and ownership of approaches (MOAFS, 2004). Under pluralistic extension services, the public sector, private sector, NGOs and Farmer Organizations are required to coordinate their activities to better respond to farmers' demands. The extension policy also clearly stipulates that

the focus for co-ordination for extension should be at district level as a way of bringing services closer to the clients.

2.8 OVERVIEW OF CBRLDP

The Malawi CBRLDP was conceived as a way of piloting the current National Land Policy that has been partly illustrated in chapter one of this study. An overview of the categories of land ownership under the MNLP is certainly important in order to understand some of the design factors that informed the implementation arrangements of the CBRLDP.

2.8.1 Categories of land ownership under the MNLP

The MNLP recognizes three land tenure categories namely Government Land, Public Land and Private Land (GOM, 2002). Government land is deemed to comprise all land acquired and privately owned by government and dedicated to specific national use or for private uses sanctioned by government. Public land is considered as all land held in trust and managed by the government or Traditional Authorities (TA) and openly used or accessible to the public at large. Within the Traditional Authority, public land includes land not allocated exclusively to any group, individual or family. Such unallocated customary land applies to *dambos* and dry season communal grazing areas whose use is limited to members of that community (GOM, 2002), retaining the attribute of excludability.

Private land is defined as all land exclusively owned, held or occupied under freehold, leasehold and customary tenure to a clearly defined community, corporation, organization, clan, family or individual (GOM, 2002). This effectively turns customary land into private property to ensure tenure security and safeguard

against further expropriation. Under the current nomenclature, customary land is christened as 'customary estate'.

2.8.2 Models of land reform and the rationale for the CBRLDP

Malawi's three land reform models are best expounded as expressed by Moyo (2008) cited in Sintowe *et al.* (2011). According to him, these are the state model, the market model and the popular model which vary in the selection of land, method of acquiring land, selection of beneficiaries, method of transferring land to beneficiaries and support to beneficiaries.

The *state model* acquires land either compulsorily (expropriation) or on "willing seller-willing buyer" (WSWB) basis. It selects beneficiaries and transfers the land to them through collective or individual title. With compulsory acquisition, no compensation is paid to the land owner, while under WSWB, government purchases the land offered by owners at market price and compensates the land owners before selected beneficiaries are allocated.

The *market model* puts beneficiaries at the centre of land reform. Communities select themselves and enter negotiations with landlords over the location and price of land. They then purchase the land and receive title from the landlord. The state facilitates and supports the process through the imposition of taxes or through the provision of incentives to landlords to encourage them to dispose of the land. Government and other development agencies may provide loans and grants to the poor to enable them to purchase land, build infrastructure and other support for setting up viable farming operations.

Under the *popular model*, self-selected beneficiaries choose and settle on the land illegally, as in the case of encroachment, awaiting legal formalizations by the state. Social mobilization is mostly used by indigenous groups and the landless poor. For the indigenous poor the motive is of obtaining secure rights, titles or access to traditionally held land. This approach has mostly been experienced in Zimbabwe, South Africa (mainly urban land in the 1980s), Malawi (1990s) and Namibia (2000s).

The *state model* is the most widely used in land reform initiatives in the developing world. Its strength rests in making land available either through coercive expropriation or wilful land sales by land owners to the state. The major weakness is its propensity for beneficiary targeting being affected by corruption and political manipulations.

The *market model* is arguably the most efficient means of implementing land reform. Its suitability lies in the peaceful, participatory and empowering community driven processes of beneficiary identification, land acquisition and development. The approach is also less prone to high level corruption and political interference.

The *popular model's* obvious weaknesses are that it makes it difficult to assess its effectiveness, efficiency, scalability and consequently its sustainability. The CBRLDP was structured on the market based model reflecting the World Bank's recommended Market Led Agrarian Reforms (MLAR). The guiding principle of the MLAR is that the cooperation of landowners is the most important factor for any successful implementation of land reform (Santurnino and Borras, 2003). According to Pereira (2007), market assisted land reform is conceived as a substitute for

redistributive land reform where the former is based on land trading and the latter on the expropriation of rural properties that do not fulfill their social function. The MNLP define social function of land as the most desirable use of land considering its location and scarcity value as well as physical and environmental attributes. De Klerk (1990) further considers land that fails to fulfill its social function as constituting among others, underutilized or abandoned land and land farmed by monopolies or absentee landlords.

In the MLAR format, only the land owner who is willing to sell his land is brought into negotiation. The aim of this negotiated approach is to overcome the confrontational approaches that have characterized land reform programs. This notwithstanding, the approach has not been without its own setbacks in other countries. For instance, the existence of large amounts of unutilized and underutilized estate land implies that there would be adequate land supply to enable beneficiaries to choose the most suitable lands (Deininger, 1999). However, Deininger (1999) in his assessment of pilots in negotiated land reform noted that the land offered for sale was often of marginal quality and hardly suitable for land reform while some of the best land continued to lie idle.

2.8.3 Objectives of CBRLDP

The objective of the CBRLDP was to increase the incomes of about 15 000 poor rural families by implementing a decentralized, community based and voluntary approach to land reform in pilot districts of Mangochi, Machinga, Thyolo, Mulanje, Balaka and Ntcheu (GOM, 2004). The project specifically provided land to the landless and land poor Beneficiary Groups (BGs) with the following aims:

- Improve land delivery systems of accessing, titling and registration;
- Provide security of land tenure;
- Increase agricultural productivity
- Increase incomes (GOM, 2004).

The expectation was that these aims would increase opportunities for sustainable livelihood and contribute towards reducing rural poverty. The project was one of the initiatives by the GOM in implementing the Land Reform Program. The project focused on rural areas where poverty was most pervasive. According to GOM (2004) the project's expectation was to achieve the following outcomes:

- Secure community land assets
- Ownership of land parcels by individuals and households
- Increased chances of sustainability of both individual and group land development infrastructures
- Empowerment of the communities to manage their own development
- Improved food security
- Improved access to social amenities
- Poverty reduction

2.8.4 Project components

The CBRLDP consisted of four components namely Land Acquisition and Farm Development (LADF), Land Administration, Capacity Building and Project Management Monitoring and Evaluation (GOM, 2004).

- *Land acquisition and farm development (LADF)*

This component facilitated land purchases, beneficiary relocation, provision of basic amenities, purchase of farm inputs and training in farm and production management. Under the same component was also productivity improvement, extension services for agricultural technology innovation and produce marketing (GOM, 2004).

According to the project implementation manual (GOM, 2004), the process of acquiring land started with the community choosing an estate they were interested in from a list of eligible estates compiled and verified by Project Management Unit (PMU) and district council officials. The beneficiary group was provided with indicative prices to inform the price negotiation. Representatives of the beneficiary group negotiated the price with the estate owner until they reached an agreement. Thereafter, the owner issued a provisional letter of agreement to sell land to the group. Assisted by agricultural officers, the Beneficiary Group (BG) prepared a farm development plan. An application, together with individual and group expression of interest forms, the provisional letter of agreement and preliminary farm development plan, was sent to the district council for appraisal. After receiving the application pack, the Lands Project Officer issued a 21 day public notice of the intended sale of land in public places and newspapers. While this was in force, a field appraisal team from the district council went to evaluate the estate in the presence of members of the concerned Project Management Committee (PMC) and the general public. The field appraisal team compiled a report with recommendations for the approval of the District Executive Committee. After approval, the LADF proposal was forwarded to the PMU for consolidation and forwarding to the National Technical Advisory

Committee (NTAC) for further review. Ultimately, the application went to the office of the Secretary for Lands, Housing and Urban Development for final appro val after which payment was made by MASAF directly to the seller. The amount for land acquisition was up to 30% of the LADF grant allocated to the beneficiary group. Detailed farm development plans were a prerequisite for funding disbursements to the community. These plans were supposed to show layout of homesteads and gardens, arable lands, social amenities, grazing areas, woodlots and gross margin analyses of different agricultural enterprises proposed for the farm. For provision of community assets such as boreholes, access roads, clinics and others, the beneficiary communities were required to apply to Malawi Social Action Fund (MASAF) for financing. MASAF which later came to be called Local Development Fund (LDF) is a financing mechanism which supports and strengthens the decentralization process in Malawi by devolving political and administrative powers and responsibilities to local authorities based on the principle of subsidiarity (GOM, 2010a). Its aim is "to empower local communities to take part in the decision making processes through improved local governance and development management in order to reduce poverty and improve service delivery.

Its specific objectives as illustrated by GOM (2010a) are to:

- Support planning and management of development resources, provided by government and development partners, at the district and community levels.
- Provide resources which ensure that development investments respond to the local priority development needs.
- Facilitate the implementation of the National Decentralization Policy.

- Enhance the accountability of local authorities to their constituents.

As can be seen from the objectives, the funding mechanism promotes community driven development initiatives and overcomes the top-down approaches that have characterized rural development for many years. Funding is accessed through four windows namely: community window, local authority window, urban window and performance window (GOM, 2010a).

The objective of the Community Window is to enhance the capacity of communities to plan, manage and sustain their own development which addresses their priorities. This window supports projects for improvement of primary service delivery at community level such as primary education and health, community managed water supply, roads and social support type projects. Based on this mandate, provision of social infrastructure for beneficiaries under the CBRLDP was supposed to be supported under this window.

The Local Authority Window aims to improve the incomes of the poor through investment projects which use labour intensive methods of implementation and which provide a public good. Projects may include road improvements, soil conservation, reforestation, solid waste disposal and bridges linking more than one community. Similarly, CBRLDP beneficiaries could benefit from this window.

The Urban Window aims at financing socio-economic infrastructure in the urban centres which are both labour and capital intensive to stimulate local economic development especially for the low income groups. Since most of the CBRLDP

beneficiaries relocated to typical rural areas, there was little chance for them to benefit from this window.

The Performance Window aims to finance capacity development requirements of local authorities in the management of their core functional areas and to reward good performance through annual performance assessments.

- *The Land Administration Component* (LAC)

This component supported the Ministry of Lands, Housing and Surveys (MLHS) in carrying out land administration activities. This involved conducting surveys to confirm boundaries and clear titles of sellers for parcels to be acquired; registering titles subject to a caution that land will not be transferred or leased for the first five years from the date of purchase and transferring the acquired land to the beneficiaries in the land registry.

- *Capacity building component*

This component aimed at enhancing capacities of stakeholders for the effective implementation of project activities. This constituted formal and informal training; institutional development; recruitment of project personnel and provision of resources to beneficiary groups, central and local government institutions and other stakeholders to enable operations to be executed effectively.

Specifically, the component's objectives were to:

- Create an enabling environment for effective land administration in pilot districts.

- Strengthen institutional, technical and human resource capacities for land development management and governance.
- Support the enhancement of institutional linkages, communication systems, and knowledge and information management.
- Respond to capacity building requests from stakeholders that were supported by district assemblies.

Since the implementation of the project hinged on a decentralized paradigm, the strategy for implementation emphasized building capacities at district and community levels as pivotal to the success of the project. The extent to which this pathway was pursued and attained formed part of this enquiry.

- *Project Management, Monitoring and Evaluation Component* (PMME)

This component provided support for implementation, technical assistance and studies as and when it was necessary. It supported activities carried out by the three other components of the project and cross cutting issues complementary to institutional development and good land stewardship at the community level. The main tasks of project management focused on:

- Project administration, coordination, monitoring and supervision.
- Review land acquisition and land development proposals submitted by DEC before forwarding them to NTAC.
- Supervising district lands officers (DLO) and a social mobilization officer.
- Ensure efficient utilization of project resources.

- Monitoring and evaluation, including environmental and social impact assessment.
- Carrying out audits
- Developing accounts and financial management systems.
- Procuring goods and services other than those under LAFD component.
- Mainstreaming cross-cutting issues such as gender, environment and HIV/AIDS
- Liaison with MASAF Management Unit (MU).

2.8.5 CBRLDP structure

2.8.5.1 Overview of CBRLDP pilot districts

The CBRLDP project was implemented in six districts namely Mulanje, Thyolo, Machinga, Mangochi, Balaka and Ntcheu. Districts of Balaka and Ntcheu were added three years before the end of the project to provide additional sources of estates for resettlement. This was arrived at after realizing that none of the tea estates in Mulanje and Thyolo had offered their idle lands for sale to the project and that offers of estate land for sale in Machinga and Mangochi were now becoming less and less. Except for Ntcheu which lies in the central region of Malawi, all the other districts are in the southern Region.

Table 2.1: Land area and population characteristics of implementing districts

District	Land Area (km^2)	Population Density ($People/km^2$)	Total Households (n)	Average Household Size (n)
Mangochi	6 273	128	185 915	4.3
Machinga	3 771	130	115 136	4.2
Thyolo	1 715	343	142 039	4.1
Mulanje	2 056	256	127 417	4.1
Balaka	2 193	144	75 656	4.2
Ntcheu	3 424	139	113 791	4.3

Source: 2008 Population and Housing Census

Table 2.1 shows Thyolo and Mulanje as districts that have the highest population densities with 343 and 256 people/km^2 respectively. Mangochi and Machinga have the least number of people per square kilometer (128 and 130 persons per square kilometer respectively). Coincidentally, most of the arable land in Thyolo and Mulanje is under tea estates owned by foreign investors who have been running them since the late 1900s.

2.8.5.2 Criteria used for selection of beneficiaries

Based on expressed need for land coupled with willingness to relocate as a group to newly acquired land, beneficiaries were a group of self-selected and organized individuals (Sintowe *et al.* 2011). The beneficiaries had to pass individual and group criterion given in the Table 2.2.

Table 2.2: Beneficiary Selection Criteria

Individual Applicant	Beneficiary Groups
▪ Malawian citizens	▪ No member of the group had benefited from previous land redistribution
▪ Landless or land poor and food insecure rural households from the pilot districts (as certified by COCs or community targeting mechanism.	▪ Cohesive groups with a common purpose and a constitution (minimum of 10 and maximum of 35 households) that demonstrate sound organizational capacity.
▪ With the least amount of land but with the ability to work on more land than accessed	▪ Had to be strong and have an identifiable leadership with capabilities to mobilize groups
▪ With lowest income and least wealth	▪ The group had to demonstrate that capacity and accountability processes were adhered to in the process negotiating for land.
▪ Vulnerable individuals e.g. orphans and disabled) were recognized and accepted into groups	▪ Had to demonstrate that there was active participation by the entire group in the LADF process.
▪ Those that had not been encroaching on land being applied for, nor involved in labour disputes with owner of the land being applied for.	▪ Had to adhere to sectoral norms and recommended practices.

Source: Government of Malawi – Ministry of Lands, Physical Planning and Surveys (2004)

2.8.5.3 Role players and linkage structures

According to the Project Implementation Manual (GOM, 2004), the implementation strategy emphasized collaboration and strong linkages with relevant sector ministries, MASAF and civil society organizations as a way of effectively undertaking project operations. Fostering constructive partnership with NGOs and the private sector was to provide a sure means to improving collaboration and support towards enhancing the standard of living of poor communities and marginalized groups living in rural areas. Within the remits of decentralized government operations, District Agricultural

Development Offices (DADOs) falling under relevant District Assemblies (DAs) assumed a three-fold role under the project. They were to advise beneficiary groups on agricultural potential of the farm they want to purchase; advise the Beneficiary Groups (BGs) on the most appropriate farm enterprises for their farms and to provide extension services to the beneficiary groups.

2.9 OVERVIEW OF INTERIM STUDY FINDINGS ON CBRLDP

Final results of the 2009 survey by World Bank Independent Evaluation Group on the project reported by Gayatri *et al*. (2009) uncovered the following:

Productivity of beneficiary households did not significantly increase when compared with the control groups. The study attributed these findings to the fact that beneficiaries were still learning how to make the most of the resources after only two seasons in their new locations. The study made these observations particularly for households that relocated great distances and had to adapt to unfamiliar agro-ecological environments, cultural settings and new markets (Gayatri *et al*. 2009). Beneficiary groups also complained that extension services were inadequate.

Furthermore, the study found that households lacked reliable markets and market prices which adversely affected their economic wellbeing despite some improvements in production. Several beneficiaries accustomed to working as day labourers (piece work and casual labourers) on tea and coffee estates in the vacated districts of Thyolo and Mulanje reported difficulties in adjusting due to the lack of employment opportunities in Mangochi and Machinga districts. These employment opportunities help to supplement household income during poor harvests given the

unreliable markets and low market prices. Finally the study (Gayatri *et al*. 2009) revealed weak social networks and informal support systems for households that moved greater distances.

Another interim study (ECIAfrica, 2008) on the same project made the following findings:

- On food security, beneficiary households had the shortest period of holding food stocks from own production (five months following harvest) while surrounding communities holding stocks lasted eight months following harvest.
- Food shortages in almost all groups were reportedly as a result of low production and low production was linked to lack of technological know-how and lack of resources to buy inputs.
- Beneficiary households depended on piece work for food during lean periods, an indication of low financial capital. Only 9% of beneficiaries had access to loans implying reduced financial capacity to meet investment needs. This was attributed to the absence of lending institutions in the study areas.
- Beneficiaries also reported having difficulties to access extension services which was attributed to unavailability of extension workers and wide area of coverage by a single extension worker.

At that time, one would have expected these findings to trigger the need for involvement of other role players as well as strengthening collaboration through effective linkage structures for provision of adequate post settlement support.

An independent project impact evaluation conducted at the phase out of the CBRLDP in 2011 uncovered the following key findings (Sintowe *et al*. 2011):

- The project effectively relocated about 15 000 beneficiaries as initially planned and 90% of these received title deeds for the land they acquired. This implies that the project had performed satisfactorily in the area of increased land holdings and security of tenure.

- Crop production and productivity, income and food security reportedly registered improvements as well. However, the report interestingly observed that the impacts were higher in the short term, while they decreased over time. This means that already at the close of the project in 2011, sustainability of the project impacts was under serious threat.

- On social infrastructure in the relocated areas, the evaluation noted serious lack of water and sanitation facilities because the project expected that MASAF would provide them. Apparently MASAF did not live up to this expectation. As such, access to portable water remained a challenge to beneficiary groups in most districts (Sintowe *et al*. 2011).

- Relatedly, the evaluation reported coordination challenges that affected integrated planning of development resulting in social infrastructure provision such as schools, health centres, portable water and roads being inadequate.

- Furthermore, the evaluation notes that the project was not effective in securing access to reliable markets, extension and links to financial and credit institutions.

Considering that the implementation arrangements through which such type of services were to be provided were outlined in the project implementation manual, the failure to make these available raises questions as to what might have gone wrong.

2.10 CONCLUSION

Chapter Two looked into the relevance of land reform to sustainable livelihoods and poverty reduction. It also reviewed literature on how the quality of post settlement support affects the performance of land reform programmes. Furthermore, the chapter reviewed the challenges facing Malawi as a country in the area of agricultural productivity and what role the CBRLDP could play to address some of these problems. The pivotal role of extension as a driver of post settlement support, overview of CBRLDP implementation arrangements and some evaluation findings were briefly discussed to provide a solid background to the study.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

Chapter three illustrates the design and methodology used for the research. Firstly, it discusses the study area followed by the research methods, sampling and data collection methods used. The chapter also mentions the data analysis methods used.

3.2 THE STUDY AREA

The study was conducted in Machinga district which was one of the implementing districts for the CBRLDP. Machinga district lies in the south eastern part of Malawi. The district has 225 519 farming households, eight EPAs and 140 agricultural sections. Ideally, each agricultural section is supposed to have its own field agricultural extension worker, called AEDO. However, at the time of the study, only 49 agricultural sections were filled with AEDOs implying that 91 agricultural sections were vacant (Machinga Agricultural Office, 2013). This gives an extension to farm household ratio of 1: 4 603. The current government recommended ratio is at 1: 800. This confirms the seriousness of staffing vacancies at field level in MOAFS and the consequent difficulties in farmers' access to agricultural extension services. Aside the public extension service, the district has six non-governmental organizations involved in agricultural services namely, Emmanuel International, Project Concern International, Catholic Development Commission, World Vision, Adventist Development and Relief Agency and Leadership for Environment and Development (LEAD) - Malawi. While these NGOs are limited in the area of

coverage and scope of interventions, they also help in providing financial and human resource capacity for the provision of extension services in the district.

3.3 QUALITATIVE AND QUANTITATIVE RESEARCH METHODS

A mixed methods approach was used to conduct the study. Mixed methods research is defined as the class of research where the researcher combines quantitative and qualitative research techniques, methods, approaches concepts or language into a single study (Johnson and Onwuegbuzie, 2004). Mixed methods approach was preferred as it offered opportunities for between-methods triangulation and explanation of existing causal relationships (Johnson *et al*, 2007). The study used quantitative methods like structured surveys and qualitative methods like focus group discussions with various role players who took part in the implementation of the project.

3.4 ANALYTICAL FRAMEWORK

In order for the study to account for alternate explanations the study primarily used the within subjects design. This is a design in which all participants receive all treatments very close in time or sometimes simultaneously (Leedy and Ormrod, 2013). The procedure involves a pre-intervention observation or measurement to establish a baseline (or control for the dependent variable). This is followed by a planned intervention (independent variable) and subsequent observation and measurement related to the dependent variable (Saunders *et al.* 2012). The baseline studies conducted provided the needed pre-intervention status of beneficiaries upon which the ex-post impact results were compared.

Practically, performance of project beneficiaries was compared across randomly sampled beneficiaries obtained from a random sample of beneficiary groups that resettled in estates belonging to Nsanama, Chikweo, Mbonechera and Nyambi EPAs. This was done to establish if performance differed significantly across the four distinct regions and further determine whether such differences were attributable to random error or errors inherent in the implementation process. The results of the analysis were compared with baseline information obtained from studies conducted at the different stages of project implementation to establish if any improvements existed.

The design returned its internal validity because its treatment effects were localized (Leedy and Ormrod, 2013). Moreover, key informant interviews with implementing agencies and role players as well as village development committees provided insights into the efficacy of processes and triangulated information collected from the household interviews to enhance the understanding of the findings regarding to their causes which had not been done before with this project.

3.5 SAMPLING

For the questionnaire survey, the study only targeted project beneficiaries. A total population of 4 419 beneficiaries resettled in Machinga District by the end of the project in 2011. Specifically, the project beneficiaries resettled in six EPAs namely Chikweo, Mbonechera, Nsanama, Nyambi, Nampeya and Nanyumbu. According to the project records, 349 beneficiaries resettled in Chikweo EPA in 19 beneficiary groups. 968 beneficiaries resettled in Mbonechera in 47 beneficiary groups. 400 beneficiaries resettled in Nsanama in 21 beneficiary groups. 2 589 beneficiaries

resettled in Nyambi in 120 beneficiary groups. 92 beneficiaries resettled in Nampeya in 4 beneficiary groups. 21 beneficiaries resettled in Nanyumbu in one Beneficiary Group. Due to resource limitations a 9% sample size was used which translated into 400 respondents. Four EPAs out of the six involved were purposefully selected for the study. The selection was based on the number of beneficiaries resettled. The four EPAs with highest numbers of beneficiaries were selected for the study namely Nyambi, Mbonechera, Nsanama and Chikweo. The rationale was to ensure that the selected EPAs should be able to absorb the allocated sub-sample. Each of the four selected EPAs was allocated a sub-sample of 100.

Multistage systematic random sampling was used. The first stage was to systematically sample beneficiary groups from each EPA. A 30% sample size was used to determine the number of beneficiary groups to be selected per EPA for the study. As such, for the sampling of respondents, 6 BGs, 14 BGs, 6 BGs and 36 BGs were selected for sampling of respondents in Chikweo, Mbonechera, Nsanama and Nyambi respectively.

Beneficiary lists for the sampled BGs in the four selected EPAs were obtained from the District Commissioner's Office. The database included names of beneficiaries, name of beneficiary group, year of relocation and name of estate where they relocated. The second stage was to systematically sample 100 respondents from the beneficiary list of the sampled BGs for each of the selected four EPAs to which the structured questionnaire was administered. Purposeful sampling was used to identify a list of eight key implementing agencies and role players to which key informant

interviews were independently conducted. Key informant interviews were conducted with representatives of the following organizations:

- District Agriculture Development Office for Machinga.
- Agriculture Extension Development Coordinators for sampled EPAs.
- Agriculture Extension Development Officers from the sampled EPAs.
- Director of Planning and Development for Machinga District Council.
- Former District Lands Officer representing the Project Implementation Unit.
- Former MASAF justification officer for Machinga District.
- Area Development Committees.
- Project Management Committees for the sampled Trusts.

The organizations and individuals were selected based on their level of involvement in the implementation of the CBRLDP and experience in local development procedures and processes.

3.6 DATA COLLECTION

The study made use of both primary and secondary data sources to generate evidence from which judgments about project impacts were made. Primary data was collected through interviewing using structured household questionnaires and semi structured interviews with key informants. Household questionnaires were administered to 100 sampled beneficiary households each from Chikweo, Nsanama and Nyambi EPAs. In Mbonechera there was a 3% non-response rate such that only 97 respondents were interviewed out of the sampled 100. As such the actual sample interviewed for all sampled EPAs was 397. Interviews were done by meeting the sampled beneficiary at

his or her homestead for a face-to-face interview after which the enumerator moved to the next sampled beneficiary.

Semi-structured interviews were conducted with purposefully selected individuals and groups to generate qualitative information about efficacy of processes and the eventual impacts of the project. These semi-structured interviews targeted stakeholders in the implementation of the project which included government staff, project staff, local development committees and project management committees that were involved in implementation. Face-to-face interview method was preferred in this study because of its tendency to maximize response rates, enable more in-depth exploration of issues and makes possible for illiterate members of the community to participate (University of Pretoria, 2012).

Secondary data was collected through project documents reviews. These constituted the project implementation manual, baseline survey, interim evaluation reports and end line evaluation reports from both internal and independent evaluation teams. Different methods of data collection provided the latitude for triangulating data to enhance the understanding and interpretation of the survey results. Data collection took place from 4th October to 18th October, 2013. Ten enumerators were used for data collection. The enumerators were hired from Ministry of Agriculture and Food Security's Department of Agricultural Planning Services (DAPS). These were trained enumerators in agricultural surveys that are designated in District Agricultural Offices across the country. A three day meeting was held with the enumerators in preparation for the survey. On the first day, the enumerators were briefed on the survey, its objectives and taken through the survey instruments, question by question

to enhance their understanding. For the free response questions, interviewers were encouraged to read back the responses written down to make sure that respondents are not being misquoted. Enumerators were further encouraged to check their schedules for completeness, accuracy, legibility and consistency before they left the respondent or before moving for the next interview.

3.7 PILOT TESTING

The survey instruments developed for both quantitative and qualitative data collection were pretested before they were administered to the sampled respondents and groups. This happened on the second day of enumerators' training. Pretesting was done in Balaka District which is one of the implementing districts for the CBRLDP. Pretesting was done a week prior to the planned commencement of the data collection process. The exercise was meant to assess the clarity of survey instruments, establish the timing and train the data collectors. Each of the ten enumerators was given three questionnaires for pre-testing. One beneficiary group was identified in Balaka District to which a sample of 30 was deduced and the questionnaires administered. The researcher demonstrated and closely supervised the exercise to take note of the challenges encountered. Each enumerator took notes of his/her observations during the exercise to input into the feedback meeting the next day. A project management committee (PMC) for the same trust was used for a pre-test of the Focus Group Discussions. The survey instruments were later adjusted based on the findings from the pretesting exercise.

3.8 DATA ANALYSIS

Primary data collected was captured using Excel. IBM SPSS statistics Version 21 was used to compute single frequencies and descriptive statistics such as means and standard deviation and also to perform statistical tests.

Recording of answers to the semi structured interviews for the rest of the research objectives were done through taking notes as well as tape recording for eventual transcription to ensure that correct responses are collected. Analysis of data for the semi-structured interviews started with reading through all the transcripts several times identifying emergent themes and insights. The process led to development of a list of all topics encountered. Thematic codes were then developed to categorize responses into key demographic, knowledge or attitude traits to help in data analysis.

3.9 MEASURES TO MINIMIZE SURVEY ERRORS

Random errors were kept to the minimum through the sampling design outlined above. Systematic errors were reduced through triangulation of responses with the key informant interviews included in the study, probing of responses and cross checking with secondary data sources. The generated respondent samples also provided for reserve lists to enable replacement of absent or non-response cases. Careful planning and timing of the interview visits and callbacks were used to reduce non-response rates.

3.10 CONCLUSION

Chapter three explained the research design and methodology used in the study. The study was conducted in Machinga District in four Extension Planning Areas.

Essentially, the methodology aimed at comparing performance of the project across the four EPAs in areas of land tenure, food security and income of beneficiaries two years after phase of the project. It also aimed at assessing post settlement support performance of the beneficiaries across the four EPAs.

CHAPTER 4

SOCIAL PROFILE AND LAND TENURE STATUS OF BENEFICIARY HOUSEHOLDS

4.1 INTRODUCTION

Chapter four provides results of the study conducted to profile the social aspects of CBRLDP beneficiaries in Machinga District. It also reflects on the status of land tenure for the beneficiaries.

4.2 SOCIAL AND DEMOGRAPHIC PROFILE OF BENEFICIARY COMMUNITIES

The study was conducted in Machinga District where land reform beneficiaries resettled since 2005. While some beneficiaries relocated to the estates from Mulanje and Thyolo districts, a majority of beneficiaries came from within Machinga district. Table 4.1 shows an overview of the number of groups by district of origin and year of relocation.

The largest number of relocations happened in the years 2006, 2007 and 2008 with 62, 65 and 53 groups relocated respectively. By 2008, 86.3% of the beneficiaries had relocated and by 2013, when this study was carried out, beneficiaries had five seasons or more of agricultural production in the resettled areas. This was accepted to be sufficient time to enable the objectives of the land reform pilot project to manifest amongst the beneficiary households.

Table 4.1: Number of beneficiary groups by district of origin and year of relocation

District of Origin	Year of Resettlement						TOTAL
	2005	2006	2007	2008	2009	2010	
Machinga	2	46	64	52	22	7	**193**
Mulanje	0	12	0	0	0	0	**12**
Thyolo	1	4	1	1	0	0	7
TOTAL	**3**	**62**	**65**	**53**	**22**	**7**	**212**

The largest number of beneficiaries (92%) relocated within Machinga District. Within district relocations were those where beneficiaries moved from one part of the district to another part to acquire more land or where former tenants and encroachers of an estate were made to formerly own pieces of land of the acquired estate. Within district relocation had the benefit of reducing some of the conflicts that arose due to long distance relocations (Pricewaterhouse, 2007). For surrounding communities who could not afford to buy land on their own, within district relocation helped to normalize land wrangles that arose from encroachment into estates by the surrounding communities. This also increased acceptability of the incoming beneficiaries by the receiving community since local communities formed part of the project beneficiaries. Table 4.2 provides an overview of the profile of land reform beneficiaries in the various districts of origin and the four EPAs namely: Chikweo, Mbonechera, Nsanama and Nyambi.

Table 4.2: Resettlement profile for land reform beneficiaries in Chikweo, Mbonechera, Nsanama and Nyambi Extension Planning Areas

Profile	District of Origin			EPAs			
	Machinga	Mulanje	Thyolo	Chikweo	Mbonechera	Nsanama	Nyambi
Number of Beneficiaries	4086	220	113	349	968	400	2589
Number of Hectares	-	-	-	751.80	1842.11	1173	5762.55
Average Landholding size (ha)	-	-	-	2.2	1.9	2.9	2.2
Number of Trusts[1]	193	12	7	19	47	21	120
Mean beneficiaries/ Trust	21	18	16	18	21	19	22
% of Total Beneficiaries	92.00	5.00	3.00	8.10	22.50	9.30	60.10

The average land holding size per beneficiary household of 2.2 ha imply that the project managed to deliver land parcels as proposed. The project was expected to allocate at least 2 hectares of land per household for farming and an extra 0.5 ha that was expected to be partly used for buildings and other community infrastructure.

[1] The Trust referred to is the same as the beneficiary group. After registration, the beneficiary group formed a legal entity called a "Trust".

From the results, the worst land constrained districts of Thyolo and Mulanje had the least number of beneficiaries relocated. If this was a trend for the rest of the districts where relocation took place it means that beneficiaries most in need of land were not adequately assisted.

Nyambi extension planning area was the largest recipient of beneficiaries (60.1%) followed by Mbonechera (22.5%). This reflects the number and sizes of idle estates available and the willingness of the estate owners to sell their land to the project. Mean number of beneficiaries per trust (beneficiary group size) ranged from 18-22 members across the resettled extension planning areas. This demonstrates success in sensitization and mobilization of communities to participate in the project. At community level, the Area and Village Development Committees were the organizational structures responsible for sensitization and mobilization of communities to participate in the project. These committees are chaired by a Traditional Authority (TA) and Village Headpersons respectively. Sensitization and mobilization was also achieved through other information and communication strategies like radio and television, posters and leaflets which together increased access to information about the project.

4.3. GENDER, AGE, MARITAL STATUS OF HOUSEHOLD HEAD AND AVERAGE HOUSEHOLD SIZE

Household composition in many ways determines participation, decision making as well as how benefits are shared amongst members of a household. The study enquired about a few aspects of household composition for beneficiaries of the CBRLDP. Table 4.3 summarizes the beneficiary household characteristics.

Table 4.3: Household characteristics of CBRLDP beneficiaries in Machinga

Characteristic	Status	Percentage
Gender of household head	**Male**	82.40
	Female	17.60
Marital status	Married	86.90
	Not Married	13.20
Mean age of household head (years)		43.47
Mean household size		6.29

The beneficiary households were predominantly male headed (82.4%). 87% of household heads were married. Out of the 13.2% unmarried households, 4.8% were widowed, 7.6% divorced and 0.8% separated. These results imply that most of the beneficiary households had stable families. Stability of a family, defined by the existence of a married couple, has a bearing on availability of labour for the household especially under smallholder farming which mostly relies on family labour.

The Chi-square test was used to test the relationship between EPAs and gender (Table 4.4). Gender differed significantly across the four EPAs at 5% level of significance (χ^2 = 10.12; df = 3; p = 0.018). In Chikweo EPA, there were fewer female headed households (10) than was expected (17.6) under the null hypothesis of no relationship. In Mbonechera, there were more female headed households (25) than was expected (17.1) under the null hypothesis of no association.

Table 4.4: Relationship between EPA and gender (n =397)

Gender	Extension Planning Area			
	Chikweo (%)	**Nyambi (%)**	**Mbonechera (%)**	**Nsanama (%)**
Males	90.00	86.00	74.20	79.00
Females	10.00	14.00	25.80	21.00
Total	**100.00**	**100.00**	**100.00**	**100.00**

The variation of marital status over the four EPAs illustrated in Table 4.5 indicated a significant difference (χ^2 = 9.42; df = 3; p = 0.024). In Chikweo, fewer unmarried persons were found (6) than what was expected under the null hypothesis of no association (13.1), while Mbonechera EPA, had more unmarried persons (20), than was expected (12.7) under the null hypothesis of no association.

Table 4.5: Relationship between EPA and marital status (n =397)

Marital Status	Extension Planning Area			
	Chikweo (%)	**Nyambi (%)**	**Mbonechera (%)**	**Nsanama (%)**
Married	94.00	88.00	79.40	86.00
Not Married	6.00	12.00	20.60	14.00
Total	**100.00**	**100.00**	**100.00**	**100.00**

CBRLDP beneficiary households were predominantly larger than the national average. The average household size was 6.29 persons per household; 1.69 points

above the national average of 4.6. This meant more demands to achieve household food security due to higher household annual food requirements.

A one way analysis of variance (ANOVA) was conducted to compare the mean household sizes across the four extension planning areas. Figure 4.1 displays the distribution of household sizes across the four EPAs where the first quartile is displayed by the bottom line of the box plot; the third quartile by the upper line of the box plot and the median or second quartile in the box.

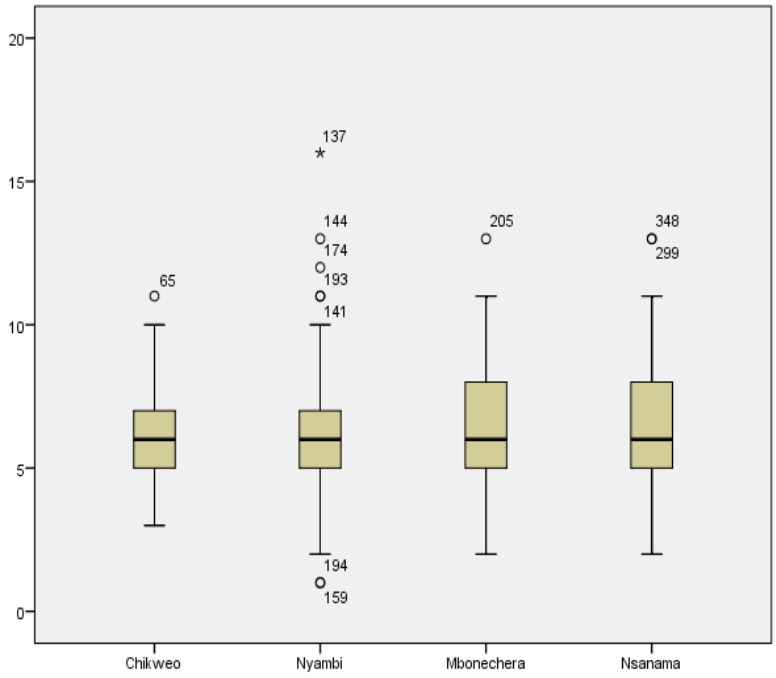

Figure 4.1: Distribution of mean household sizes across the four EPAs

The results of the one way analysis indicate that mean household sizes did not differ significantly among the four EPAs at 5% level of significance (F (3,393) = 0.747, p =0.52) implying that average household sizes were similar across all the EPAs. This

further demonstrates that household food requirements were also generally the same. However, Mbonechera and Nsanama EPAs had more households above the average size than there were in Chikweo and Nyambi. This could have been so because older households showed more interest to relocate than younger ones in these EPAs.

4.4 AGE OF HOUSEHOLD HEADS

The mean age of household heads was 43 years with Mbonechera EPA having the highest mean age (48 years) and Chikweo the lowest (41 years). The ANOVA indicated that the mean ages of the household heads differed significantly across the EPAs ($F(3.393) = 5.677$, $p = 0.001$). A post hoc multiple comparison of mean age of household heads across the four EPAs was conducted to determine where the mean ages differed. The test illustrated that mean ages of household heads for Mbonechera and Chikweo ($p = 0.002$) and Mbonechera and Nyambi ($p = 0.003$) differed significantly from one another (Table 4.6). The variation occurred because Mbonechera EPA had relatively a bigger proportion of older household heads than there were in Chikweo and Nyambi EPAs. This may be because the older households in Mbonechera EPA were much ready to relocate than the younger ones.

Table 4.6: Multiple comparison of age of household heads across EPAs (n =397)

(I) Region	(J) Region	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Chikweo	Nyambi	-.220	1.796	1.000	-4.98	4.54
	Mbonechera	-6.571*	1.809	.002	-11.37	-1.77
	Nsanama	-2.690	1.796	.809	-7.45	2.07
Nyambi	Chikweo	.220	1.796	1.000	-4.54	4.98
	Mbonechera	-6.351*	1.809	.003	-11.15	-1.55
	Nsanama	-2.470	1.796	1.000	-7.23	2.29
Mbonechera	Chikweo	6.571*	1.809	.002	1.77	11.37
	Nyambi	6.351*	1.809	.003	1.55	11.15
	Nsanama	3.881	1.809	.195	-.92	8.68
Nsanama	Chikweo	2.690	1.796	.809	-2.07	7.45
	Nyambi	2.470	1.796	1.000	-2.29	7.23
	Mbonechera	-3.881	1.809	.195	-8.68	.92

* The mean difference is significant at the 0.05 level.

4.5 EDUCATION LEVEL OF HOUSEHOLD HEADS

A large proportion of household heads reported to have undergone some level of education which translates into high prevalence of numeracy and literacy skills. 70.5% reported to have done primary education, while17.6% of respondents reported not to have undergone any form of schooling.

Numeracy and literacy skills have an implication on the ability of beneficiaries to understand various technical extension messages thereby improving agricultural production, agribusiness as well as group organization and development. In the light of low literacy levels among farmers, technology adoption becomes lower and consequently affect effectiveness of the extension service (MOAFS, 2000). Most of the farmers who are illiterate or semi-illiterate have difficulties in adopting new technologies and their understanding of farming as a business activity is limited.

Table 4.7 illustrates a statistically significant association between educational level of household heads and the EPAs (χ^2 = 20.11; df = 6; p = 0.002). In Chikweo, fewer household heads indicated they had no education (9%) than was expected (17.6%), while in Nyambi there were more household heads with no education (30%) than was expected under the null hypothesis of no association (17.6%).

Table 4.7: Relationship between EPAs and education level of household head (n = 397)

Marital Status	**Extension Planning Area**			
	Chikweo (%)	**Nyambi (%)**	**Mbonechera (%)**	**Nsanama (%)**
Primary Level	82.00	59.00	70.10	71.00
Secondary level	9.00	11.00	11.30	16.00
No education	9.00	30.00	18.60	13.00
Total	**100.00**	**100.00**	**100.00**	**100.00**

The differences in educational level among the four EPAs have profound impact in the delivery of agriculture support services especially technical training of farmers. In many cases, technical messages have to be modified, in their preparation and delivery, to suit the level of education of clientele. For farmers that cannot read and write, technical messages may have to be translated into a language that they can easily understand. Moreover, technical training may have to be through practical

hands on than otherwise. Understanding of this dimension about the community was therefore important.

4.6 LAND TENURE STATUS

The CBRLDP had, as one of its objectives, to improve land access to land poor smallholders farmers and ensure tenure security for the acquired land parcels. One of the thrusts of this study was therefore to ascertain whether land holdings had actually increased for the beneficiary households and also the extent to which the acquired land was secure from expropriation. The average landholding for farming was 2ha per beneficiary household. Considering that landholdings of the households were less than 0.4ha before this project, land holding sizes tremendously increased by 400% and more. 99.2% of respondents reported holding their acquired land under leasehold tenure as opposed to customary tenure under which they held their small parcels of land before the project. Individual land parcels were registered under a Trust consisting of a group of beneficiary households. As such, the project managed to ensure tenure security for the acquired land.

There was mixed evidence on beneficiaries' understanding of tenure rights. In relation to freedom of households to transfer title of their land, 71.5% indicated that they were free to do so, while 28.5 % said they were not allowed to transfer title deeds of their land. Out of those that felt they were free to transfer title of their land, 98% were of the view that they were allowed to transfer title of their land within the household only. 1.7% believed they were even allowed to sublease or rent to other users, while 0.3% believed selling the land to potential buyers was also permissible.

In relation to acquisition, utilization and disposal of the land, 62.5% respondents placed control in the beneficiary group (trust). 36.5% considered the beneficiary household to have the control, while only 1% respondents were of the view that the village chief held the control.

95% of beneficiary households showed to be apparently aware of the benefits of having their acquired land under leasehold tenure. However, the perceived benefits were predominantly related to future use of siblings (57.7%). 38.8% of beneficiary households viewed secure tenure as only helping them in safeguarding a large piece of land that enabled them to grow enough crops to increase their household food and income security without threat of dispossession by chiefs. Only 2.9% respondents were aware of the benefit of secure tenure as collateral for credit. Lack of such knowledge by the beneficiaries has the propensity of preventing them from maximizing benefits from secure tenure.

The results above indicate that the project managed to ensure tenure security of the acquired land. This was achieved by registering the land under leasehold title under communal ownership as a Trust. This according to Maxwell and Wiebe (1999) holds true, particularly where tenure security is defined as holding a registered deed or title. At phase out of the project, 90% of the beneficiary groups had their land registered under leasehold title (Sintowe *et al.* 2011). Control for the acquisition, utilization and disposal of the land was not vested in an individual person but the group as whole, which makes it difficult for an individual to take a unilateral decision on disposal of the land except where the disposal revolves around the beneficiary household itself (inheritance). This partly explains why most beneficiary households felt the benefits

for having land under secure tenure hinged on increased production due to bigger landholdings and future use of young ones. On the other hand, knowledge on the benefits of secure tenure appeared to be limited amongst the beneficiary households as they did not have insight into the possibility of using the leasehold title to secure loans or credit to improve their production. Deininger and Binswanger (1999) found that secure land ownership and the associated ability to use land as collateral can increase the supply of credit from formal sources. Barrows and Roth (1990) cited in Maxwell and Wiebe (1999) counters this notion by arguing that in much of Africa, land titling is not sufficient to increase access to formal sources of credit because farmers are reluctant to mortgage their land.

CHAPTER 5

PERCEIVED EFFECTIVENESS OF CBRLDP ON FOOD SECURITY AND HOUSEHOLD INCOME STATUS OF BENEFICIARIES

5.1 INTRODUCTION

Food security and increased household incomes for the beneficiaries were some of the objectives set for the CBRLDP. This was to be measured by the number of households that moved from running out of food from own production before the next harvest and the increase in household income over time. The expectation was that with increased land holding sizes and the complementary support provided, the beneficiaries would increase food production and consequently have sufficient food reserves to last them from harvest to harvest and even have surplus for sale. To ascertain the impact, the study measured the proportion of households with energy food reserves during critical months (December to January) in the 2012/2013 season which was a normal to above normal season for crop production.

5.2 ENERGY FOOD RESERVES DURING CRITICAL MONTHS (DECEMBER TO JANUARY)

The procedure for calculating the percentage of households that were food secure began with calculating the total household calorie requirements taking into consideration the energy content per kilogram (kcal/kg) of edible portions of major staple foods (King and Burgess, 1998). The process continued with computation of total household calorie requirements based on adult equivalents and standard calorie

requirement per adult person (2 100 kcal per day per adult equivalent). Total household calorie requirements for the lean period or critical months were then calculated after which the differential between energy required and energy balance was determined. A negative differential indicated that the household is food insecure and a positive differential indicated that the household is food secure (Storck *et al.* 1991) (Table 5.1).

Table 5.1: Proportion of food secure households during critical months (December to January).

EPA	% Food Insecure	% Food Secure	TOTAL
Nsanama	78.00	22.00	**100.00**
Chikweo	82.00	18.00	**100.00**
Nyambi	88.00	12.00	**100.00**
Mbonechera	91.00	9.00	**100.00**
AVERAGE	**84.75**	**15.25**	**100.00**

On average, only 15% of the sampled households were food secure during critical months during the 2012/2013 season. Mbonechera EPA had the largest proportion of food insecure households (91%) followed by Nyambi (88%) and Chikweo (82%). Nsanama EPA had the largest proportion of food secure households (22%). Considering that the 2012/2013 season received normal to above normal rainfall (Machinga Agriculture Office, 2013), the high proportion of food insecure households demonstrate that despite getting increased landholdings, the beneficiary

households were not able to achieve increased production levels to cater for their household staple food needs throughout the year. Low staple food production was attributed to lack of crop production skills as well as problems in accessing required inputs to support crop production.

5.3 STAPLE FOOD PRODUCTION, FOOD SHORTAGES AND COPING STRATEGIES

Average annual energy/staple food crop production was calculated for the major staple food crops in order to investigate whether the poor food security status of beneficiary households was due to crop production or other factors. The data was further triangulated to identify which households experienced food shortages during the 2011/2012 and 2012/2013 cropping seasons. Furthermore, coping mechanisms the food insecure households adopted whenever they run out of food were identified. Government of Malawi confirmed stagnation in productivity in most of the agricultural crops observing that the gap between potential yields and actual yields given the available technologies, ranged from 38%-53% for cereals and 40%-75% for legumes (GOM, 2009b). The government attributed this to low input use caused by poor agricultural credit, output and input markets, unfavourable weather, small landholding sizes and inadequate technology development and transfer. Low food crop productivity would naturally cause concerned households to run out of food from own production within the cropping season and further induce them to adopt mechanisms to cope with the food shortage. The nature and type of a coping mechanism may also be negative to future crop production potential of a given household plunging it further into the abyss of poverty. Table 5.2 depicts household

energy/staple food production levels for CBRLDP beneficiaries in Machinga District in the 2012/2013 season.

Table 5.2: Household energy/staple food production levels for CBRLDP beneficiaries (2012/2013).

Food Crop	Average Production (kg) 2012-2013 Season[2]							
	Maize	Cassava	Rice	Millet	Sweet potato	Banana	Sorghum	Other
Quantity Produced (kg)	233.74	379.90	175.34	52.78	301.25	210.00	52.92	72.41
% of Producers	54.60	12.00	7.30	2.20	2.00	0.50	6.00	11.80

Production levels were generally lower compared to the average household food requirements for an average household size of 6.26 people. Production levels averaged 233.73kg, 379.9kg, 175.34kg and 301.25kg for maize, cassava, rice and sweet potato respectively. These production levels translate into 806 403, 531 860, 587 389 and 364 512 kcal for maize, cassava, rice and sweet potatoes respectively. In Malawi, maize, rice and cassava are the dominant staple food crops and total kilocalories produced from these three food crop types only add up to 1 925 652kcal assuming each beneficiary grows each of those three food crops. Annual food requirement for an average household size of 6.26 members is 3 761 923kcal which leaves a differential of 1 836 271kcal. Potentially, yield levels for maize, rice and

[2]Indicates total energy/staple food produced. Since the indicator measured total energy/staple food produced as opposed to measuring yields, there was no need to capture hectarage planted to each crop.

cassava are reported to be 5 000kg, 3 500kg and 20 000kg[3] per hectare respectively (MOAFS, 2012). Mean production figures in Table 5.2 are all below 500kg/ha for maize, rice and cassava. Two possible explanations can be offered for this tendency. Either the area planted to either of these crops was too small (since production is a function of area planted and yield) or the yields were suboptimal to attain sufficient production. This demonstrates that most households produced food crops way below their annual food requirement, causing a large number of beneficiary households to experience food shortages. This may either be a result of poor crop production practices or limited access to production inputs as the critical production factors under a normal cropping season would be capital, labour and management. A one way analysis of variance was conducted to explore any differences in mean production of maize across the four EPAs. There were no statistically significant differences in mean production of maize in kilograms across the four EPAs ($F\ 3, 397 = 1.062$, $p = 0.366$) (Figure 5.1).

[3] The potential yield for cassava is based on fresh weight.

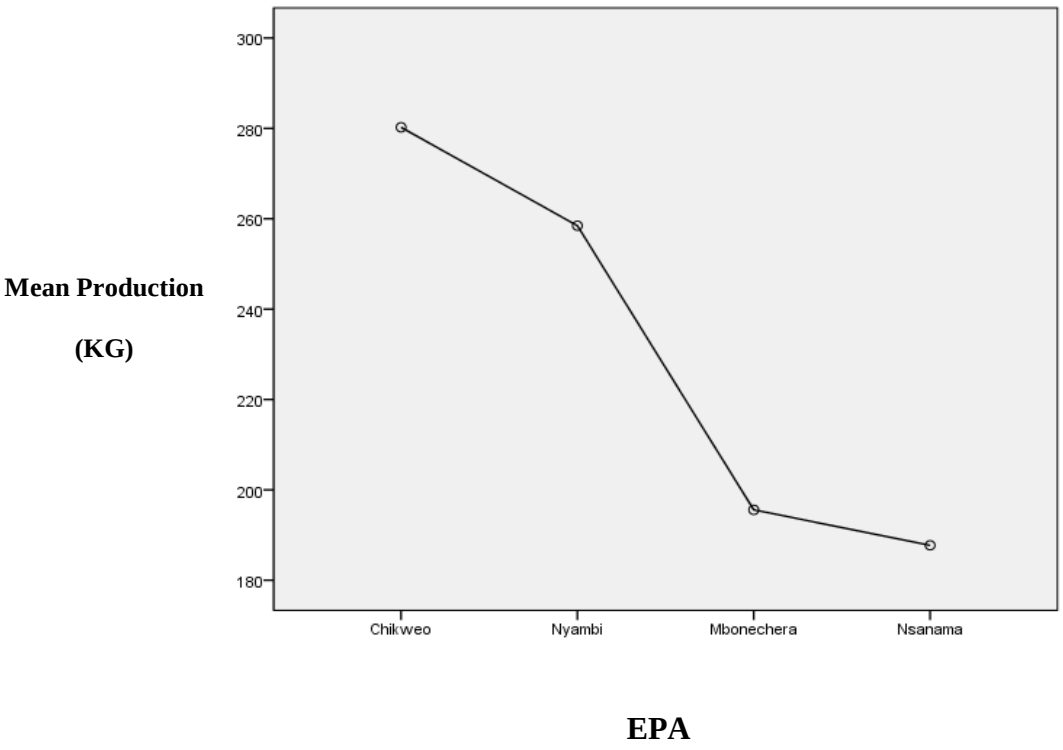

Figure 5.1: Comparison between EPA and amount of maize produced (kg)

Although mean production of maize did not differ significantly across the four EPAs, some EPAs had higher averages than others. For instance, Chikweo, Nyambi, Mbonechera and Nsanama has mean production levels of 280.4, 258.46, 195.6 and 187.7 kg respectively.

Since only a few respondents indicated the amount of cassava that they produce, a non-parametric Kruskal-Wallis test was conducted to determine whether the median production levels of cassava differed between EPAs. The results showed that there were no statistically significant differences between EPAs and mean production levels in kilograms of cassava ($\chi^2 = 6.88$; df = 3; p = 0.076) (Figure 5.2).

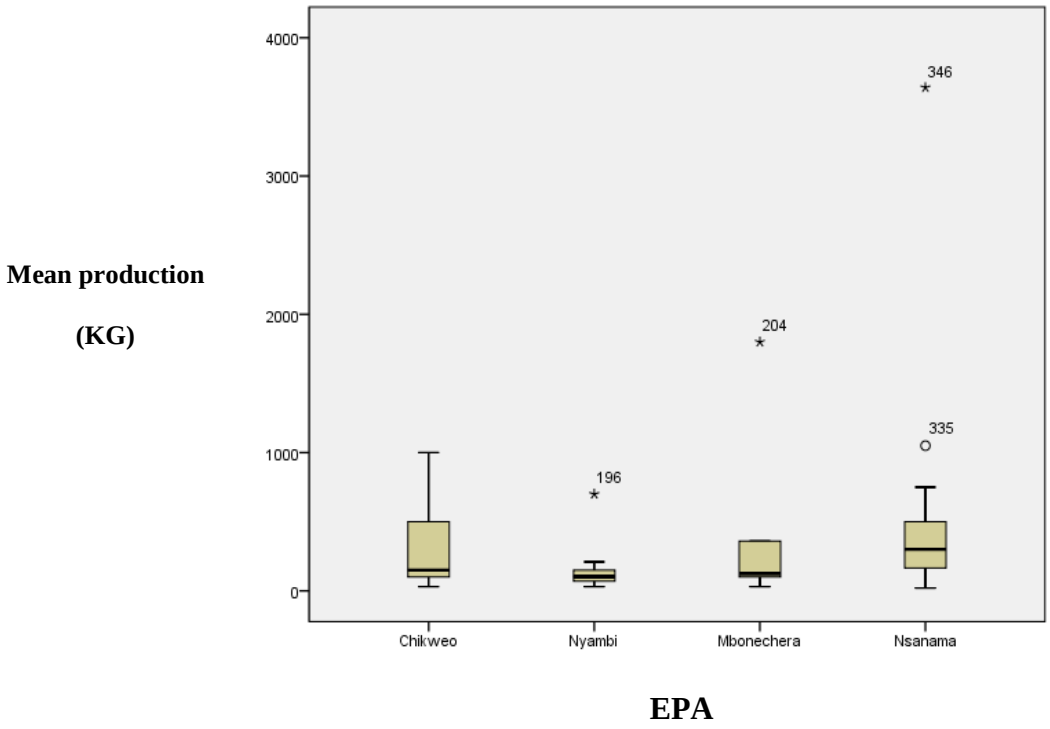

Figure 5.2: Comparison between EPA and amount of cassava produced (kg)

Although mean production levels were not significantly different across the four EPAs, some variations occurred which are worth noting. Nsanama had the highest mean production for cassava (495kg) followed by Mbonechera (423kg). Nyambi had the least mean production (297.78kg).

Similar results occurred when Kruskal-Wallis tests were further conducted to calculate median production levels of rice, millet, sweet potatoes and sorghum for the different EPAs. The results showed that there were no statistically significant differences between EPAs and mean production levels in kilograms of rice, millet, sweet potatoes, sorghum.

The results generally show that despite geographical differences of the four EPAs, mean production levels of all major food crops did not differ significantly, which implies that the generally low levels of production were not influenced by environmental and/or geographical differences of the areas but rather factors outside them. This could have been a result of farmers' lack of skills in production technologies or lack of access to production inputs.

A notable observation also occurred with the production of some food crops. For instance, in Mbonechera EPA no sweet potatoes were reportedly grown by any from a sample of 397 farmers. In Mbonechera and Chikweo no millet was grown during the 2013/2014 season. These observations indicate serious lack of crop diversification and also indicate minimal involvement of research and extension in the promotion of production technologies of less popular but high value crops.

Since the assertions above are based on quantitative measures of how much was produced against how much was the household food requirement, it was necessary to crosscheck these findings with actual household experience of food shortages or not in the past two seasons (2011/2012 and 2012/2013). The choice of two seasons was done to allow for comparison and deal with weather influences.

Machinga District lies in the low altitude area where the average rainfall ranges between 700-800mm per annum (MOAFS, 2012). Both seasons experienced normal to above normal rainfall (Machinga Agricultural Office, 2013). Table 5.3 provides an overview of respondents' experience of food shortage during 2011/2012 and 2012/2013 seasons.

Table 5.3: Proportion of CBRLDP beneficiary households experienced food shortages during the 2011/2012 and 2012/2013 seasons

Production Season	% Households with Food Shortage	% HH without Food Shortage	Total
2011/2012	69.00	31.00	**100.00**
2012/2013	72.50	27.50	**100.00**

69% and 72.5% households reported to have experienced food shortages in 2011/2012 and 2012/2013 production seasons respectively. This confirms the observation that despite getting larger land holding sizes, CBRLDP beneficiaries in Machinga district were not able to achieve and sustain adequate food crop production levels to ensure household food security.

Table 5.4: Differences in experiencing of food shortage during 2011/2012 season in the four EPAs (n = 397)

Food shortage	Extension Planning Area (EPA)			
	Chikweo (%)	**Nyambi (%)**	**Mbonechera (%)**	**Nsanama (%)**
Yes	66.00	71.70	73.20	65.00
No	34.00	28.30	26.80	35.00
Total	**100.00**	**100.00**	**100.00**	**100.00**

CBRLDP beneficiaries in Machinga district did not experience significant differences in food shortages during 2011/2012 cropping season (χ^2 = 2.3; df = 3; p = 0.511). Also for the 2012/2013 cropping season, the differences between EPAs in experiencing of food shortages were not significant (χ^2 = 5.10; df = 3; p = 0.0.164) (Table 5.5). Though the results were not significantly different, Mbonechera EPA had more households (73%) that experienced food shortage than the rest of the EPAs.

Table 5.5: Differences in experiencing of food shortage during 2012/2013 season in the four EPAs (n= 397)

Food shortage	**Extension Planning Area (EPA)**			
	Chikweo (%)	**Nyambi (%)**	**Mbonechera (%)**	**Nsanama (%)**
Yes	65.00	72.00	74.20	79.00
No	35.00	28.00	25.80	21.00
Total	**100.00**	**100.00**	**100.00**	**100.00**

During the 2012/2013 production season, Nsanama experienced the highest percentage of food shortages (79%) and Chikweo the least (65%).

Overall, for the two seasons (2011/2012 and 2012/2013), the results indicate that Chikweo performed relatively better than the three EPAs in terms of food security. These results demonstrate that a big challenge still exist to improve the food security status of beneficiary households even after receiving bigger land holding sizes.

Confirming further the preceding findings, beneficiary households reported adopting a wide range of coping mechanisms to avert the effects of staple food shortages. Table 5.6 illustrates a greater proportion of respondents (89%) abandoning their own crop fields during the hunger period to go and work in crop fields of neighbours and surrounding estates as casual labourers. 47% of the respondents indicated that they reduced number of meals per day, while 40% of the respondents resorted to reduction of food portions at meal times (Table 5.6).

Table 5.6: Coping mechanisms applied by food insecure households

Coping Mechanism	% of Beneficiaries Adopting
Working in other people's fields leaving own fields unattended	89.40
Selling household assets	3.90
Selling of livestock	15.80
Selling of breeding stock	0.30
Selling of farm inputs	0.30
Selling/cooking grain meant for seed	2.60
Reducing food portions at meal times	40.10
Reducing number of meals per day	47.40
Going to bed on an empty stomach	25.20
Controlled felling of trees for firewood or charcoal selling	1.00
Uncontrolled felling of trees for firewood or charcoal selling	3.90
Other	10.00

The coping mechanisms are negative in nature in that they affect next season's production prospects further entrenching the household into perpetual food insecurity. This is so because the traditional food deficit period for Malawi, usually from December to March, coincides with the critical time for land preparation and crop production.

5.4 INFLUENCE OF CBRLDP ON HOUSEHOLD INCOME OF BENEFICIARIES

5.4.1 Introduction

Another objective of the study was to determine the influence of CBRLDP on household income for the beneficiaries. Increased household income was one of the objectives set for the pilot project and this was supposed to be achieved through growing of both food and cash crops that could be sold. Increased household incomes can make a positive impact on food security status of households since it increases accessibility of households to sufficient, safe and nutritious food through cash purchases where own production has failed.

5.4.2 Average incomes of beneficiary households

The study quantitatively determined the overall average incomes for beneficiary households. Incomes were categorized in broad categories of on-farm and non-farm incomes in order to determine the contribution of each to the overall earning capacity of the households in the year 2013 (Table 5.7). Nominal average agricultural incomes of beneficiaries were lower (MK60 117) when compared with the ones observed at the end-of-project evaluation (MK88 004) (Sintowe *et al.* 2011). The income

differential could have been much lower if real values factoring inflationary trends over time were considered. However, Chikweo EPA (MK104 805) performed better in terms of average agricultural incomes seconded by Nyambi and Nsanama EPAs (MK56 827 and MK43 189 respectively).

Table 5.7: Average household incomes in the year 2013 in the four EPAs

(n = 397)

EPA	Average Farm Income in 2013 (MK)	Average off-farm Income in 2013 (MK)	TOTAL (MK)
Chikweo	104 805	24 880	**129 685**
Nyambi	56 827	32 113	88 940
Mbonechera	35 647	44 109	79 756
Nsanama	**43 189**	37 399	80 588
AVERAGE	**60 117**	**34 625**	**94 742**

The variation in average agricultural incomes can be attributed to the difference between EPAs involved in tobacco production. On average tobacco made a lot of income to participating households compared with other crops grown by the beneficiaries. This was so because of its organized marketing. In Malawi, tobacco production and sales are regulated by the Tobacco Control Commission and all tobacco is sold through the Auction Holdings Limited (AHL).

Off farm income was highest in Mbonechera EPA (MK44 109). This was largely contributed by small scale businesses especially dry fish sales from the nearby Lake Chirwa.

5.4.3 Sources of household income during 2012/2013 season.

Considering that rural household incomes may vary between on-farm and off-farm activities, the potential of all possible sources was investigated. The potential sources considered to contribute to the household income included livestock, crop, forestry and various off-farm incomes.

5.4.3.1 Overview of livestock farming in Malawi

The livestock industry in Malawi contributes about 8% to the Gross Domestic Product (GDP) and about 36% to the value of total agricultural products (MOAFS, 2005). This underscores the importance of livestock development in contributing to overall food, income and social security in the country. Livestock production systems in Malawi are variable depending on whether production is for commercial or subsistence purposes. MOAFS (2005) reported that 15% of all livestock owners were commercial while the rest were subsistence. Subsistence farmers largely produce under extensive system, while commercial farmers mainly produce under intensive system. Overall trends show that chickens, goats, sheep and pigs are increasingly becoming important in the sector. There is a notable movement of farmers from cattle to smaller stock. This is because the smaller average farm size on which the animals are kept is favouring the small sized animals (Banda, 2008). Chicken dominates the production of meat (35.5%) followed by pig (26.6%), beef (21.6%) and goat at 15.6% (Banda, 2008).

Table 5.8 illustrates the mean annual household income from livestock sales during the 2012/2013 season.

Table 5.8: Mean annual household income[4] from livestock sales during 2012/2013 Season

	Type of livestock						
	Cattle	**Chicken**	**Goats**	**Pigs**	**Guinea Fowls**	**Sheep**	**Other Livestock[5]**
Mean value of sale (MK)[6]	0	6 892	16 513	60 000	10 333	13 001	8 250
% of households involved in selling[7]	0.0	25.0	19.0	0.2	0.7	1.5	1.0

While incomes from pig, guinea fowl and sheep were relatively high, MK60 000, MK10 333 and MK13 001 respectively, the percentages of respondents rearing them were insignificant and ownership was not recorded across all the four EPAs. The sales figures, though showing appreciable values, the proportion of households involved indicate limited ownership and diversification of livestock among beneficiary communities. When focus groups were probed as to why there was low ownership of livestock, they indicated that though the project initially planned to supply them with startup stock of different livestock classes for multiplication, most beneficiary groups did not get the start–up stock until the project phased out. Due to limited financial capacity most households were not able to buy breeding stock on their own. For rural households, livestock ownership is important as it increases household assets that improve resilience to risks and shocks to crop production as

[4]Annual income was calculated by multiplying weekly or monthly income by the number of times the income was gained.
[5]This refers to non-conventional livestock which include ducks, rabbits, pigeons, guinea fowls and guinea pigs.
[6]1USD equals 400MK
[7]The percentage is based on three hundred and ninety seven respondents. It captures only those households that reported livestock sales. Percentages are exclusive to each livestock type since one household can raise different types of livestock at once. Hence may not add up to 100%.

they offer alternative income sources. Livestock ownership also makes animal manure readily available for increased crop production. Absence of these therefore negatively impacts on livelihood of the beneficiary households.

Very few beneficiary households owned livestock and this is the likely reason why sales were also low. Livestock was mainly sold through middle-men, local butcher men and also in local council markets held on designated days in a week.

5.4.3.2 Cash crop income

Another source of income available for the beneficiary households was sale of cash crops. The underlying supposition for the study was that if by choice some farmers opted to grow cash crops at the expense of food crops, they may have performed poorly on availability of food from own production, while still achieving the food security objective through food purchases made possible by increased household incomes from sale of cash crops.

Tobacco, cotton and tea are the three major cash crops in Malawi. However, tea is mainly grown by large estates with few smallholder farmers participating in tea out-grower schemes. Sugarcane for raw consumption is also one important cash crop for smallholder farmers though it has not been fully recognized in national discourses. Table 5.9 illustrates the mean household income from cash crop sales during 2012/2013.

Table 5.9: Mean annual household income from sale of cash crops during 2012/2013

	Cash crop			
	Tobacco	**Cotton**	**Sugar cane**	**Other[8]**
Mean value of sale (MK)	114 981	37 027	43 333	15 000
% of households involved in selling cash crops	27.20	14.30	0.76	0.25

Table 5.9 shows that tobacco and cotton were the major cash crops grown by the beneficiaries represented by 27.2% and 14.3% of beneficiary households respectively. Average annual income gained was MK114 981 and MK37 027 for tobacco and cotton respectively. Only a small proportion of respondents reported being involved in sales of sugarcane and other crops respectively. Sugarcane though grown by a small number of beneficiaries generated a considerable amount of income compared to other crops. This could be so because some areas resettled by beneficiaries were *dambos* (low lying) conducive to sugarcane production and yet these might not have been available for most households. The other crops sold as cash crops were mainly birds' eye chillies, pigeon peas and vegetables. While the potential for earning extra income from cash crops was high as shown by the average total incomes, the low numbers of farmers involved indicate that a lot more farmers were not benefiting from production of cash crops. This further limited the potential of households for increasing incomes to meet other household needs and invest in other income generating activities.

[8]Other cash crops included different vegetables, pigeon peas and birds' eye chillis grown for sale.

5.4.3.3 Income from forest based enterprises

Sale of forest based products also provides another source of income for rural households. This is especially true for beneficiaries relocated to estates that had forestry resources. While forestry resources may provide income to the households endowed by it, overuse of such resources may also be an indicator of a threat to environmental sustainability. Table 5.10 gives mean household income from sale of forest based products during 2012/2013 season.

Table 5.10: Mean annual household income from sale of forest based products during 2012/2013

	Forest Based Product					
	Timber	**Poles**	**Honey**	**Mushroom**	**Seedlings**	**Other**
Mean Value of Sale (MK)	26 040	3 200	9 000	700	60 000	9 298
% of households involved in selling forest based products	1.2	0.5	0.2	0.2	0.2	6.3

Table 5.10 shows low utilization of forest based products as a source of income for the beneficiary households. Only 1.2% of households got an average of MK26 040 from sales of forest based products. This is so because most estates bought under this project did not have a lot of forest based resources. While the households involved in the sale of poles, honey, mushroom and seedlings are insignificant, the incomes generated from these indicates a potential for increasing household income if a good number of farmers can be mobilized to participate in these activities. The 6.3% households involved in other forest based products were involved in rural manufacturing activities like weaving and making of hoe handles. The mean value of

sale derived from this was MK9 298. Promotion of forest based products also creates an incentive among communities to undertake community based natural resources management through conservation and preservation of village forestry areas.

A Kruskal Wallis test was conducted to establish if differences in median income existed among the EPAs. No significant statistical differences were found to exist among the EPAs with regard to the sales of other forest products (χ^2 = 3,709; df = 3; p = 0.295)

5.4.3.4 Income from sale of food crops

For some households the ability exists to produce surplus food crops above their annual household food requirement which they can sell and supplement household income. As such, food crop production can also be another source of household income. Table 5.11 illustrates the mean household income from sales of food crops during 2012/2013 season.

Table 5.11: Mean annual household income from selling of food crops during 2012/2013

	Food Crop							
	Maize	**Cassava**	**Rice**	**Ground nuts**	**Sweet potatoes**	**Pulses**	**Sorghum**	**Other**
Mean value of sale (MK)	20 076	22 649	34 340	24 785	6 300	10 023	4 600	12 833
% of households involved in selling food crops	12.8	11.3	7.6	15.3	2.1	41.3	0.7	1.0

Pulses (beans, pigeon peas and soya beans), were the most dominant food crops sold among households (41.3%) with a mean income of MK10 023. This was followed by groundnuts in the second place (15.3%), maize (12.8%) and cassava (11.3%). Farmers' preference for legumes as cash crops derives from their multiplicity of uses. Firstly as foods which improve the dietary diversity and nutritional status of households and secondly because of the potential to generate income for the households. Legumes (groundnuts and pulses) also improve soil fertility through nitrogen fixation as well as providing nutritious animal feed through their haulms. Another agronomical advantage is that legumes can improve aggregate yields from a piece of land due to the possibility of inter-planting them with other crops.

Uptake of cassava and sweet potatoes as sources of income and as food security crops appeared to be low among the beneficiary households, with only 11.3% and 2.1% households involved for cassava and sweet potatoes respectively. Considering that cassava planting patterns do not normally require a pure stand and that sweet potatoes can as well be planted as a relay crop at the tailing of the rainy season, the reported figures are truly low. These crops are drought resistant and may reduce the risk of total crop failure in times of dry spells. As such, they needed to be promoted amongst the beneficiary households.

Rice was the highest mean household income earner amongst all the food crops (MK34 340), but the percentage farmers involved were low (7.6%). This was because production conditions in most of the relocated areas were not conducive to production of lowland rice.

5.4.3.5 Off-farm income

A household may also earn income from sources that are not related to farming. Income may come from salaries, remittances and small businesses ultimately contributing to a household's income purse. Existence of such opportunities within the household can offer livelihood security. Table 5.12 illustrates the household income derived from various off-farm income sources.

Table 5.12: Mean annual off-farm household income during 2012/2013

	Source			
	Salaries	**Small Businesses**	**Remittances**	**Other**
Mean Value of Sale (MK)	24 293	52 686	26 942	37 672
% Number of households involved	77.1	20.9	6.5	4.5

A large proportion of households (77.1%) depended on salaries as a source of off-farm income seconded by small businesses (20.9%) and remittances (6.5%). The mean incomes varied from MK24 293, MK52 686 and MK26 942 obtained through salaries, small businesses and remittances respectively. The proportion of households that earned income through salaries or wages confirmed earlier findings of many beneficiaries involved in working on other people's fields as part of a coping mechanism. Most farmers got salaries or wages after working in surrounding estates, in fields of well to do farmers and some reportedly crossed over to Mozambique. These findings indicate that a large proportion of households were not able to address and sustain their livelihood needs from the project interventions alone. While a relatively large mean income originated from small businesses (MK52 686), the

number of households involved was relatively small which could have been a result of limited access to credit.

Salaries were one source of income for the beneficiary households. However, since the opportunities for wage income are not equally distributed across locations, an analysis of variance was performed to test if any relationship existed between EPAs and income from salaries (Figure 5.3).

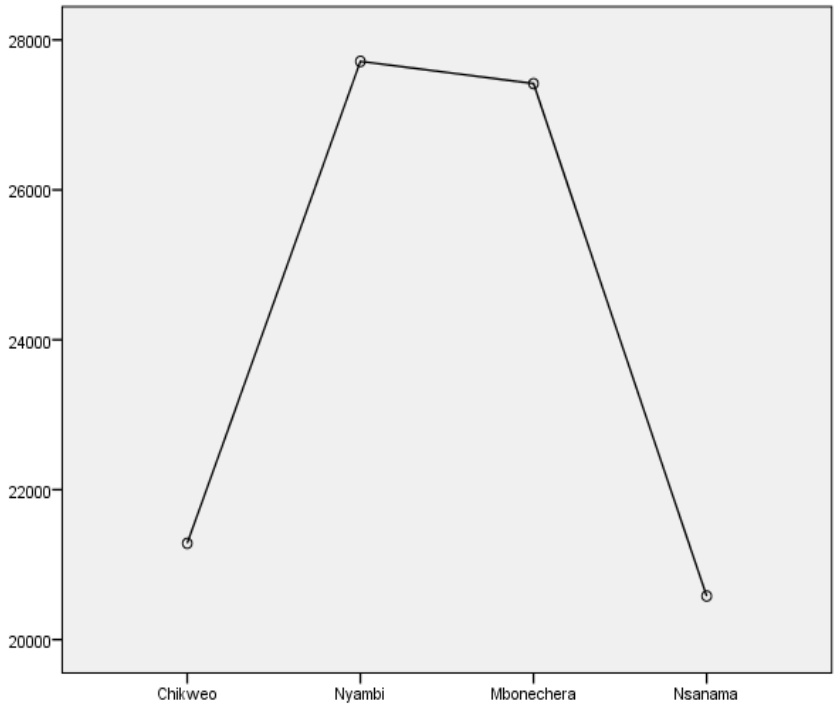

Figure 5.3: Income from salaries across the EPAs (n =397)

Although differences existed in income earned through salaries and wages among the four EPAs, these were not statistically significant (F (3,302) = 0.985; df = 3; p = 0.4). Income derived from salaries was the lowest in Nsanama (MK20 581) and the highest

in Nyambi (MK27 714). The relatively low income levels from salaries emanated from the nature and seasonality of the jobs that beneficiaries were involved in. As earlier stated, beneficiaries usually looked for a job during the lean period as a coping mechanism when they run out of food from their own production. For Malawi, this is usually between December to March. Coincidentally, this is the time of peak labour demand for agriculture as this is also the period for the main rainy season. To cope with food insecurity most food insecure households tended to abandon their own fields and work in the surrounding estates.

Similarly, running small scale businesses was one means by which the beneficiaries earned extra income. But again, success of small scale business is contingent upon many factors in that different locations may differ in their climate for doing business.

Table 5.13: EPAs and mean income from small businesses (n =397)

EPA	Number of households involved	%	Mean income (MK)
Chikweo	18	18.0	41 972.00
Nyambi	18	18.0	46 000.00
Mbonechera	23	23.17	59 472.00
Nsanama	24	24.0	59 233.00
TOTAL	**83**	**83.17**[9]	**51 658.00**

[9] The total does not add to 100% because it only captures those involved in small businesses. The remaining percentage was not doing any business.

There were no statistically significant differences in mean values of income derived from small businesses across the four EPAs (χ^2= 2.219; df = 3; p = 0.528) (Table 5.13).

Under the income category of remittances, analysis was also done to establish if income from remittances differed across the four EPAs.

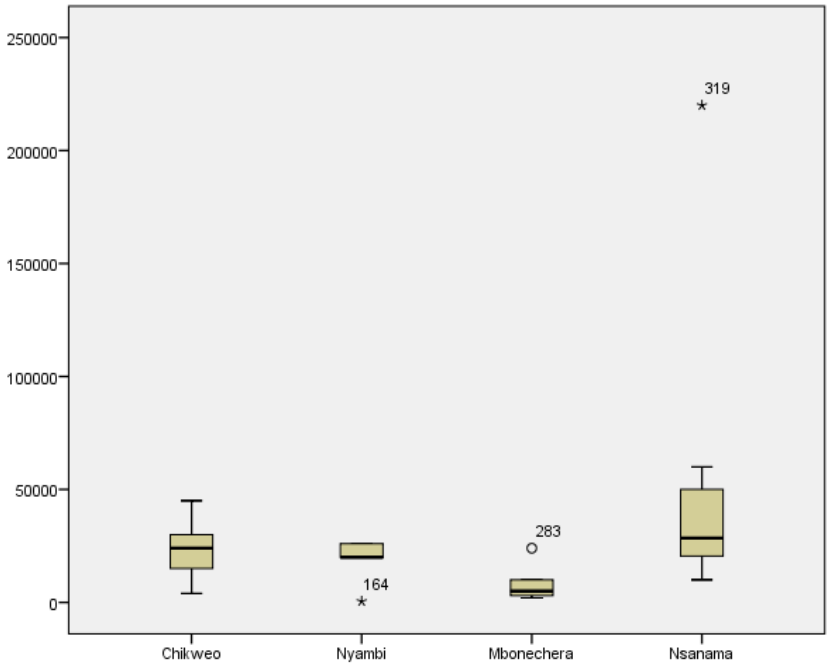

Figure 5.4: EPAs and mean income from remittances (n=397)

The Kruskal-Wallis test showed a statistically significant difference in the median income from remittances across the four EPAs (χ^2 = 9.50; df = 3; p = 0.023). Nsanama registered the highest mean income (MK53 500) while Mbonechera had the lowest mean remittance contribution (MK7 750). This means that households with

less chance of getting income from siblings and relations elsewhere may have had more difficulties to meet their livelihood needs than those that had greater chance.

CHAPTER 6

PERCIEVED EFFICACY OF POST SETTLEMENT SUPPORT FOR CBRLDP BENEFICIARIES

6.1 INTRODUCTION

Chapter six investigates the possible causes to the findings revealed under Chapters four and five. The underlying assumption is that the performance on the overall project objectives is a direct result of how well and effectively the implementation process was designed and implemented. Chapter four showed satisfactory performance in land tenure status of beneficiaries except that their knowledge of land rights was found to be limited. Chapter five revealed poor performance on both food security and household income statuses. Chapter six elaborates on how effectively post settlement support was deployed to achieve project end results.

6.2 BENEFICIARIES' LEVEL OF BELONGING TO FARMER GROUPS

Poorly organized farmers face a lot of challenges to improve their agricultural productivity and profitability. This is so because, the supply driven system of training individual farmers that used to work effectively in the 1970's is no longer applicable under current challenges of growing farming population, collapsing of farmer club system, high attrition rates of field extension workers, inadequate training of new extension workers and dwindling resources allocated to agricultural sector (Government of Malawi, 2009b). The paradigm has shifted from individual to group approaches. The Neuchatel group (2006) observes that while farmers are very heterogeneous, working with groups and organizations of farmers with similar

interests is able to secure more responsive service provision and more efficient use of resources. The study sought to establish the extent to which beneficiary households were organized in groups.

The analysis of the extent to which beneficiary households belonged to groups indicated that 43.7% of the respondents belonged to farmer groups. This meant greater difficulties on the part of extension service providers. Dissemination of extension messages is made efficient and effective when farmers work as groups as opposed to individuals. This is so because, with high extension to farmer ratio arising from the growing population of farmers, the few extension workers hardly have adequate time and resources to make individual visits. For instance, GOM (2009b) reported 40% of the establishment of the Ministry of Agriculture and Food Security being vacant at the end of the third quarter of 2007. From the recommended extension to farmer ratio of 1:800, the ratio went up to an average of 1: 2 500 nationwide. The vacancies mostly existing at the middle and operational levels of the MOAFS structure result in significant shortages of operational staff such as field extension workers. Group approaches are also promoted to reduce the costs related to the provision of extension services and to enhance learning through peer influence. It is also a conduit through which commodity specific extension services and group marketing of agricultural produce are easily achieved.

The existence of large numbers of beneficiaries (56.3%) without membership to any farmer group rendered increased access to extension services impossible for the farmers and obviously triggered negative consequences on production and

profitability of the farming enterprise. The type of farmer groups that existed in the beneficiary communities are illustrated in Figure 6.1.

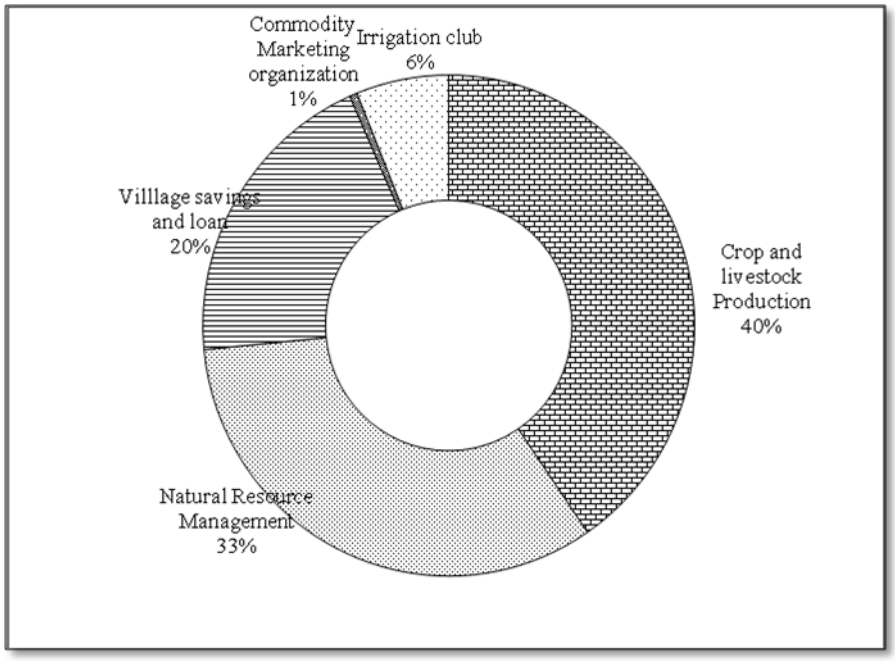

Figure 6.1: Type of farmer groups in the community

Agricultural production (crop and livestock) groups were the most dominant farmer groups existing in the communities (40%), followed by natural resource management groups (33%). Commodity marketing farmer groups were the least available (1%) followed by irrigation clubs (6%) and the Village Savings and Loan groups (20%). While agricultural production and natural resources management are important for increased and sustained agricultural production, profitability of the farming enterprise is also enhanced by organized marketing as well as accessibility to production inputs. Under constraints of limited field extension workers, commodity specific extension services are made easy when farmers are organized in crop and livestock production groups. Where farmers are well organized in groups the extension worker finds it

easy to conduct trainings, on-farm demonstrations and field days on good agricultural practices. Farmer groups play key roles that benefit the members. For instance, irrigation clubs coordinate production of crops under irrigated agriculture, ensuring efficient utilization of water resources and marketing of produce. Village savings and loan groups help local communities build a savings culture and access credit at a cheap price. Commodity marketing organizations on the other hand pool produce from a number of commodity oriented clubs together and facilitate group marketing of the produce. This increases their bargaining power and enables entry into profitable markets. To have functional and highly performing farmer groups, coordination of service providers needs to be carefully and purposefully structured, organized and enabled in order to better respond to the needs and demands of farmers. An understanding of the linkage mechanisms that existed between beneficiary households and service providers was therefore necessary.

6.3 LINKAGE BETWEEN COMMUNITIES AND SERVICE PROVIDERS.

Communication plays a vital role during the project implementation. Russ (2008) categorizes change communication into two broad theoretical categories namely ‘programmatic’ and ‘participatory’. The programmatic approach gravitate on transmission of monologic communication about organizational change in a ‘top down’ sort of ‘telling and selling’ to generate stakeholder compliance and stimulate the desired positive attitudes and beliefs about the planned change. On the other hand, the participatory approach to change communication leverages dialogic communication so as to involve all stakeholders through sincere solicitation of their ideas or input about the change and the implementation process. At the heart of

participatory approaches is an 'equal participation' strategy that advocates integration of two way communication to disseminate information to all relevant stakeholders about the planned change, while simultaneously soliciting input from them (Lewis *et al.* 2001). A quick review of the organizational schema or communication plan for the implementation of the CBRLDP reflects salient shortfalls that certainly hindered effective implementation and meaningful involvement and participation of stakeholders (Figure 6.2).

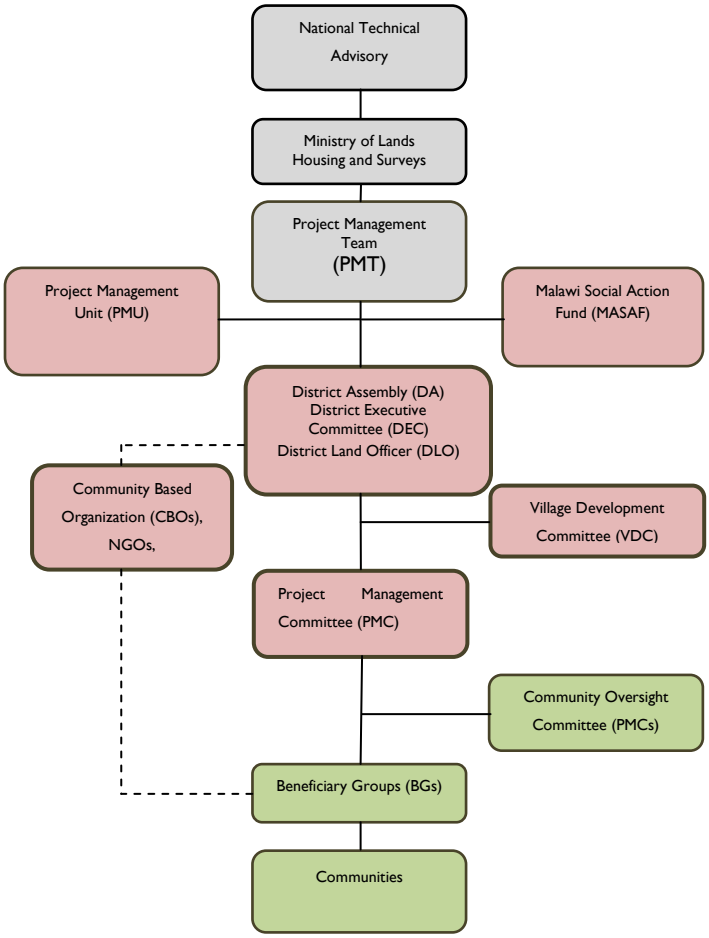

Figure 6.2: CBRLDP linkage model

The implementation structure demonstrates a top down programmatic model that does not offer a meaningful forum for dialogue and input from relevant stakeholders and role players for the implementation of the project. From the FDGs it became evident that although the District Development Committee is the technical development arm for district councils, it may not have been an appropriate forum for discussing focused issues on CBRLDP. This is so because under the structure of this committee, beneficiary groups could not be represented. NGOs and private sector players not physically present in the district but critical for the implementation of the project could not be represented. Other organizations and role players holding decision making powers on resource allocation and other implementation matters were also not part of the committee.

The FDGs also showed that although the project operated under decentralization, implementation was highly centralized in its approach. The district councils did not have any power to decide on course of action to take as needs and demands arose.

6.4 THE DISTRICT AGRICULTURAL EXTENSION SERVICES SYSTEM (DAESS)

The District Agricultural Extension Services System (DAESS) stood as the most appropriate service management arrangement for provision of coordinated post settlement support. The new agricultural extension policy for Malawi, developed in the 2000, advocates provision of demand driven and decentralized extension services (MOAFS, 2000). The system is integrated into the district assembly system through Stakeholder Panels (SP) and the District Agriculture Extension Coordinating Committee (DAECC). Under the system, each village is supposed to have an

agriculture committee that takes all issues raised during Participatory Rural Appraisals (PRA) pertaining to agriculture and submit them to the Area Stakeholder Panel (ASP) which, after scrutinizing the demands, further sends them to the District Stakeholder Panel. MOAFS (2004) explains the role of Stakeholder Panels as follows:

- To provide a forum for farmers to express their demands.
- Ensure right representation of all stakeholders and that each group is heard.
- Ensure that villages' demands are articulated and aggregated.
- Ensure that quality response to the demands is provided and maintained by the respective service providers.

The Stakeholder Panels were the appropriate structures through which beneficiary groups should have been represented to express their demands. This is so because of the multidisciplinary composition of the stakeholder panels. The panels are composed of smallholder food security farmers (who form 50% of the total membership), semi commercial and commercial farmers, NGOs, farmer organizations, agribusiness groups, community based organizations and relevant committees. CBRLDP Trusts being special interest groups had their own peculiar needs and demands that required them to be directly represented in decision making forums. Under this arrangement, the Village Development Committee (VDC), which is headed by the village headman, acts as the main development committee that plans and oversees village development across the board. The VDC further oversees and supervises all development activities in a given area. However, the VDC being a general committee does not normally have the time and expertise to do detailed

analyses of problems and develop coherent plans of action. That is why, specific sub-committees, like the agriculture committee, are necessary to carry this function.

Local extension officers form part of the Area Stakeholder Panels (ASP), where they help local community representatives articulate their needs, aggregate demands from different villages and develop action plans. Where local level service providers do not have adequate capacity to respond to the emerging demands, they forward them to the District Stakeholder Panel (DSP) through elected representatives. After the demands from different villages in the district are aggregated, they are presented to the District Agriculture Extension Coordinating Committee (DAECC) that is composed of representatives from public extension, NGOs, private sector and farmer organizations. DAECC functions are to:

- Set standards for delivery of services.
- Ensure that quality services are provided.
- Plan agricultural extension services at district level.
- Ensure equity in service provision.
- Coordinate provision of agricultural extension services at district level.
- Conduct monitoring and evaluation.
- Link agriculture extension service providers and farmers to the district assembly.

After coming up with the consolidated district plans, DAECC presents these to the full council meeting formerly the District Consultative Forum for adoption. The elected ward councilors, traditional authorities and members of parliament from the district are the voting members in the full council meeting. It would have been

appropriate for the CBRLDP to support and be embedded in DAESS service management arrangement. This would have ensured participation and involvement of all key stakeholders in the implementation of the project as well as enhance ownership and integration of project interventions into existing development support systems. Representation of beneficiary groups in stakeholder panels would have also meant that their needs and demands are accorded equal attention. Figure 6.3 illustrates the pathways through which needs and demands of project beneficiaries were channeled.

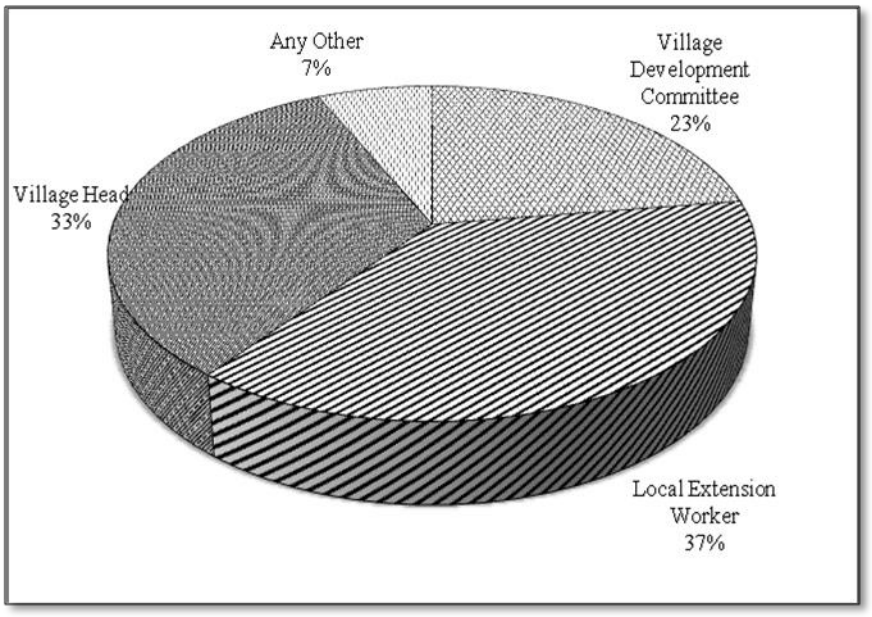

Figure 6.3: Linkage mechanisms between beneficiary groups and service providers at district level

CBRLDP beneficiary groups were linked to service providers through the local extension worker (37%), the village headman (33%) and the Village Development Committee (23%). In all these linkage mechanisms, the beneficiary groups had no direct representation at area and district level development forums. This made it

difficult to have their service and information needs adequately supported. Considering that this was a novel project with its own specific needs and demands that went beyond what the project resources could support, a special effort was needed to align the project implementation arrangement with existing structures to better link and involve all role players in implementation of the project. The Area Stakeholder Platforms would have been primary discussion forums for service provision with NGOs, public and private sector organizations and farmer based organizations, working in the area, to plan and implement post settlement support. Where capacity fell short in terms of finances and/or human resources, the project needed to come in and strengthen these areas through provision of direct grants or engaging a service provider to close the gap.

6.5 BENEFICIARIES' PERCIEVED LEVEL OF ACCESS TO KNOWLEDGE SUPPORT SOURCES (KSS) AND THEIR LEVEL OF COMPETENCE

Table 6.1 provides an overview on how beneficiaries perceived their level of access to knowledge support sources, measured on a Likert scale 1-4 (1 = no access to knowledge support service, 4 = always access to knowledge support service). 77.5% of the beneficiaries had no access to any source of knowledge support since the phase out of the project.

Table 6.1: Distribution of farmers' perceived access to various knowledge support sources measured on a four point Likert Scale

Sources of knowledge support	n	% Access				Total %
		Always	Often	Rarely	Not at all	
Ministry of Agriculture	380	9.5	9.2	35.3	46.0	**100.0**
Forestry department	383	6.5	3.7	13.8	76.0	**100.0**
Private agro-dealers	381	0.3	0.8	3.9	95.0	**100.0**
NGOs	381	1.6	2.4	4.2	91.8	**100.0**
Farmer Based Organizations	380	2.6	6.8	4.7	85.9	**100.0**
Lead farmers	382	4.5	6.0	6.5	83.0	**100.0**
Fellow farmers	381	12.6	7.1	15.7	64.6	**100.0**
AVERAGE		**5.4**	**5.1**	**12.0**	**77.5**	**100.0**

89% of the beneficiaries perceived that they rarely or did not at all receive knowledge support from service providers. Among the sources accessed by beneficiaries, fellow farmers ranked the most important (19.7%), seconded by MOAFS field extension workers (18.7%). In general, these results indicate that CBRLDP beneficiaries mainly use their own experience and knowledge with regard to decision making. A possible reason for this is that beneficiaries were relocated in remote areas previously occupied by estates and not properly provided for with extension staff. The high vacancy rates existing in public sector extension contributed to the poor availability of extension staff. Such limitations should have provided a compelling reason to co-opt other service organizations e.g. NGOs and FBOs to fill the capacity gaps by sub-granting them to carry specific activity packages.

However, the level of access to extension services by farmers was not the same in different EPAs. Further analyses as discussed in the following section compare access of farmers to KSS in the four EPAs.

6.6 COMPARISON BETWEEN EPAs AND FARMERS' PERCIEVED ACCESS TO KSS

Interventions that encompass land reform and agriculture entail involvement of different actors and stakeholders to achieve the desired goal. With the challenges facing public sector extension services, pluralism in extension service delivery is being encouraged at national and local levels. The following section discusses the perception of CBRLDP beneficiaries in relation to their access to different agricultural extension knowledge support sources.

6.6.1 Farmers level of access to MOAFS extension staff.

Some EPAs like Nsanama had significantly better access to MOAFS extension staff than Nyambi and Mbonechera EPAs. Nyambi experienced the least access to extension staff from MOAFS followed by Chikweo and Mbonechera. The differences in level of access were related to vacancy rates of the EPAs. Remoteness of some EPAs appeared to correlate with the high vacancy rates because given a choice, extension staff prefer less remote EPAs.

A Chi-square test was used to compare farmers' perceived level of access to various knowledge support sources across the four EPAs. Table 6.2 illustrates that access to MOAFS extension staff varied significantly across the four EPAs ($\chi^2 = 85.43$; df = 9; $p = \leq 0.0001$).

Table 6.2: Level of access to MOAFS extension staff in the four EPAs

(n = 380)

Level of Access	Extension Planning Area (EPA)			
	Chikweo	**Nyambi**	**Mbonechera**	**Nsanama**
Not at all	55.70	67.50	45.80	18.00
Rarely	31.60	30.30	39.60	39.00
Often	7.40	2.20	10.40	16.00
Always	5.30	0.00	4.20	27.00
TOTAL	**100.00**	**100.00**	**100.00**	**100.00**

Mechanisms of how to adequately support the remote and underserviced regions with extension services need to be put in place. Such variations in service delivery can better be understood and planned for in advance if capacity assessment for different regions is done to inform designing of proper remedies to effectively deliver needed support services.

6.6.2 Farmers level of access to Department of Forestry extension staff.

Similar trends observed under MOAFS extension staff were noted when an analysis was conducted on farmers' perceived level of access to Department of Forestry extension staff. Huge differences existed in the access to forestry extension staff by the farmers in the four EPAs ($\chi^2 = 50.1$; df = 9; p = $\leq$ 0.0001). Nsanama EPA enjoyed the highest access to forestry extension staff, while Chikweo and Mbonechera received the lowest frequency of access to forestry extension staff. This is so because forestry staff is relatively few compared with agricultural staff and are mostly deployed in selected high potential areas like Nsanama (Table 6.3).

Table 6.3: Relationship between EPAs and level of access to forestry extension staff (n = 380)

Level of Access	Extension Planning Area			
	Chikweo	**Nyambi**	**Mbonechera**	**Nsanama**
Not at all	85.00	91.00	76.30	54.00
Rarely	7.00	7.90	16.50	23.00
Often	4.00	0.00	4.10	6.00
Always	4.00	1.10	3.10	17.00
TOTAL	**100.00**	**100.00**	**100.00**	**100.00**

Poor access to forestry extension services for the beneficiaries of land reform programs has far reaching implications on environmental sustainability of their major preoccupation, which is farming. Firstly, lack of knowledge of the benefits of conserving natural forestry areas can lead to massive deforestation in the resettled areas bringing problems of erosion and soil degradation. Where forestry resources are not available, resettled farmers were also required to reserve a piece of land for establishment of a communal forestry area and this needed expertise of forestry staff. As individuals, beneficiary households who have just resettled require poles for construction of houses and other infrastructure hence the need to incorporate forestry activities in resettled areas.

6.6.3 Farmers' level of access to Agro-dealers

In recent times, knowledge generation and transfer have ceased to be the mandate of national research institutions and public extension only. World Bank (2006) recognizes how knowledge, information and technology are increasingly being

generated, diffused and applied through the private sector. The recognition gives impetus for pluralistic and demand driven extension services. Malawi's current extension policy espoused this paradigm shift as an answer to multiple challenges facing agricultural extension service provision. Farmers' level of access to other role players (private agro-dealers, NGOs, FBOs) across the four EPAs was analyzed to determine existence of any relationships.

Private agro-dealers play an important role in promoting smallholder farmers as commodity processors and exporters and also as private agro-chemical input suppliers. As commodity processors and exporters, their involvement to promote smallholders entail the dissemination of specific technical production aspects to farmers who produce on contract basis (Hanyani-Mlambo, 2002). Agrochemical input suppliers get involved in agricultural extension as a marketing strategy to increase farmers' awareness of their products and increase market share (Hanyani-Mlambo, 2002). These agrochemical input suppliers usually specialize in agrochemical inputs and specialized application methods hence better placed to fulfill this role. Private agro-dealers also provide farm inputs to farmers on loan for recovery as the produce is sold. They also provide inputs like seed, fertilizers and chemicals to enable extension workers to conduct method and result demonstrations with the aim of promoting their products. In Malawi, providing inputs to farmers on loan applies to tobacco and cotton production where the cost of inputs is recovered when the agro-dealer is buying the crop. Agro-dealers also directly sell chemicals, fertilizers and other inputs to farmers in rural areas through a network of rural input agro-dealers. Agro-dealers also play an important role in the development of

agricultural value chains and their absence means that farmers are affected. Table 6.1 has illustrated that only 5% of beneficiaries perceived to have access to agro-dealers. Table 6.4 illustrates that statistically significant differences existed in access to private agro-dealers in the four EPAs ($\chi^2 = 17.46$; df = 9; p = 0.042).

Table 6.4: Relationship between EPAs and level of access to private agro-dealers (n = 381)

Level of Access	Extension Planning Area			
	Chikweo	**Nyambi**	**Mbonechera**	**Nsanama**
Not at all	97.90	98.90	91.80	92.00
Rarely	0.00	1.10	7.20	7.00
Often	2.10	0.00	1.00	0.00
Always	0.00	0.00	0.00	1.00
TOTAL	**100.00**	**100.00**	**100.00**	**100.00**

Table 6.4 illustrates that Nyambi experienced very low access to private agro-dealers followed by Chikweo, Nsanama and Mbonechera. This is most likely because Chikweo and Nsanama grow more tobacco and cotton, which require input support and have organized marketing systems.

6.6.4 Farmers' level of access to Farmer Based Organizations

Farmer Based Organizations (FBOs) are key players in the provision of agricultural extension services. These farmer organizations exist at different levels including farmer groups, clubs, cooperatives, associations and community based organizations. Farmer organizations assume a number of functions. Farmer organizations represent their members on the economic and political fronts. They also conduct capacity

building programmes and the dissemination of production and marketing information (Hanyani-Mlambo, 2002). They may offer training and advisory services to their members either delivered from within their own organization, by hiring staff or through farmer-to-farmer methods. Services to members may also be offered by liaising with other competent agencies. In table 6.1, 14% of the beneficiaries indicated they have access to KSS through their belonging to farmer based organizations. The variance in access to extension knowledge support from farmer based organizations in the four EPAs is displayed (Table 6.5).

Table 6.5: Level of access to farmer organizations' extension knowledge support in the four EPAs (n = 380)

Level of Access	Extension Planning Area			
	Chikweo	**Nyambi**	**Mbonechera**	**Nsanama**
Not at all	86.10	92.00	79.40	86.00
Rarely	2.10	4.00	7.20	5.00
Often	9.60	0.00	12.40	5.00
Always	2.00	4.00	1.00	4.00
TOTAL	**100.00**	**100.00**	**100.00**	**100.0**

The difference in access to KSS from FBOs was not statistically significant across the four EPAs (χ^2 = 19.46; df = 12; p = 0.078). The general tendency displayed was of very low or no access to extension services from farmer organizations across all the four EPAs. At 14%, access was relatively low mainly because of FBOs lack of presence in the area (Table 6.1). Lack of access to farmer based organizations in the area implies poor representation in policy advocacy, uncoordinated marketing of

agricultural produce and general difficulties in dissemination of production information.

6.6.5 Farmers' level of access to Non-Governmental Organizations' extension services

Non-Governmental Organizations (NGOs) categorized under the not-for profit private sector have been playing an important role in providing knowledge support in the four EPAs. Alex *et al*. (2004) observe that NGOs are often flexible, committed to work with the poor and disadvantaged, able to provide integrated assistance and have skills in building local organizations and linking them to markets. Although only 8% beneficiaries perceived access to knowledge support from NGOs in the area, NGOs have been engaged to complement extension efforts in EPAs not adequately covered by other service providers. Table 6.6 provides an overview of accessibility to NGOs knowledge support in the four EPAs. The difference in accessibility was not statistically different ($\chi^2 = 14.224$; df = 9; p = 0.115). However, Nsanama experienced the highest frequency of access to NGO knowledge support (8%), followed by Chikweo (4%) and Nyambi (2%).

Table 6.6: Level of access to NGO's extension services in the four EPAs

(n = 381)

Level of Access	Extension Planning Area			
	Chikweo	**Nyambi**	**Mbonechera**	**Nsanama**
Not at all	94.60	91.10	92.80	89.00
Rarely	1.10	6.70	6.20	3.00
Often	3.20	2.20	0.00	4.00
Always	1.10	0.00	1.00	4.00
TOTAL	**100.00**	**100.00**	**100.00**	**100.00**

Efforts were hardly made to involve NGOs in the implementation of the CBRLDP despite their necessity being explicitly spelt in the project implementation manual. The relatively low level of engagement of NGOs in the implementation of the project is worrisome and certainly had an effect on the generally low access to agricultural knowledge support in the resettled areas. Where the capacity of MOAFS extension services had been inadequate, NGOs could have attended to specific intervention areas in which they have special skills and competences.

6.6.6 Farmers' level of access to "Lead Farmers"

Where conventional extension services have failed due to a number of reasons, lead farmers or master farmers from farmer organizations play an important role in providing basic extension services to fellow farmers. A "lead farmer" is defined as an individual farmer who has been trained in certain technologies, follows these

technologies and is able to pass them on to other farmers in the community (MOAFS, 2006). The concept of "lead farmers" uses bottom-up and farmer-centered approach, which empowers farmers to express meaningfully their demand for services and legitimize ownership of the learning process. Farmer-to-farmer extension in Malawi started in the 1990's with DANIDA funded Agriculture Sector Programme Support II (MOAFS, 2006). MOAFS sees the concept improving quantity, quality and efficiency of extension services provision in Malawi. 17% of the beneficiaries illustrated to have access to lead farmers and their knowledge support (Table 6.1). Table 6.7 illustrates statistically significant differences in the accessibility of "lead farmers" to farmers across the four EPAs ($\chi^2 = 43.721$; df = 12; p = 0.0001).

Table 6.7: Level of access to "lead farmers" in the four EPAs (n = 382)

Level of Access	**Extension Planning Area**			
	Chikweo	**Nyambi**	**Mbonechera**	**Nsanama**
Not at all	87.50	93.30	86.70	66.00
Rarely	5.20	4.50	8.20	8.00
Often	5.20	2.20	4.10	12.00
Always	2.10	0.00	1.00	14.00
TOTAL	**`100.00**	**100.00**	**100.00**	**100.00**

Though Nsanama experienced the highest level of accessibility to "lead farmers" (26%), the general tendency demonstrates limited accessibility by farmers to this source of knowledge support. This situation owes its origins to the generally poor access by lead farmers to formal knowledge support sources. "Lead farmers" first need to be identified, trained in specific technical areas by Subject Matter Specialists

(SMS) and then deployed to provide basic services to fellow farmers. The limited access to lead farmers means that the lead farmers may have been few in number and/or not adequately trained to provide the needed services.

6.7 PERCIEVED COMPETENCY LEVELS OF KSS

While the knowledge support sources for agricultural extension have expanded in the recent times under the rubric of pluralistic extension services, distribution of skills and competencies in intervention areas cannot be the same among role players. World Bank sees the scope of innovation for agricultural development extending beyond technology and production to encompass organizational (attitudes, practices, and new ways of working) as well as management and marketing changes (World Bank, 2006). With this realization, there has been a fundamental mind shift from educational function of extension to the incorporation of other facilitation roles. Educational functions of extension involve conducting trainings, on-farm demonstrations, field days and campaigns to promote agricultural technology adoption. This functional area requires competences in the technical aspects of agricultural production. Facilitation roles include group mobilization and farmer organization and development (World Bank, 2006).

Skills and competences required for each of the sets of functions are certainly different and knowledge support sources therefore differ in their skill sets depending on training and experience. The perceptions of beneficiaries on knowledge support sources' competence in technical and soft skills were tested. Technical skills relate to those concerned with production technologies, while soft skills relate to skills in group mobilization, facilitation and group organization and management. Table 6.8

illustrates the perceived competence of knowledge support sources in technical skills by beneficiaries of CBRLDP.

Table 6.8: Perceived competence of KSS in technical skills

Knowledge Support Source	n	Percentage Score (%)			TOTAL
		Competent	Marginally Competent	Incompetent	
MOAFS	208	73.1	25.5	1.4	**100**
Department of Forestry	89	75.3	24.7	0.0	**100**
Private agro-dealers	22	27.0	46.0	27.0	**100**
NGOs	30	66.6	26.7	6.7	**100**
FBOs	54	68.5	27.8	3.7	**100**
Lead Farmers	62	66.2	30.6	3.2	**100**
Fellow farmers	139	42.5	48.2	9.4	**100**

75.3% and 73.1% of respondents perceived forestry extension and MOAFS extension staff respectively to be competent in technical skills of farming. FBO's, NGO's and lead farmers (68.5%, 66.6% and 66.2% respectively) were also perceived to be technically competent. Farmers' positive perception about the technical competence of lead farmers (66.2%) and FBO's (68.5%) offers some hope for increasing access to basic extension services to beneficiary households through well trained and organized farmers. This would help ease the problem of extension staff shortage in the rural areas not as a replacement but a supplement.

Comparisons were conducted to establish if variations existed in technical competence of knowledge support sources across the four EPAs. Statistically

significant variations in technical competence only occurred with regard to MOAFS extension staff ((χ^2 = 14.072; df = 3; p = 0.003) (Table 6.9).

Table 6.9: Perceived competence of MOAFS extension staff in technical skills across the four EPAs (n = 208)

Competence	Extension Planning Area			
	Chikweo (%)	Nyambi (%)	Mbonechera (%)	Nsanama (%)
Competent	58.10	76.70	63.50	85.50
Incompetent	41.90	23.30	36.50	14.50
TOTAL	**100.00**	**100.00**	**100.00**	**100.00**

Nsanama (85.50%) and Nyambi (76.70%) recorded high levels of technical competence amongst extension staff. The possible reason could be that the two EPAs have had numerous Government and Donor funded projects, which have offered training to existing staff in various technical areas. Due to resource limitations under the recurrent budget of MOAFS, most staff trainings have been made possible with support of donor funded projects. Since project areas are delineated, those that have benefited from the technical trainings are mainly staff involved with the implementation of the programmes, leaving out non-participating EPAs.

Apart from MOAFs extension staff, competence in technical skills for the other knowledge support sources did not vary significantly across the four EPAs. This is so because until recently, extension service provision has been dominated by public sector extension. A related reason posited by Haunkonnou *et al.* (2012) is that most efforts to increase crop productivity in Sub-Saharan Africa have focused on

technology transfer. As such capacity building efforts for field extension workers have tilted more towards the same direction. Differences in technical skills of field extension workers are bound to occur since trainings are often targeted at areas involved in particular projects or initiatives.

Another area of concern was that respondents indicated that they access the KSS of fellow farmers more (20%) than MOAFS staff (18.7%) and others (Table 6.1). However, the same respondents perceive fellow farmers to be relatively very low in technical skills (58%) (Table 6.8). This poses a threat to adoption of good agricultural practices and demonstrate that fellow farmers are not a substitute for formally trained field extension workers. While use of lead farmers and fellow farmers in farmer-to-farmer extension is encouraged, it must only be used as a supplement and not substitute to career field extension workers. Further enquiry was done to gauge how respondents perceived the competence of service providers with regard to soft skills i.e. group mobilization, organization and management and related areas (Table 6.10).

Table 6.10: Perceived competency level of service providers in soft skills

Service Provider	n	Percentage Score (%)			TOTAL
		Competent	Marginally Competent	Incompetent	
MOAFS	208	47.10	38.30	14.60	**100.00**
Department of Forestry	89	48.30	37.10	14.60	**100.00**
Private agro-dealers	22	25.00	15.00	60.00	**100.00**
NGOs	30	63.30	20.00	16.70	**100.00**
FBOs	54	57.40	25.90	16.70	**100.00**
Lead Farmers	62	25.40	36.50	38.10	**100.00**
Fellow farmers	139	11.90	6.70	81.40	**100.00**

Non-Governmental Organizations were perceived as the most competent of all in displaying soft skills (63.3%) followed by FBOs (57.4%), Department of Forestry (48.3%) and MOAFS extension staff (47.1%). Perhaps this explains why a small number of farmers belonged to farmer organizations. With limited access to formally trained extension workers, farmers most likely lacked guidance and proper facilitation in the area of farmer organization development. This is a task, as shown from the results, which could hardly be delegated to farmers themselves. Comparisons were conducted to determine existence of variations in soft skills' competence for various knowledge support sources. For all knowledge support sources investigated, results showed no significant differences across the four EPAs. The results indicate serious deficiencies of service providers in group mobilization, organization and management and related areas. It could also signal the complete disregard of this important area by the project and the actors providing services to the beneficiaries.

6.8 MEANS OF ACCESSING INPUTS FOR AGRICULTUTRAL PRODUCTION

Poorly organized farmers lack bargaining power over pricing of agricultural produce. Access to inputs as well as agricultural finance is also made difficult due to high transaction costs (GOM, 2009b). Figure 6.4 illustrates different means by which beneficiaries accessed agricultural production inputs.

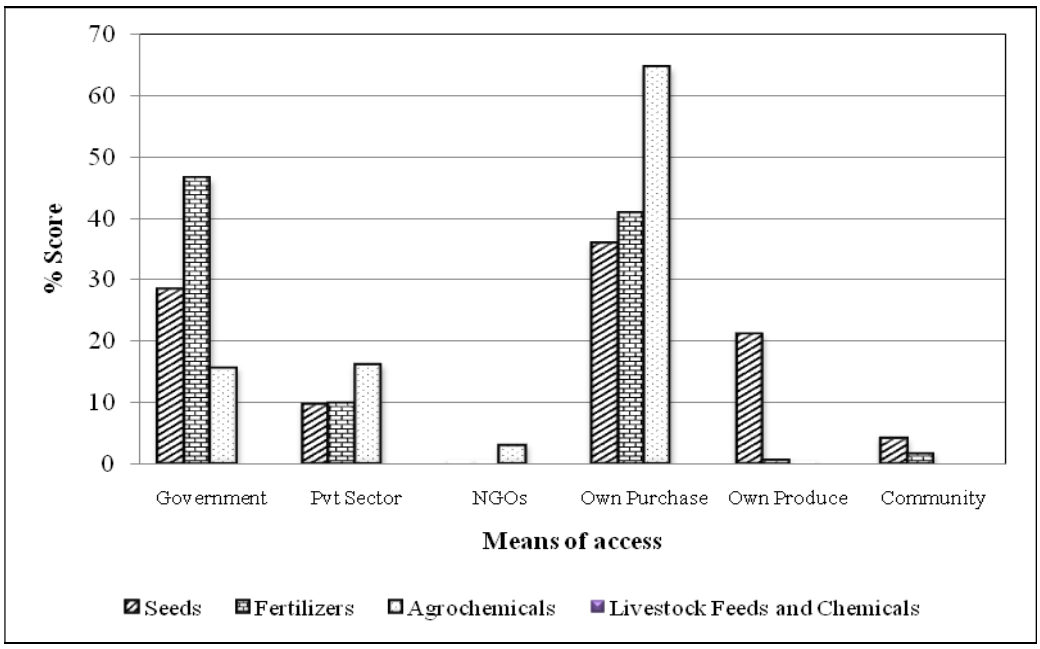

Figure 6.4: Means by which beneficiaries access inputs for agricultural production

Figure 6.4 shows that beneficiaries mostly accessed inputs using own purchases with 36% of seeds, 40.8% of fertilizers and 64.6% agrochemicals accessed through own purchase. Government subsidies came second as a means of accessing inputs (28.5% seeds, 46.5% for fertilizers and 15.7% for agrochemicals). The predominant means for accessing inputs (own purchase and government subsidies) may have both excluded farmers that needed agricultural inputs support. This is so because own purchases are only possible for those farmers with cash and government subsidies are targeted on beneficiaries based on specific criteria.

6.9 MARKET AVAILABILITY AND MARKETING CHALLENGES EXPERIENCED BY CBRLDP BENEFICIARIES

Production inputs only facilitate to come up with the quantity and quality of produce but how to sell the marketable produce at profitable margins is another arduous task.

Important therefore was to identify if marketing of agricultural produce was a challenge to beneficiary households. 84.2% of the beneficiaries indicated marketing of agricultural produce was a major challenge. A cross tabulation was conducted to identify if the experiencing of market problems differed across the four EPAs. The results showed that there was a statistically significant difference between EPA and the experiencing of marketing problems ($\chi^2 = 17.016$; df = 3; p = 0.001) (Table 6.11). In Chikweo EPA, more households experienced market problems (94.68%) than in the rest of the EPAs. The reason for this is that agricultural production in Chikweo EPA was generally higher than the rest of the EPAs. Mbonechera EPA experienced the least marketing challenges (73.2%) (Table 6.11). This was so because it lies along the tarmac road which makes accessibility to markets easy. This observation is also supported by the relatively high presence of private agro-dealers in Mbonechera whose additional role, apart from supplying agricultural inputs, is also to provide markets for agricultural produce.

Table 6.11: Relationship between EPA and experience of marketing problems (n = 397)

Experience of marketing problem	**Extension Planning Area**			
	Chikweo (%)	**Nyambi (%)**	**Mbonechera (%)**	**Nsanama (%)**
Yes	94.68	86.32	73.20	83.00
No	5.32	13.68	26.80	17.00
Total	**100.00**	**100.00**	**100.00**	**100.00**

The study investigated the type of markets available for selling different categories of agricultural produce. Four major markets were identified: Agro-companies, ADMARC, local market and middlemen. Agro-companies involved private agro-dealers resident in the district, buying agricultural produce from farmers. Agricultural Development and Marketing Corporation (ADMARC) is a Malawi Government paristatal involved in selling and buying crop produce. This corporation has a network of rural marketing sheds and annually buys crop produce especially grains for stockpiling and reselling during the lean period. Local markets refer to public infrastructure constructed by local councils at designated places where on designated days during the week, community members bring their produce for sell. Middlemen are intermediate buyers who go around in the communities buying crop produce and livestock for resell to prime buyers in urban areas. Figure 6.5 provides a brief overview of the available markets.

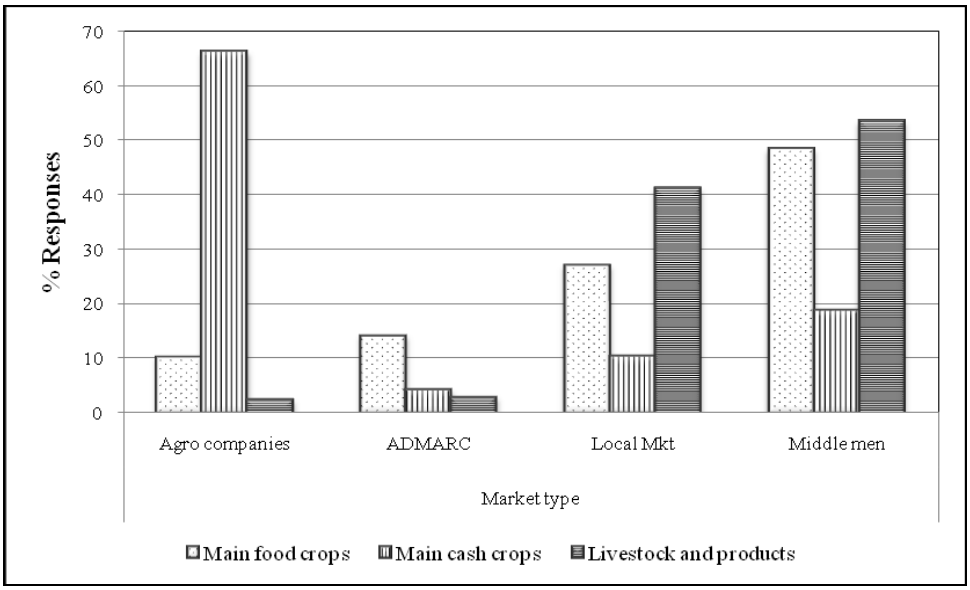

Figure 6.5: Type of markets available for selling different categories of agricultural produce

Figure 6.5 shows that middlemen were a very prominent market opportunity available for the beneficiary households (48.4%, and 53.5% for main food crops and livestock and products respectively). It is only for main cash crops i.e. tobacco and cotton, that agro companies showed highest levels of presence among the beneficiary households (66.3%). Notably, ADMARC showed the least presence (14.2%, 4.2% and 3.9% for main food crops, main cash crops and livestock and products respectively). This is not surprising since ADRMARC had to restructure in favour of private sector in response to the structural adjustment programs implemented in the early 1990's (GOM, 2011). The thriving of middlemen illustrates mainly unorganized marketing by the farmers themselves which further points to poor organization of farmers around aspects of crop production and marketing.

Beneficiary households were further asked to indicate main market problems faced by them in marketing agricultural produce (Figure 6.6).

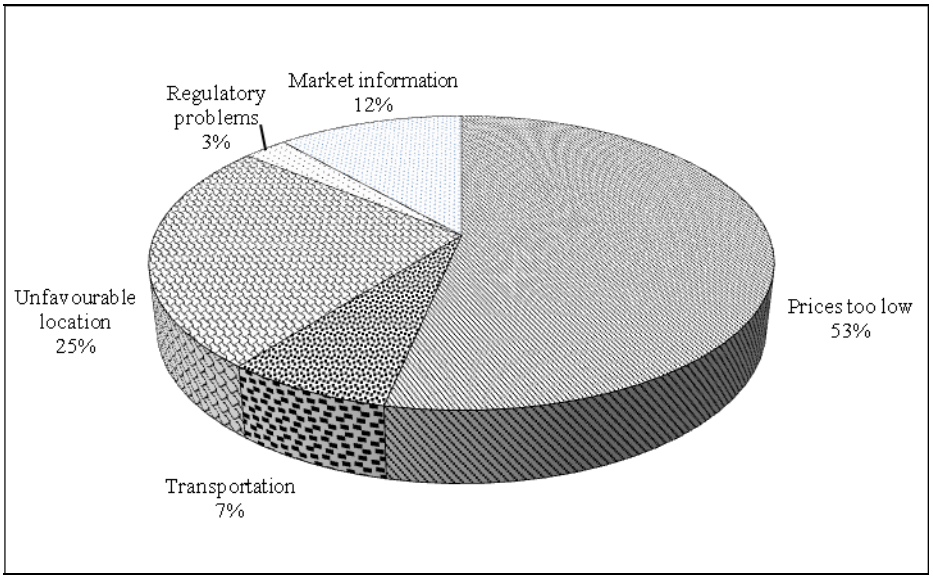

Figure 6.6: Main market problems experienced by farmers (n = 397)

Main marketing problems were related primarily to prices being too low (53%) followed by unfavourable location (25%), lack of appropriate market information (12%) and transportation challenges (7%). Unfavourable location alludes to being located in very remote and difficult-to-reach areas, which made it difficult for them to easily access better markets due to high transaction costs. These challenges are closely interlinked. Obviously, beneficiaries located in very remote areas, transportation of marketable produce to the nearest preferred market became a costly exercise. Again, market information became difficult to access and the effect is that the cosmopolitan class of middlemen took advantage of the situation to provide the missing link at a mark-up that is too exorbitant for the farmers. The question therefore arises as to how to address institutional and organizational challenges pertaining to settlement of new farmers.

Produce marketing is related to the forward linkages in the commodity value chain after farmers have already produced. However, backward linkages are also crucial in order to ensure that farmers access the required inputs to attain expected levels of production since not all farmers have adequate savings to pay for the cost of production inputs. Agricultural credit or loans can assist farmers to access inputs and improve levels of production.

6.10. BENEFICIARIES' ACCESS TO AGRICULTURAL LOANS OR CREDIT

Results from a question on whether or not households obtained a loan from any lending institution for use in agriculture production indicated that only 10% households obtained loans during the 2011/2012 and/or 2012/2013 cropping seasons.

Accessibility to credit for agricultural production for 2011/2012 and 2012/2013 cropping seasons did not significantly differ statistically across the four EPAs (χ^2 = 3.942; df = 3; p = 0.268) (Table 6.12).

Table 6.12 shows that all the four extension planning areas equally experienced problems to access agricultural loans or credit to support their farming activities. Accessibility to loans is facilitated by purposeful institutional arrangements and capacity building to link farmers and agricultural credit institutions and less on inherent natural factors for the area.

Table 6.12: Relationship between EPA and accessibility to loans/credit for agricultural production (n = 397)

Access to credit	**Extension Planning Area**			
	Chikweo (%)	**Nyambi (%)**	**Mbonechera (%)**	**Nsanama (%)**
Yes	10.30	11.20	5.20	13.40
No	89.70	88.80	94.80	86.60
Total	**100.00**	**100.00**	**100.00**	**100.00**

The problems therefore point to the inadequacy or complete absence of efforts to link the demand and supply sides of rural or agricultural credit. For farmers to get linked to credit organizations they need to be organized in functional groups and open a savings account with a commercial bank. For most rural savings and credit groups, peer influence of the group provides a guarantee against default by any group member hence the importance of the group. The group is also supposed to prepare a

detailed business plan complete with cash-flow projections in order to justify their ability to repay the loan. Interface meetings are also supposed to be facilitated between the farmer groups and the credit organizations. Extension workers are crucial in mediating this process. These processes require competent facilitation of extension officers with agribusiness skills. With beneficiaries facing infrequent access to extension workers and extension workers themselves biased towards technical skills, it is less surprising that there was low accessibility to agricultural credit amongst the beneficiary households.

Households were asked to indicate sources from where they obtained agricultural loans. For smallholder farmers in Machinga district, agricultural credit can be obtained from a number of sources. Government has loan schemes like the Malawi Rural Development Fund (MARDEF) from where farmers can access loans to support agricultural production. Several NGOs working in rural areas have also championed formation of Village Savings and Loan groups where local communities deposit their savings and also borrow money for investment financing. For some groups of farmers that are well organized, a few commercial banks have specific service packages to support agricultural production. Private agro-dealers especially for tobacco and cotton also offer credit in kind to farmers. Farmers can also get informal credit from friends, relatives and other community members for repayment at a later date and this was under “any other” category.

Figure 6.7 illustrates that most beneficiary households obtained loans from Village Savings and Loan (VSL) groups (46%), followed by private agro-dealers (19%), commercial banks (13%) and government loans (11%). While it is commended that

village savings and loan schemes, which are a community managed savings and credit cooperative, assisted a bigger proportion of farmers to access credit, it is not known how sufficient the loan package was.

However, the initiative needs to be supported and encouraged as a way of promoting the saving culture among beneficiary households. Private agro-dealers' loan provision was largely in kind through provision of chemicals, seed and fertilizers especially for the major cash crops of cotton and tobacco.

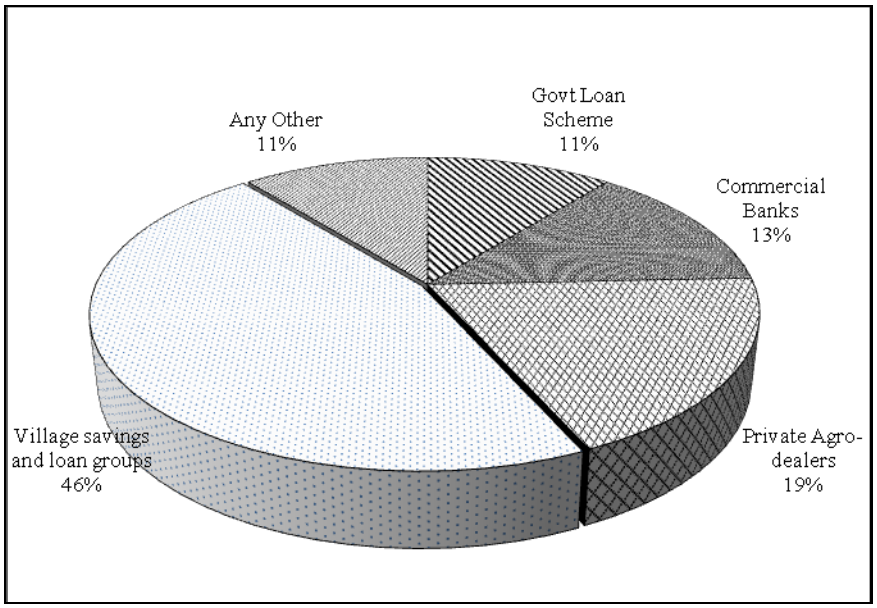

Figure 6.7: Agricultural credit organizations for obtaining agricultural loans.

As such, the package was limited in the number of crops and farmers that could benefit from it. Similarly, the government loan scheme which was largely provided by Malawi Rural Development Fund was not specific to the beneficiary households and its high level of politicization meant that not all who needed a loan could get it. The 13% of beneficiaries accessing loans from commercial banks is deemed relatively small considering that the beneficiary households or trusts had land

ownership rights, which could have been used as collateral for obtaining group credit. Despite availability of institutions providing agricultural loans, not all farmers accessed the loans.

Figure 6.8 illustrates the main reasons why some farmers did not access the loans.

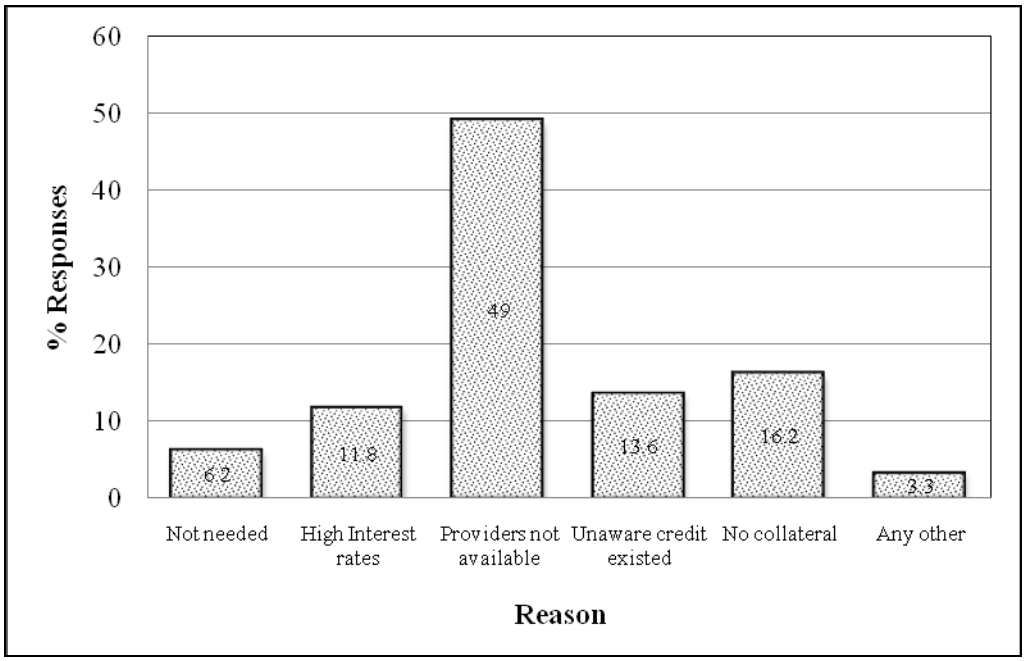

Figure 6.8: Farmers' reasons for not obtaining an agricultural loan or credit

Figure 6.8 shows that 49% of the respondents failed to obtain loans because credit organizations were not available while 16.2% of the respondents failed because they had no collateral to offer for a loan. 13.6% respondents were unaware of the credit facilities that existed in their area. 11.8% of the respondents feared the high interest rates associated with the loans.

The unavailability of providers and lack of awareness on the part of farmers shows that a great deal of work and linkage planning was not done to help the beneficiaries. The perception of "lacking collateral" means that the benefits of holding land under

legal title were not clearly explained to the trusts. Lack of awareness of existence of credit organizations again indicates weak extension services, poor group organization and poor stakeholder coordination as this only needed information sharing. Table 6.13 displays the reasons across the four EPAs why beneficiaries did not obtain loans or credit.

Table 6.13: Reasons for not obtaining loans across the EPAs (n = 397)

Reason	Responses (n)				Total
	Chikweo	Nyambi	Mbonechera	Nsanama	
Not needed	6	3	5	2	**16**
Have working capital from own sources	2	0	2	3	**7**
High interest rates	6	10	20	11	**47**
Providers not available	48	50	45	48	**191**
Unaware credit/loan existed	15	13	19	6	**53**
No collateral	14	20	11	18	**63**
Total	**91**	**96**	**102**	**88**	**377**

The main reason across the four EPAs was the fact that credit organizations were not available. Credit organizations were not available in Nyambi (50 responses) followed by Chikweo and Nsanama (48 responses each). Mbonechera had the biggest number of respondents not aware about existence of credit/loan followed by Chikweo. Fear of high interest rates was more in Mbonechera than the rest of the EPAs. While some of the reasons for not obtaining loans or credit were real, some were also perceptual and emanating from farmers' lack of knowledge about issues of credit. From the results, one can deduce a lot of information asymmetries across the EPAs. If trusts were well organized and guided, they should have been able to obtain loans on the basis of

group collateral or through use of title deeds for their land. Before linking farmers to credit organizations, it was necessary to train and inform farmers on savings and credit management and then link the groups to available credit organizations for support.

6.11 MAJOR CHALLENGES FACED BY BENEFICIARIES AFTER RELOCATION

In any development programme like CBRLDP, many challenges exist. Some challenges are core and others peripheral. Beneficiary households were requested to indicate major challenges experienced after relocation on a Likert scale (1-4) with regard to their level of difficulty. The resulting scores were multiplied by their scalar values to get weighted scores that were compared in order to determine priority challenges (Table 6.14).

Table 6.14: Major challenges experienced after relocation of beneficiaries

	WEIGHTED SCORES				
CHALLENGE	**CHIKWEO**	**NYAMBI**	**MBONECHERA**	**NSANAMA**	**TOTAL**
Inadequate extension support	130	124	97	104	**455**
Access to project funds	40	73	37	123	**273**
Lack of economic and social infrastructure	218	217	199	187	**821**
Bad weather	11	29	18	109	**167**
Poor soils	7	15	29	34	**85**
Poor veld condition	0	0	9	0	**9**
Poor social integration with receiving communities	116	85	174	95	**470**
Other	138	116	122	84	**460**

Lack of economic and social infrastructure was the major problem experienced by the respondents after relocation (821). Economic and social infrastructure included roads, clinics, schools and clean drinking water. This was followed by poor social integration with receiving communities (470), poor access to agricultural inputs and credit ("other" category) (460) and inadequate extension support (455).

According to the set-up of the project, infrastructure was supposed to be funded by Malawi Social Action Fund under the Local Development Fund or by resources from the sector concerned. Since local development fund supported community driven projects it required the good will of local chiefs and their village development committees to propose projects to support infrastructure development for the relocated beneficiaries. Because of competing interests and poor social integration between the Trusts and the receiving communities, most of the projects proposed for relocated beneficiaries did not see the light of the day. Relocated beneficiaries reported being excluded by receiving communities from benefitting from social support programmes like the Farm Input Subsidy Programme, Public Works Programmes and Input for Asset programmes because of the indigenous communities' feeling that the beneficiary communities were already receiving a lot of support from the project. After getting project assistance in the first and second years, beneficiaries were left without links to credit organizations or NGOs where they could get group loans if need arose. The challenge of inadequate extension support has been demonstrated in a number of results already presented in this report.

6.12 BENEFICIARIES' RECOMMENDATIONS FOR IMPROVING SIMILAR PROGRAMMES IN FUTURE

The results with regard to service delivery demonstrate critical service gaps that inevitably led to emergence of serious challenges to achieve project objectives. To get an insight of how the project could have been improved in its performance, respondents were asked to suggest ways in which projects of a similar nature could be improved in future (Table 6.15).

Table 6.15: Beneficiary recommendations for improving similar programmes in future

Recommended Actions	Responses				TOTAL	
	Chikweo	Nyambi	Mbonechera	Nsanama	n	%
Provision of social infrastructure to resettled areas with emphasis on clean portable water	39	33	35	30	**137**	**34.50**
Provision of loans for farm inputs, and income generating activities	37	32	33	25	**127**	**31.98**
Extension of the period for providing farm input support	6	18	23	20	**67**	**16.87**
Linkage with NGOs and donor agencies for complementary support	3	4	2	2	**11**	**2.77**
Increased contact with extension staff	11	6	8	11	**36**	**9.06**
Proper identification and screening of beneficiaries	2	1	3	2	**8**	**2.01**
Recognition of Trusts as villages in their own right	5	3	1	2	**11**	**2.70**
TOTAL	**103**	**97**	**105**	**92**	**397**	**100**

Table 6.15 displays that 34% resettled communities faced access challenges to social infrastructure like schools, health facilities, clean portable water and access roads. Of all types of social infrastructure, access to clean portable water emerged as the biggest challenge.

As a result, they found it difficult to access education and health facilities that were located at long distances. Resettled areas were generally far from other communities, in places previously occupied by estates and were not included in local development plans for provision of social facilities. They recommended that for resettlement programmes like the CBRLDP, social infrastructure be provided prior to resettlement of the beneficiaries to ensure that their general wellbeing is not affected by the relocation into new areas.

32% respondents recommended providing loans for agricultural inputs and small businesses for sustainable development programmes. The recommendation came against the backdrop of most beneficiaries failing to access agricultural inputs after project assistance phased out. Some beneficiaries reported to have experienced crop failure due to dry spells in the initial years of resettlement.

The obstacle was that organizations were not available to assist the farmers with loans. The effect was low agricultural production and low income. Credit-in-kind in form of livestock pass-on programmes was mentioned as another area that can improve lives of resettled families. Though livestock production was in the plans of CBRLDP, the project failed to provide initial stock to beneficiaries.

Beneficiaries also recommended that the period and amount for receiving assistance in land reform projects should be increased. Each eligible household was allocated an equivalent of US$1 050 for land acquisition, resettlement and farm development. Of this grant, 62% was allocated for farm development, 30% for land acquisition and 8% for resettlement allowance. The grant was disbursed over one to two years, depending on the time the beneficiaries relocated. If they relocated late in the agricultural season due to administrative factors, disbursement of the grant extended to the second year of resettlement. The farm development allocation was felt to be small to meet the needs and demands of people who were resettling in new areas, not yet having opportunities to earn extra income from other sources and cut off from social networks they enjoyed before relocation. Secondly, the period for receiving support was perceived to be too short for reasons that the project needed to recognize the risky nature of agriculture. Beneficiaries faced disasters e.g. dry spells and pest and disease outbreaks in the initial years of relocation but could not get extra project support in the following years to assist them bounce back to normal production. Sometimes, crop failure was caused by the project itself relocating the beneficiaries late in the rainy season, leaving them with no time to adequately prepare the new fields and plant with first rains.

Increased contact with extension staff was also recommended as a means of improving programmes of similar nature. As demonstrated earlier in this report, beneficiaries faced difficulties to access extension advisory services from different role players including the mainstream government extension officers. As a consequence, farmers were poorly organized, lacked knowledge and skills in many

respects of agricultural production and could not access loans to support agricultural production. Linkage to markets for agricultural produce was also limited. The beneficiaries felt that increasing contact with extension staff can help solve most of the problems they faced.

Related to accessing extension services, beneficiaries further recommended linkage with NGOs, private sector and other donor agencies for complementary support to land reform programmes. This is related to the feeling of beneficiaries that project support was inadequate in areas of access roads, health facilities and portable water and that such linkage could open channels for additional support.

Proper identification and screening of beneficiaries was linked to the challenge of beneficiaries returning to their original homes after the first year of relocation. Some beneficiaries returned just after receiving the resettlement grant. Respondents felt that these were false beneficiaries who just wanted the resettlement grant but were not seriously in need of land. The challenge they brought is that before abandoning the land, they could sell it to somebody without knowledge of the group thereby bringing conflict into the group. The respondents further proposed that to better gauge the seriousness of beneficiaries, the resettlement grant be provided in form of materials and inputs and not cash to the beneficiaries.

Recognition of Trusts as villages in their own right as a recommendation originated from the challenge of poor social integration with receiving communities. Respondents felt that Trusts often were left out of social support programmes like the Farm Input Subsidy Programme (FISP) and local development projects. Beneficiaries

were sidelined because locals felt that they were already receiving a lot of support from the project from which the locals were not able to benefit. However, the idea of turning Trusts into gazetted villages may bring more social conflicts than it intends to solve. Under the traditional laws of Malawi, a group of people cannot just move to another Traditional Authority, create a village and name their own chief. The best way is for land reform programmes to have specific activities aimed at promoting social integration of land reform beneficiaries and the receiving communities. This can be achieved by having sub-projects that benefit both sides and lobby for inclusion of the beneficiary representatives in the village development committees.

CHAPTER 7

CONCLUSION AND RECOMMENDATIONS

7.1 INTRODUCTION

The study was conducted to assess the impact of the Community Based Rural Land Development Project (CBRLDP) in Machinga District and make policy and operational recommendations for future improvement of similar programmes.

The study aimed to test a number of conjectures. The first hypothesis was that increased access to land by the landless and land poor smallholder farmers enables more efficient, profitable and sustainable agricultural production and hence greater household income and access to food. The second hypothesis stated that adequate post settlement support is a critical precondition for effective performance and functioning of land reform beneficiary groups. Lastly, the third hypothesis contended that effective collaboration of all role players is important for the provision of sustained and coordinated support to land reform beneficiaries.

Chapter 7 summarizes the conclusions on the results displayed in Chapters 4, 5 and 6 which lead to recommendations made for policy makers and implementers. The conclusion and recommendations are presented following key objectives of the study in order to maintain focus and relevance.

7.2 CONCLUSION

7.2.1 Social and demographic profile of beneficiaries.

Overall, CBRLDP beneficiaries in Machinga District were in stable families. Beneficiary households were predominantly male headed (82.4%) with 87% of household heads reportedly married. Average household size was higher at 6.29 than the national average of 4.6. This meant more demands to meet household food requirements. The household composition demonstrated availability of family labour, a fundamental aspect under smallholder farming. However, marital status of household heads varied significantly over the four EPAs (χ^2 = 9.42; df = 3; p = 0.024), with Mbonechera having more unmarried persons (20%) than was expected under the null hypothesis of no association (12.7%). Household heads were in the productive age ranges with mean average age at 43 years. Mean ages of household heads differed significantly across the four EPAs (F (3.393) = 5.677, p = 0.001) with Mbonechera EPA having a larger proportion of older household heads (48 years) than in the rest of the EPAs. A large number of beneficiaries had some form of education ranging from primary education (70.5%) to secondary education (11.9%). The education levels varied significantly (χ^2 = 20.11; df = 6; p = 0.002) across the four EPAs, with Nyambi EPA having the largest proportion of household heads without any form of education (30%). Overall, the profile showed qualities that put the beneficiaries in a better position to effectively take part in farming and other livelihood interventions.

7.2.2 Land Tenure status of beneficiary households.

The CBRLDP demonstrated a highly satisfactory performance in addressing land tenure issues for the previously landless and land poor beneficiary households. The project managed to relocate more than 15 000 beneficiaries planned by the project (Sintowe *et al*. 2011). With each beneficiary holding 2.2ha of agricultural land, land holding sizes, on average, increased by 400%. Beneficiaries on average held 0.2 to 0.4 ha before the project (Pricewaterhouse, 2006). If land alone was a critical success factor, beneficiaries were expected to achieve the other objectives of food security and increased income. These results were corroborated by project management committees (PMCs) interviewed who indicated satisfaction with the quality and size of the land acquired. PMCs saw the land to be potentially productive and bigger in size than the land they had before.

A large number of beneficiaries were from within Machinga District. Out of 4 419 project beneficiaries in Machinga District, 92% were within district relocations. The worst land constrained districts of Thyolo and Mulanje had the least number of beneficiaries relocated to Machinga (5% and 3% respectively). This meant that beneficiaries most in need of land were not adequately assisted. One would have expected these districts to benefit more from the project.

Achievement on tenure security was also highly satisfactory in that the newly acquired land was held and communally registered as a Trust, but with individual ownership of demarcated parcels of land. 99.2% of respondents reported holding their land under leasehold tenure as opposed to customary tenure under which they formerly held their small pieces of land. Legal ownership of the entire land acquired

was with the Trust and individual households were not permitted to transfer ownership and utilization of the land except where it meant passing user rights to siblings within the same household (inheritance). There was mixed understanding among beneficiaries on land tenure rights. The majority of respondents (57.7%) saw benefits in secure tenure through future use of siblings while 2.9% of respondents were aware of the use of secure tenure as collateral for credit. The latter certainly limited the trusts' opportunities for accessing loans to improve agricultural production as well as venture into small scale businesses.

7.2.3 Perceived food security status of beneficiary households

Household food security status was determined by looking at the number of households with or without food from their own production throughout the year. Those with food from own production throughout the year were deemed food secure and those without were regarded food insecure. The expectation was that with increased landholding sizes and complementary support rendered, the average household food production will increase.

There was high prevalence of food insecurity among beneficiary households. 85% households reported to be food insecure during 2012/2013 season with Mbonechera EPA having the highest proportion of food insecure households (91%). These results indicate that land holding size is not the only limiting factor to increased agricultural productivity, but that other factors also play a critical role. Mid and end of project evaluations by Sintowe (2011) and Pricewaterhouse (2006) reported increases in production levels by CDRLDP beneficiaries. During the project life time, support services were largely being provided by project staff. Two years after phase out of the

project, it appeared that all gains from involvement in the project have been lost; demonstrating that support systems for the beneficiaries did not sufficiently consider sustainability mechanisms.

Most households produced food crops way below their annual food requirement resulting into large numbers of food insecure households across the four EPAs. Total kilocalories produced for maize, rice and cassava (the dominant food crops in Malawi) only averaged 1 925 652kcal per household against an annual food requirement of 3 761 923kcal for an average household size of 6.26. Discussion with communities and PMCs showed that this was a result of poor crop production practices and limited access to production inputs. Communities as well as PMCs bemoaned limited access to services providers for extension, agricultural inputs, credit as well as difficulties in accessing markets for their produce.

Mean production of maize and cassava for instance did not statistically vary significantly across the four EPAs despite inherent geographical differences among them ($F\ 3, 397 = 1.062$, $p = 0.366$) and ($\chi^2 = 6.88$; $df = 3$; $p = 0.076$) for maize and cassava respectively. All four EPAs experienced low production levels in all major food crops indicating that the variation was attributable to other factors than geographical differences.

There was limited crop diversification into less popular but high value crops. This was a result of minimal involvement of research and extension in the promotion of alternative crop production technologies rather than lack of interest by farmers in such crops.

As a coping mechanism to food insecurity, 89% of households depended on working in fields of relatively well to do and labour constrained farmers, in order to earn income to buy food on the market. Reduction of food portions at meal times and reduction of number of meals per day were some of the alternative strategies adopted by many households.

7.3.4 Income status of beneficiary households

Household incomes were categorized in broad categories of farm and non-farm income in order to determine the potential earning capacity for a household. There was a reduction in average household income two years after phase out of the project. Average household farm incomes of beneficiaries were lower (MK60 117) compared with MK88 004 observed at the end of project evaluation (Sintowe *et al,* 2011). Chikweo EPA recorded the highest average agricultural income (MK104 805 owed to farmers involved in tobacco production. On average tobacco production contributed more income to participating households than any other crop grown by the beneficiaries due to its organized marketing.

There was limited ownership and diversification of livestock among beneficiaries. Although the project initially planned to supply beneficiaries with start-up stock of different livestock classes for multiplication, most beneficiary groups did not receive these until the project phased out. Due to limited financial capacity most households were unable to buy livestock on their own. Despite low livestock ownership among beneficiaries, chickens and goats were the dominant classes owned by beneficiaries. Due to low numbers owned, incomes from chicken and goats sales only averaged MK6 892 and MK16 513 respectively. Because of this, beneficiaries became

increasingly vulnerable to risks and shocks to crop production as they lacked alternative income sources.

Tobacco and cotton were the major cash crops grown by the beneficiaries (27.2% and 14.3% of beneficiary households respectively). Though average incomes from these crops were relatively higher (MK114 981 and MK37 027 respectively), the low number of farmers involved in growing these crops imply that a majority of farmers were not able to benefit from this income source. This further limited the prospects of households increasing incomes to meet other household needs and invest in other income generating activities.

Pulses, (beans, pigeon peas and soya beans) were the most dominant sources of income amongst the food crops raking in an average income of MK10 023 and involving 41.3% of households. This was so because such crops can be grown as an intercrop and are less input demanding.

Uptake of cassava and sweet potatoes both as sources of income and as food security crops was low among the beneficiaries with only 11.3% and 2.1% households involved in these crops. Such numbers of farmers involved are truly low where cassava planting patterns do not require a pure stand and that sweet potatoes can as well be planted at the tailing of the rainy season. These crops are drought tolerant and may reduce the risk of total crop failure in times of dry spells. As such, they needed to be promoted amongst the beneficiary households. This was a result of over-emphasis on maize as a food security crop.

A significant proportion of households (77.1%) depended on salaries as a source of off-farm income followed by small businesses and remittances (20.9% and 6.5% respectively). Average incomes of MK24 293, MK52 686 and MK26 942 were obtained through salaries, small businesses and remittances respectively.

Overall, the findings reject the first hypothesis that increased access to land by the landless and land poor smallholder farmers enable more efficient, profitable and sustainable agricultural production and hence greater income and access to food. Despite increases in landholdings, food production levels were low across all crops while income levels were also low for most of the sources. Low crop production levels were not attributable to geographical differences but other factors.

7.3.5 Efficacy of post settlement support

Focus group discussions conducted revealed serious linkage and interaction gaps among and between key actors in the project. Coordination was dysfunctional immediately after relocation of beneficiaries. Beneficiary groups were not represented in any local development structures at village, area and district levels which limited their opportunities for benefiting from local development funding mechanisms available at district level. Furthermore, NGO and private sector involvement in the implementation of the project was generally nonexistent.

In general, CBRLDP beneficiaries faced great difficulties to access extension services yet the role of extension was pivotal in this project. As Rivera and Sulaiman (2009) pointed out, extension acts as a driver of structural and institutional arrangements for propelling the process of developing, adapting and diffusing new knowledge,

information and technology for social and economic change. Yet, 77.5% of the beneficiaries had no access to knowledge support sources from any type of service provider since the phase out of the project. This was largely as a result of them being relocated in very remote areas previously occupied by estates and not provided for with extension workers and the high vacancy rates existing in public sector extension. Beneficiaries had limited access to NGO's, private agro-dealers and farmer based organizations. This was a result of failure by the project to adequately support institutional development for coordinated provision of post-settlement support. As a result many stakeholders did not participate in project implementation. Semi structured interviews with role players also showed that no mechanisms existed for linking role players for effective provision of post settlement support. The problems appeared to have originated from project conception where the implementation structure followed a top down programmatic model that did not allow meaningful dialogue and input for key stakeholders. The project did not put in place nor support any efforts to ensure that key role players regularly met to plan, coordinate and support beneficiary groups. Almost all planning, monitoring and evaluation for the project was done centrally and government sectors relevant to the project felt alienated. At district level, greater control was in the hands of the District Lands Officer (DLO) who was recruited by the project. No specific support was provided to key government agencies to implement sector specific interventions to support the beneficiaries. While the project recruited its own extension workers mid-way in the project, these also generally worked in isolation thereby stifling the participation and involvement of other role players.

Obviously, limited access to extension services and lack of involvement of a wide range of stakeholders ramified into several other problems. Overall, the support package that was offered to beneficiaries was inadequate. Post settlement support fell short in many respects ranging from extension service provision, credit provision, marketing, group organization to infrastructure development. Beneficiaries faced difficulties to access inputs for agricultural production due to the low incomes earned and the absence of credit organizations to provide loans. Only 10% of beneficiaries were able to access agricultural loans and 46% of the loans were from VSL clubs. Many households complained of having no means of support for accessing production inputs.

84% respondents identified marketing of agricultural produce as their major challenge. Major markets were identified as Agro-companies, ADMARC, local market and middlemen. Middlemen were the dominant role players in the marketing of beneficiary households' produce (48.4%, 18.9% and 53.5% for main food crops, main cash crops and livestock and products respectively). It is only for main cash crops i.e. tobacco and cotton, that agro companies played an important role (66.3%). The findings agree with assertions by Deininger, (1999) that access to land but not with access to markets for output and credit fails to make land reform beneficiaries better off than before due to multiple market imperfections in the rural environments. The thriving of middlemen resulted from unorganized farmers and poor linkage structures among stakeholders. Marketing problems were mainly related to low prices (53%), unfavourable market location (25%), lack of market information (12%) and transportation challenges (7%).

In the analysis of all possible sources of knowledge support, one consistent message came through namely the need for purposeful planning and financing for effective coordination and linkages between knowledge support service providers. It is certainly impossible to bring together multiple actors with different organizational mandates to work on a common objective without providing the necessary support for the building of the linkage mechanisms. However good they may be, coordination and linkage structures such as the District Agricultural Extension Services System (DAESS), cannot work perfectly if not accorded proper resourcing for their operationalization.

The findings support the second hypothesis that adequate post settlement support is a necessary precondition for effective performance and functioning of land reform beneficiaries. The findings also support the third hypothesis that effective collaboration of all role players is important for the provision of sustained and coordinated complementary support to land reform beneficiaries.

7.2.6 Challenges experienced by beneficiary households

Lack of economic and social infrastructure, access to agricultural inputs and loans, poor social integration with receiving communities and inadequate extension support were the major problem experienced by farmers after relocation. According to the set-up of the project, infrastructure was to be funded by Malawi Social Action Fund under the Local Development Fund or by the sector concerned. Funding opportunities for infrastructure projects for the Trusts was affected by poor relationships between Trusts and local leadership. FDGs with PMCs showed that BGs were not represented in village development committees who proposed projects to be supported by

MASAF in their area. Relocated beneficiaries bemoaned of being excluded by receiving communities from benefitting from government's social support programmes because of the feeling that the beneficiary households were already receiving a lot of support from the project.

Capacity building was notably inadequate in scope as it was largely oriented towards land delivery issues and activities for the first years of resettlement. Trainings centered more on technical issues than other equally important areas of organizational and institutional development for coordinated post settlement support. This is in agreement with assertions by Agwu *et al.* (2008) when they recommend that extension approaches should explore and promote not only technical innovations but also institutional, organizational and managerial innovations.

7.3 RECOMMENDATIONS

The results of the study demonstrate that land reform beneficiaries lacked knowledge support, agricultural inputs supply, agricultural loans and faced general marketing challenges. This resulted into few land settlement beneficiaries progressing into sustainable enterprises. The study shows that dysfunctional stakeholder collaboration has a negative influence on long term sustainability of land reform impacts since it leaves the beneficiary households with no enduring structures, systems and institutions through which they can continue to get needed support.

The study further argue that absence of clear guidelines and mechanisms for facilitating stakeholder involvement renders effective collaboration impossible for the provision of integrated post settlement support.

7.3.1 Towards better and integrated provision of post settlement support

A key recommendation coming from the findings is that adoption of an interactive institutional framework for coordinated provision of post settlement support is important for land reform projects like the CBRLDP. This entails embedding project management arrangements that should encourage and support effective interaction and participation of public sector, private sector and the NGO sector to close knowledge, information and service gaps needed by the BGs.

7.3.2 Developing robust linkage mechanisms for coordination of role players

It is critically important for the sustainability of land reform impacts to build and support institutional capacity for coordination and collaboration of role players to enable sustained provision of post settlement support. There is need for land reform projects to support stakeholder forums involving beneficiary groups' representatives, relevant government sectors, NGOs, farmer based organizations, research institutions and private sector players. Such forums would undertake decentralized joint planning and review meetings well informed by needs and demands of the beneficiary groups, develop specific plans of action with responsibilities given to the role player who would best deliver the service. Such forums would also enable role players plan and solicit complimentary resources for financing specific services needed by the beneficiaries. Land reform projects should be able to dedicate funds for this purpose. It is tempting for land reform projects as it has been with other projects to get attracted with short term tangible results and take issues of institutional and capacity development as project bay-windows where resources get reallocated to other activities without foresight. But as the results demonstrate, absence of enduring

systems, structures and institutions can quickly wipe away the short term gains and bring an ideally good project into disrepute.

7.3.3 Direct financial support for participation of role players

The CBRLDP employed its own extension technicians to provide extension services to beneficiaries. These extension technicians almost single handedly taught the beneficiary groups how to perform activities such as land preparation, management of agricultural enterprises, fertilizer application, soil and water conservation, pest management, natural resource conservation and management, crop storage, agricultural produce marketing and income generating activities. However, it is unlikely that one extension worker would adequately offer required services to meet the needs and demands of land reform beneficiaries. Secondly, these extension workers were only there for a given period of time. That is why after phase out of the project, extension services are reported to have gone down. The effective and enduring way is to capacitate the existing role players with resources to be able to coordinate and provide such services to the beneficiaries in a sustainable manner.

In recognition of the need for an integrated approach to provision of post settlement support, institutional arrangements need to be clarified to enable coordination and involvement of key role players. Specific rules and procedures need to be provided for individual organizations to access funds from the project to implement agreed and needed interventions for the beneficiaries. For the CBRLDP, two path ways would have been possible. The first one was for the projects to provide direct grants to NGOs, CBOs, individual public sectors and private sector players based on approved sub-projects to implement specific interventions for BGs. This would have to happen

in consultation and under close supervision of the District Executive Committee. An alternative avenue was for Government to provide dedicated grants to receiving district councils through MASAF's local development fund to attend to specific service and infrastructural needs of BGs from which district based public and private sector players can tap resources for implementation of approved sub-projects. This would empower local communities and enhance decentralization.

7.3.4 Farmer organization development

Farmer organizations, which include groups, clubs, cooperatives associations and community based organizations should be an important component of land reform programmes to gain greater control over their own development and improve livelihoods of beneficiaries. Post settlement support initiatives need to focus deliberately on building the capacity of farmers in order to strengthen and empower them as groups. As it has been demonstrated in the study, this will make provision of extension and related support services easier and more effective.

7.3.5 Empowering Trusts for higher crop productivity and increased incomes

The study revealed low production levels and diminishing incomes. This is attributable to so many factors but the dominant factors have been the difficulties in accessing agricultural inputs and lack of capital to start small businesses. It is important to recognize that land reform projects will seldom have adequate funds and enough time to provide all the needed support to transform lives of the beneficiaries. With project support, Trusts can develop a revolving fund to enable members borrow to purchase inputs or start small businesses. This can be a good entry point for establishing a relationship with financial institutions if bank accounts can be opened

with them for bigger investment loans in future. This can also gradually reduce beneficiaries' dependency on external support and increase business sense among its members.

7.3.6 Getting key social infrastructure in place

The experience from CBRLDP has shown that it is difficult to entirely place responsibility for provision of social infrastructure in the hands of an autonomous organization with different operating procedures without binding agreements in place. Malawi Social Action Fund though drawing funds from the same donor as the CBRLDP failed to provide water points, health facilities and access roads to resettled beneficiaries because of the community driven nature of its implementation process. It is critical for land reform projects to have own components for provision of basic infrastructure in resettled areas to avoid obvious disease out breaks, school drop outs due to long distances and poor accessibility which can all have a negative impact on current and future productive capacity of the resettled households.

7.3.7 Delineation of land reform project components

Activities supporting land delivery are normally "once-off" while post settlement support often involves processes that take longer to yield results. To avoid land delivery issues overshadowing provision of integrated post settlement support, there is need to clearly delineate land reform project components. It is recommended to have land delivery component, post settlement support component and project management and coordination component well separated with discrete budgetary allocations, staffing requirements and implementation time frames. Obviously, post

settlement support requires longer time to be implemented than land delivery issues and land reform project designs should take this into account.

7.3.8 Balanced capacity building of beneficiaries

It is tempting for projects to concentrate efforts on areas that show tangible results in the shortest time possible at the expense of activities that gradually build sustainable groups. As observed from this study, concentration on technical skills of beneficiaries leaving out the soft skills of organizational and institutional development brought its own share of problems. It is important that development of technical and soft skills for land reform beneficiaries be given equal attention in order to develop sustainable and self-reliant farmer enterprises in the end.

7.3.9 Flexibility in planning for post settlement support

As has been observed on several occasions in this study, conditions are seldom the same in all locations of project implementation. For instance, EPAs differed in their level of education, access to extension staff, experiencing of marketing problems and challenges faced after relocation. This implies that the "one size fits all plans" that characterize most projects may not be effective for land reform projects. There is need for flexibility in planning for post settlement support considering that areas may be different in many aspects. This can be achieved by providing unallocated funds that can be used by local councils to respond to specific needs and demands peculiar to each resettled area.

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APPENDICES

A) Household questionnaire and FDG guidelines used

UNIVERSITY OF PRETORIA

FACULTY OF NATURAL AND AGRICULTURAL SCIENCES

Department of Agricultural Economics, Extension and Rural Development

Evaluating the Impact of Land Reform in Malawi: The Case of Community Based Rural Land Development Project.

A. IDENTIFICATION PANNEL

A1	District	
A2	EPA	
A3	Village	
A4	Enumerator Name	

B. DEMOGRAPHIC INFORMATION

B1: Name of Respondent: _____

B2: Age of Household head: ☐

B3: Gender of household Head:

M	
F	

Gender:

B4: Marital Status of household head

1=Married	2= Never Married	3= Widowed	4= Divorced	5= Separated

Marital Status:

B5: Highest Education Level of household head

Edulevel

ID No	Education level	Response *(please tick)*
1	Standard 1-5	
2	Standard 6-8	
3	Form 1-2	
4	Form 3-4	
5	Tertiary level	

B6: How many members are there in your household? ☐

C. EFFECTIVENESS OF CBRLDP ON LAND TENURE

C1: How much land do you currently have for farming as a household? *(Ha.)* ☐

C2: Under which tenure category do you hold this land? *(Please tick in appropriate box)*

Tenure

Customary =1	*Leasehold =2*	*Customary estate=3*	*Freehold tenure=.4*	*Communal tenure=5.*

C3: As a household, are you free to transfer title of your land?

TitleTransfer

Yes	
No	

C4: If yes, in what ways are you free to transfer this title? *(Can choose more than one)*

ID No	Variable	Response *(please tick)*
1	Within the household	
2	Sale to potential buyers	
3	Returning it back to the community for reallocation	
4	Subleasing/renting to other users	

TransWays

C5: Who holds control for the acquisition, utilization and disposal of the land? *(Please choose one)*

Id no	Variable	Response
1	Household	
2	Village chief	
3	Beneficiary community	
4	Government Officials	

Utidispocontrol

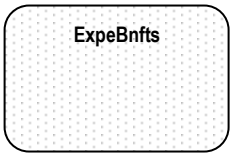
C6: Do you see any benefits for having your land under this tenure category? *(Please tick)*

Yes	
No	

Seebnfts

C7: If yes, what benefits do you get/expect to get for having your land under this tenure? *(Can choose more than one)*

Id no	Variable	Response
1	Collateral for credit	
2	Renting out	
3	Future use of sibling	
4	Other (please specify)	



D. EFFECTIVENESS OF LAND REFORM ON SMALLHOLDER FOOD SECURITY.

D1: Does your household engage in the production of energy/staple food crops? ☐

(1 = yes, 2 = no) **If yes, go to question 3.**

D2: If no, why not? *(Can choose more than one)*

Id no	Variable	Response
1	Grow cash crops only and purchase staple food	
2	Produce livestock for sale	
3	Area not suitable for energy food crops	
4	Lack of inputs for production	
5	Any other (Please specify)	

D3: If yes, please record the amount of each energy/staple food crop produced using the tables below.

Proportion of households with energy food reserves at harvest and at start of hunger

Food Crop	Period	Local Units of Measurement	Estimated Weight (kg) per Local Unit	Total Kilograms
1. Maize/Maize meal	By December			
2. Cassava	By December			
3. Rice (paddy)	By December			
4. Millet	By December			
5. Irish Potatoes	By December			
6. Sweet Potatoes	By December			
7. Plantain/Bananas	By December			
8. Sorghum	By December			
9. Other (Specify)	By December			

Note: *Since the indicator is measuring total energy/staple food produced as opposed to measuring yields, there is no need to capture hectarage planted to each crop.*

D4: Did you experience food shortage during the past two seasons?

2011/2012	Yes	
	No	
2012/2013	Yes	
	No	

Foodshort

D5: If yes, state the coping mechanisms you adopted when there was food shortage in your household (*The interviewer should not read from the list of irreversible coping strategies, but mark as the respondent answers)*

ID	Irreversible Coping Strategy	Status of Adoption	
		Adoption	Not adopting
1	Working in other people's fields in exchange for food, leaving own fields unattended		
2	Selling of household assets such as land, bicycle, furniture etc.		
3	Selling of Livestock		
4	Selling of Breeding stock (specify)		
5	Selling of Fertilizers, seeds (tick)		
6	Selling of Farm implements (specify)		
7	Selling Cooking grain meant for seed		
8	Reducing food portions at meal times		
9	Reducing number of meals per day		
10	Going to bed on an empty stomach		
11	Cutting down fruit trees to sell as firewood		
12	Uncontrolled felling of trees for firewood or charcoal selling		
13	Children dropping out of school		
14	Breaking up of marriages		
15	Temporary migration		
16	Gathering of unusual wild foods		
17	Others (specify)		

E. INFLUENCE OF LAND REFORM ON HOUSEHOLD INCOME

Please describe the amount of household income you earned from various sources during the past year.

E1: Income from livestock production

Source of Income	Unit	Amount of Income from Livestock Production					
		Weekly		Monthly		Annual**	
		Qty	Total Value	Qty	Total Value	Qty	Total Value
1. Sale of Livestock							
1.1. Cattle							
1.2. Chicken							
1.3. Goats							
1.4. Pigs							
1.5. Guinea fowls							
1.6. Sheep							
1.7. Other livestock, if any							
1.7.1.							
1.7.2.							
1.7.3.							
Sub-Total							
2. Sales of Livestock Products							
2.1. Milk							
2.2. Meat							
2.3. Egg							

Source of Income	Unit	Amount of Income from Livestock Production					
		Weekly		Monthly		Annual**	
		Qty	Total Value	Qty	Total Value	Qty	Total Value
2.4. Other (specify)							
2.4.1.							
2.4.2.							
Sub-Total							
Total Cash Income from Livestock & Livestock Products							

*** Annual income is calculated by multiplying weekly income by the number of weeks that income was gained. If income is monthly, then the calculation of annual income is made by multiplying monthly income by the number of months the income was gained.*

E2: Annual income from crop sales

Type of Crops	Unit of Measurement	Quantity of Crop Sales	Estimated Unit Price	Total Value
1. Sale of cash crops				
1.1. Tobacco				
1.2. Tea				
1.3. Cotton				
1.4. Sugar cane				
1.5. Other (specify)				
Total cash income from cash crops				
2. Sale of food crops				
2.1. Maize				

Type of Crops	Unit of Measurement	Quantity of Crop Sales	Estimated Unit Price	Total Value
2.2.Cassava				
2.3. Rice				
2.4. Millet				
2.5. Ground nuts				
2.6. Sweet potatoes				
2.7. Pulses				
2.8. Sorghum				
2.9. Other 1 (specify_____)				
2.10. Other 2 (specify_____)				
Total cash from sale of surplus crops				

E3: Income from Forest Based Enterprises

Type of Forest Based Enterprises	Unit of Measurement	Quantity of FBE Sales	Estimated Unit Price	Total Value
1. Income from sale of forest based products				
1.1. Timber				
1. 2. Poles				
1.3. Honey				

Type of Forest Based Enterprises	Unit of Measurement	Quantity of FBE Sales	Estimated Unit Price	Total Value
1.4. Mushroom				
1.5. Wild fruits				
1.6. Seedlings				
1.7. Other 1 (specify_____)				
Total income from sale of forest products				
2. Income from forest based other enterprises				
2.1. Ganyu offered to forest activity				
2.2. Manufacturing of products from forest products, e.g. making curios				
2.3. Other service (specify)				
2.4. Other service (specify)				
Total income from other enterprises				
Total Cash Income from FBEs				

** *Annual income is calculated by multiplying weekly income by the number of weeks that income was gained. If income is monthly, then the calculation of annual income is made by multiplying monthly income by the number of months the income was gained.*

E4: Income from other (various) sources

No.	Types of Income	Amount of Income from Different Sources					
		Weekly		Monthly		Annual*	
		Amount	Value**	Amount	Value	Amount	Value
1	Salaries/wages/payments from piece work (ganyu)						
2	Income from small businesses such as oxcart, bicycle, mandasi, etc.						
3	Remittances/income from transfers						
4	Other income source, please specify						
	4.1.						
	4.2.						
	4.3.						
	4.4.						
Total Cash Income from other income sources							

Notes: * Annual income is calculated by multiplying weekly income by the number of weeks that income was gained. If income is monthly, then the calculation of annual income is made by multiplying monthly income by the number of months the income was gained.
** The amount column is meant to reflect the value of a payment where it is not made in cash

F. ASSESSMENT OF EFFICACY OF POST SETTLEMENT SUPPORT

F1: As a farmer, do you belong to any farmer group in this community?

Yes	
No	

GrpMembership

F2: What types of farmer groups exist in this community? *(Can choose more than one)*

ID No	Farmer Group Type	Response *(please tick)*
1	Crop Production groups	
2	Livestock Production groups	
3	Natural resource management groups	
4	Village savings and loan groups	
5	Commodity marketing associations	
6	Irrigation schemes	
7	Stakeholder panels	

GroupTypes

F3: As farmers, how are you linked to service providers available at district level and beyond? *(Can choose more than one)*

ID No	Linkage mechanism	Response *(please tick)*
1	*Through village development committees*	
2	*Through area stakeholder panels/platforms*	
3	*Through our local extension workers*	
4	*Through the village chief*	
5	*Through representation at district consultative forums*	

LinkageMechs

F4: How do you access inputs for crop and livestock production?

Category of Inputs	**Sources**					
	1= Govt.	2 = Pvt. Sector	3= NGOs	4= Own purchase	5 = Own produce	6 = Community
1. Seed/vegetative material						
2. Fertilizers						
3. Agrochemicals						
4. Livestock feeds and chemicals						

Inputacces

F5: Please indicate in the table below the frequency of service provision of each provider?

Extension Service Provider	**Frequency of Provision** *1 = not at all; 2 = rarely; 3 = often; 4 = always*			
	1	**2**	**3**	**4**
1.MOAFS				
2.Forestry Department				
3.Private Agro-dealers				
4.NGOs				
5.Farmer Based Organizations				
6.Lead Farmers				
7.Neighboring Farmers				

ServiProviders

Servifreque

E5.1. E5. 6.

E5.2. E5. 7.

E5.3.

E5.4.

F6: Please rate the identified service providers above with respect to their competence in technical and soft skills (organization and Management skills) ** on a scale of 1 to 4. *(4 = highly competent; 1 = incompetent*

ID	Service Provider	Technical Skills				Soft Skills			
		1	2	3	4	1	2	3	4
1	MOAFS								
2	Forestry Department								
3	Private Agro-dealers								
4	NGOs								
5	Farmer Based Organizations								
6	Lead Farmers								
7	Neighboring Farmers								

** Soft skills refer to skills in organizational development and management, communication and networking

F7: For each production category listed below, indicate the markets you use to sell agricultural produce?

Category of Produce	Market Sold *Agro companies = 1, ADMARC = 2, Local Market = 3, Middle men = 4 (**multiple responses permitted**)*			
	1	2	3	4
1. Main food crops *(maize, rice, sorghum, millet, cassava, sweet potatoes, European potatoes, legumes, pulses)*				

AvailableMkts

E7.1=

E7.2=

E7.3=.

2. Main Cash crops *(Tobacco, Cotton, Vegetables)*				
3. Livestock and livestock products *(shoats, pigs, cattle, poultry)*				

F8: Do you experience any market problems for your agricultural produce?

Yes	
No	

Mktpblms

F9: If yes, what are the main market problems you experience? *(Can choose more than one)*

ID	Market Problem	Response *(please tick)*
1	Market prices too low	
2	No transport	
3	Transport costs too high	
4	Too far from road	
5	Market too far	
6	Regulatory board problems	
7	Lack of market information	
8	Quality standards too high	

Whatmktpblms

F10: Did your household obtain any loans/credit from financial institutions or other sources for use in agriculture production or natural resource management during the past two seasons?

Yes	
No	

FILoans

F11: If no, what were the main reasons for not obtaining loans/credit?

ID	Reason for no loans/credit	Response *(please tick)*
1	Not needed	
2	Have working capital from own sources	
3	High interest rates	
4	Providers Not available	
5	Unaware credit/loan existed	
6	No collateral	
7	Other (Please specify)	

Whynoloans

F12: If yes, from which Financial Institutions did you obtain loans/credit for agricultural production?

ID	Reason for no loans/credit	Response *(please tick)*
1	Government loan schemes	
2	Commercial banks	
3	Private agro-dealers	
4	Farmer credit cooperatives/VSL	
5	Village revolving fund	
6	Other (Specify)	

Loansources

F13: Please indicate from the list given below (a) any major challenges that you faced after resettlement and (b), rank their level of difficulty on a scale of 1 to 4. (1= least difficult and 4 = most difficult).

ID	Challenge	Response *(please tick)*	Level of Difficulty 1= Least —— 4 = most			
			1	2	3	4
1	Inadequate extension support					
2	Access to project funds					
3	Lack of economic and social infrastructure					
4	Bad weather					
5	Poor soils					
6	Poor veld condition					
7	Poor social integration with receiving communities					
8	Other (Please specify)					

F14: What would you recommend for improving future implementation of similar programmes?

SEMI STRUCTURED INTERVIEW GUIDELINES FOR ROLE PLAYERS

1. Which stakeholders/role players/govt. sectors/Agencies have been involved in providing support services to resettled farmers in the CBRLDP?
2. What role did each of these stakeholders/role players, play in the implementation of the Community Based Rural Land Development Project?
3. Were there any structures that existed to link different role players for the implementation of the project? If yes, explain what these structures were and who was involved at each level?
4. How were these structures linked to project beneficiaries to ensure beneficiary participation in decision making?
5. How often have you been meeting as stakeholders/role players to plan and harmonize provision of support services to resettled beneficiaries *(extension, training, social infrastructure etc.)?*
6. How were role players supported (financially and technically) to adequately provide support services to project beneficiaries?
7. Do you feel you were able to adequately support the project to the best of your skills and abilities?
8. If not, what in your view hampered provision of adequate support to project beneficiaries?
9. In general, was the support provided to beneficiaries of the program adequate to achieve purposes of food and income security?
10. What major challenges did you observe in the implementation of the project?
11. If the project was to be implemented again, what would be your suggestions for improving performance?

GUIDELINES FOR SEMI STRUCTURED INTERVIEWS WITH PROJECT MANAGEMENT COMMITTEES AND VILLAGE DEVELOPMENT COMMITTEES

1. Which specific roles did you play in the implementation of the project?
2. In what areas did you receive training to effectively carry out your roles related to the project?
3. Which key stakeholders (government, private sector, NGOs, Farmer organizations, lending institutions etc.) did you work with in the implementation of the project?
4. In what way was your committee linking with other stakeholders in the implementation of the project?
5. In your view, how do you compare the level of involvement of the listed stakeholders in the implementation of the project? (do pair-wise ranking)
6. Which particular service did each of these role players provide to project beneficiaries?
7. Please rank the listed services above according to your perceived level of importance. (do matrix ranking)
8. Which services do you consider as most important in your day to day lives as farmers?
9. What other committees existed in the community for supporting project activities?
10. In general, where did the beneficiaries largely access information about various aspects of agricultural production? (List from highest to lowest).