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An Examination of Land Policy in Empowering Emergent Farmers: A Case Study of Emergent Farmers Chongwe District

[1] Cynthia Kalumba, [2] Dr. Kelvin Chibomba

[1] Department: Development Studies, Information and Communication University, Lusaka, Zambia

[2] Supervisor, Department: Development Studies, Information and Communication University, Lusaka, Zambia

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Corresponding Author: **Cynthia Kalumba**

Abstract

Despite the fairly dismal agricultural growth rates across the continent, some countries appear to be making significant positive strides. For example, over the last decade maize production in Zambia has doubled, while the real value of agricultural production has grown by 23 percent. Much of this growth is being driven by a rapid increase in the population of indigenous, medium-scale or "emergent" farmers. The findings reveal a largely positive shift in market access following participation in the Land Empowerment Program (LEP). A combined 60.0% of respondents reported enhanced opportunities to sell their produce, with 28.0% indicating that access had improved significantly, while another 32.0% experienced slight improvements. Such responses suggest that the program has enabled a majority of emergent farmers to connect more effectively with buyers, likely through increased credibility, expanded production capacity, or better bargaining power. One farmer put it simply: "Now that I have proper land, the buyers take me more seriously - they even come to my farm instead of me chasing them." Conversely, income stagnation or decline was prevalent among non-participants. Among the 14 farmers who did not benefit from the LEP, 57.1% reported no change, while 42.9% experienced a decline in annual income. A non-beneficiary expressed frustration, stating, "Those with land are moving ahead. For us without land, each year is harder than the last. "The chi-square test ($\chi^2 = 32.993$, $p < 0.001$) confirms that the relationship between LEP participation and income change is statistically significant, underscoring that access to land has been a pivotal driver of economic upliftment. Respondents highlighted practical benefits of these practices. One participant explained, "Planting trees along my fields has helped reduce soil erosion and provides shade for crops during the dry season." Another noted, "Rotating crops has improved my soil fertility and led to slightly better yields, even though I cannot always follow the schedule perfectly due to limited land." The Friedman test results indicate statistically significant differences in the adoption of various sustainable land management practices among emergent farmers in Chongwe District (Chi-Square = 13.000, df = 2, p = 0.002). The mean rank scores suggest that crop rotation or intercropping (Mean Rank = 2.14) is practiced more frequently than agroforestry/tree planting (Mean Rank = 2.14) and soil conservation measures such as terracing and contouring (Mean Rank = 1.90). The Friedman test results indicate statistically significant differences in the adoption of various sustainable land management practices among emergent farmers in Chongwe District. The study therefore recommends a need for timely capacity building programmes for farmers on various land empowerment and management practices The results reveal that a substantial proportion of respondents, 68.0% (34 out of 50), reported participation in the Land Empowerment Program (LEP), indicating strong engagement with the land policy initiatives at the household level. Conversely, 32.0% (16 respondents) had not participated. The recommendation is that there is a need for continuous farmer and government feedback on lad empowerment programmes.

Keywords: Land, Policy, Farmer, Livelihood

1. Introduction

1.1 Background

Globally, two potential growth pathways for explaining the rapid increase in the emergent farmer population reflect divergent opinions on the most effective strategy for increasing agricultural productivity and reducing poverty in Africa. On the one hand, there are those who argue that sustained public investment aimed at increasing the productivity of millions of

smallholder farmers offers the best prospects for achieving significant poverty reduction and agricultural growth on the continent (Poulton *et al* 2016, Dorward *et al* 2024). This type of inclusive agricultural growth is seen as a necessary precursor to achieving sweeping structural transformations in the overall economy (Johnston and Kilby 2015; Mellor 2016). Understanding the factors driving the growth of the emergent farmer sector requires a close examination of the legislative and public spending environment within which this growth is occurring. In Zambia agricultural policy has been guided in large measure by two fundamental preconceptions: 1). land in Zambia is abundant; and 2). emergent farmers are in the best position to utilize this land to drive agricultural productivity growth. Since independence the opening paragraph of nearly every National Agricultural Policy document has highlighted that Zambia is uniquely endowed with large swaths of potentially productive agricultural land that lays idle (e.g. National Agricultural Plan 2004: 1; National Agricultural Policy 1998). The notion of abundant, underutilized land implies that substantial agricultural production growth can be achieved by facilitating the productive use of these underutilized areas. The notion of abundant underutilized land also implies that land is not the binding constraint to agricultural development, increased food security, and lower rural poverty levels as it seems to be in many other countries. The second fundamental preconception is an outgrowth of the first, and speaks directly to the on-going debates about the role of small-scale farmers in Africa's future development. In Zambia agricultural policy has tended to reflect the belief that production growth is best achieved through public investments directed toward farms with larger asset and capital bases.

1.2 General Objective

The aim of the study is Examination of land empowerment program a case study of Chongwe district.

1.2.1 Specific Objectives

1. To evaluate the influence of land empowerment program on agricultural productivity and income generation among smallholder farmers in Chongwe District.
2. To analyze the socio-economic implications of the land empowerment program on livelihoods and poverty reduction in Chongwe District.
3. To assess the effectiveness of the land policy in promoting sustainable land management practices at the household level in Chongwe District.

1.3 Research Question

1. How has the land empowerment program influenced the income levels of smallholder farmers in terms of increased earnings and diversified income sources?
2. How has the land empowerment program impacted household livelihoods in terms of access to resources, employment opportunities, and overall well-being?
3. How has the land policy influenced land management practices, such as soil conservation, water management, and agroforestry, at the household level?

1.4 Theoretical Framework

Empowerment Theory

There is no consensus among scholars on a single, all-encompassing definition or conceptualization of empowerment (Speer & Peterson, 2000). Despite these differences, empowerment has continued to capture the altruistic imagination of social workers. Empowerment as a theory for direct social work practice at individual, group, community, and political levels is a staple in many social work texts that promote a generalist model of social work (Allen-Meares & Garvin, 2000; Miley *et al*., 2011; Robbins *et al*., 2012). Therefore, it is important in any discussion of empowerment to address the many "faces" of empowerment since as a concept it varies in meaning and is defined and operationalized in varied ways (Cattaneo & Chapman, 2010). For example, empowerment is described as a per spective or philosophy guided by principles of social justice, such as inclusivity, equality, and an understanding of oppression. This description is closely related to empowerment as an ideal condition, a process, and a way of acting in carrying out social work roles. Common processes that social workers engage in when applying an empowerment perspective include sharing power, consciousness raising, and partnership. In contrast, as an intervention model, social workers engage in empowerment practices at multiple levels, such as the intrapersonal, inter personal, and community levels to influence personal and system changes, often simultaneously. Lastly, as an outcome, empowerment is operationalized as an increase in power in intrapersonal, interpersonal, and community realms. At the intrapersonal level with individuals, this outcome often includes an increase in perceived competency and self-efficacy, or the ability to experience competence in one's life (Carr, 2003; Bandura, 1982). Increased self-efficacy, viewed as increased power, then translates into an increased ability to influence events in one's life, interpersonally in one's relationships and in the sociopolitical sphere. At the community or societal level, self-efficacy is linked to collective efficacy. Many scholars have proposed definitions of empowerment; four are outlined in the follow ing for their potential relevance to direct practice.

2. Literature Review

2.1 Land empowerment program on agricultural productivity

Kabeer's conceptualization of empowerment encompasses three main elements: resources, agency, and achievements. On one hand, there is more evidence on gender equality in resources and achievements than on agency because of the existence of established metrics and rapidly increasing availability of sex-disaggregated, individual-level data. The typical achievements measured include poverty, income, wealth, nutrition/health (women's and children's), education, among others. While these measures of achievement provide information about gender gaps, they are not directly aligned with Kabeer's concept of empowerment, which is about goals that are unique to individuals. Measured achievements may be linked or associated with individual goals but may not provide a full picture of whether the person is achieving their own personal goals.

On the other hand, data on agency remains scarce, especially at the national level. Much of the existing data either comes from individual projects and/or is only representative at subnational levels. Agency is also arguably more difficult to measure. The most common way of measuring agency has been to consider women's (and men's) participation in different decisions, typically within the household. While

this captures part of agency, it does not fully depict the concept of agency, defined as "the ability to define one's goals and act upon them" (Kabeer 1999, 438). Kabeer (1999) explains that while decision-making is often used to measure agency, it can also take other forms that are unobservable (and thus difficult to measure), such as negotiation, manipulation, subversion, and resistance, and is closely related to the idea of "power within" (Rowlands 1997).

2.2 Socio-economic implications of the land empowerment program on livelihoods and poverty reduction

Following the launch of the WEAI, multidimensional empowerment indices based on the Alkire and Foster (2011) methodology—a counting method for measuring multidimensional poverty—using individual-level data have proliferated. Some are directly related to the WEAI and measured using similar survey questions and indicators. Abbreviated WEAI (A-WEAI) measures the same domains of empowerment as WEAI using a subset of the original indicators. Project-level WEAI (pro-WEAI) combines qualitative and quantitative data and shares a core set of common indicators with WEAI and A-WEAI but includes additional indicators to improve its ability to track empowerment impacts of agricultural interventions. More recently, pro-WEAI for health and nutrition (pro-WEAI + HN; Heckert *et al*. 2022) and pro-WEAI for market inclusion (pro-WEAI + MI) propose additional specialized indicators, which complement the set of standard indicators included in pro-WEAI and measure agency related to health and nutrition decisions and value chain activities, including the empowerment environment and factors such as sexual harassment in the workplace.

2.3 Effectiveness of the land empowerment program in promoting sustainable land management practices

Recent analysis using two different spatial databases, the Global Rural-Urban Mapping Project (GRUMP) and AfriPop, suggest that while large tracts of land in Zambia do indeed conform to the notion of low population densities, the vast majority of rural households are actually confined to relatively small areas where population densities are high (Jayne *et al* 2012) [25]. These databases allow the distribution of Zambia's rural population to be examined at the 1 square kilometer pixel level. Once all pixels containing less than 10% arable land or exceeding 2,000 persons per km2 are excluded, thereby eliminating most high density, peri-urban areas from the analysis, a more nuanced picture of land access conditions in rural Zambia emerges. This analysis shows that roughly 35 percent of Zambia's rural population currently resides in pixels exceeding 500 persons per km2, which is considered by at least one study to be the maximum carrying capacity for land under intensive cultivation (Henao and Baanante 1999) [22]. This population pressure in rural areas has begun to make land access in customary areas more difficult. According to survey data from 2001, roughly 56 percent of smallholder households in Zambia stated that there was no land in their village that wasn't already allocated to someone else (SS 2001). This suggests that much of Zambia's rural population is concentrated in a relatively small area, where population pressures are becoming acute.

3. Methodology

3.1 Research Design

The basic research design employed in this study was a case study design. The choice of this design was chosen due to the fact that it enriches the data collection. The research design adopted in this study will be carefully planned, so as to be able to obtain accurate and complete information about the research project being used.

3.2 Target Population

Population is basically the universe of unit from which the sample is to be selected. According to Babbie (2019), a study population is the aggregation of element from which the sample elements actually selected. The target population for this research are emergent farmers in Chongwe. 100 farmers were targeted.

3.3 Sampling Design

In determining those that make up the sample size, the researcher will use judgmental technique. Both Interview and questionnaire methods were used to collect data (Roa, 2014).

3.4 Sample size determination.

3.4.1 Sample Size

Sample size refers to the number of items to be selected from the universe to constitute the sample, and this answer how many sampling units should be surveyed and interviewed (Kothari 2010). Large sample give more reliable results than small samples. The sample size of One Hundred (100) in number was used.

Sample Size (Sloven's formula):

$$n = N/ (1+Ne^2)$$

Where;

n is the sample size.

N is the population size

e is the margin of error

$$n = 116/ (1+ [116] \times [0.05]^2)$$

$$n = 100/1.29$$

$$n = 99.92$$

n = 100

3.5 Interview Method

The interview method of collecting data involves presentation of oral-verbal stimuli and reply in terms oral-verbal responses (Gujarati, 2010). This method was used through personal interviews. Both structured and unstructured questions will be administered to the respondents. The questions were open and flexible so as to allow greater opportunity for an individual. A set of predetermined questions will be used to guide the respondent in order to provide the necessary information to meet the research objectives. The questions will be distributed to road construction companies in on the site.

3.6 Questionnaires Method

This method of data collection is quite popular, particularly in case of enquires. It is being adopted by private individual's research workers, private and public organizations and even by governments. In this method, questionnaires will be sent to the person's concerned with a request to answer the questions and turn to the questionnaires. A questionnaire consists of number of questions printed or typed in a definite order on a form or set of forms. The respondents had to answer the questions on their own.

3.7 Data Collection Methods

The major source of data in this work will be mainly through primary and secondary sources of data collection. The primary sources are data collected at first hand from original sources for the user's express purpose. Such data are usually collected from oral interview, questionnaires and face to face observation of the respondents. The secondary data are simple data collected on a secondhand base. This type of data was obtained through the use of textbooks, seminar papers, journals, newspapers, internet and magazines collected mostly from university, public and specialized libraries (Gujarati, 2017).

The research study will employ the combination of different data collection methods. This will include primary data and secondary data collection method. This enhanced the validity and reliability of data. Secondary data may either be published or unpublished data. Usually published data are available in various publications of the central state or local government or various publications of foreign governments or international bodies and their subsidiaries organizations, technical and trade journals, books magazines and newspapers, reports and publications of various associations connected with business and industries, banks, stock exchanges etc. Report prepared by research scholars, universities, economists etc (Leo, 2019). In this work, the researcher will use many books, construction policy and other important articles to collect data which include Zambia Road construction companies' policy, Zambia construction act policy and Zambia economic bulletin to collect secondary data.

The policy of construction affects Zambia as a whole but because of the vast nature of Zambia. The study will be conducted in Mongu district which is located in Western province. The reason for this location is the prescience of good number of road construction companies. Also, this area will purposely be selected as representative sample of road construction companies due to accessibility, convenience to the researcher. This will help in minimizing time and other financial demand in terms of expenses (Leo, 2019).

3.8 Data Analysis

The data collected was both qualitative and quantitative in nature, however, data processing and analysis will include computation, classification and tabulation to enable the analysis to be done well. Quantitative data was presented using descriptive statistic methods including table and charts. Qualitative techniques was used to analyze qualitative data from the views of respondents. This will increase the validity and reliability of information. Therefore, data will be entered using Microsoft Excel, and statistical analysis will be performed using the Statistical Package for the Social Sciences (SPSS) version 26. Descriptive statistics, including frequencies, percentages, and means, will be used to summarize the data.

4. Presentation of Results and Discusions

Demographics

Table 5.1: Demographic Characteristics of Respondents

Variable	Category	Frequency (n)	Percent (%)
Gender	Male	28	56.0
	Female	22	44.0
Age Group	18-24 years	8	16.0
	25-34 years	14	28.0
	35-44 years	12	24.0
	>45 years	16	32.0
Respondent Type	Youth Farmer	15	30.0
	Women Farmer (Adult)	18	36.0
	Ministry of Lands Officer	10	20.0
	Community Leader / Extension Officer	7	14.0
Education Level	No Formal Education	6	12.0
	Primary	14	28.0
	Secondary	18	36.0
	Post-Secondary / Certificate	8	16.0
	Diploma / Degree	4	8.0
Farm Size (Hectares)	<0.5 ha	10	20.0
	0.5-10 ha	14	28.0
	1.1-3.0 ha	16	32.0
	>3.0	10	20.0

Source: Field Data

The demographic profile indicates that slightly more males (56%) than females (44%) participated, suggesting relatively balanced gender representation. Age-wise, the largest proportion of respondents were aged above 45 years (32%), followed by those in the 25–34 year bracket (28%), pointing to a blend of both experienced and active middle-aged participants. Youth aged 18–24 years accounted for only 16%. In terms of respondent category, women farmers formed the largest group at 36%, slightly ahead of youth farmers at 30%, reinforcing the significant presence of women in agricultural production. Government representation through Ministry of Lands officers stood at 20%, while community leaders and extension officers accounted for 14%. Education levels showed that secondary school completion was the most common (36%), followed by primary education at 28%, indicating that most respondents possessed basic literacy. However, only 8% had tertiary qualifications, with 12% having no formal education at all. Regarding landholding capacity, most respondents operated small-scale farms, with 32% cultivating between 1.1 and 3.0 hectares and a further 28% managing 0.5 to 1.0 hectares. Only 20% had farms above 3.0 hectares.

Objective 1: To evaluate the influence of land empowerment program on agricultural productivity and income generation among smallholder farmers in Chongwe District.

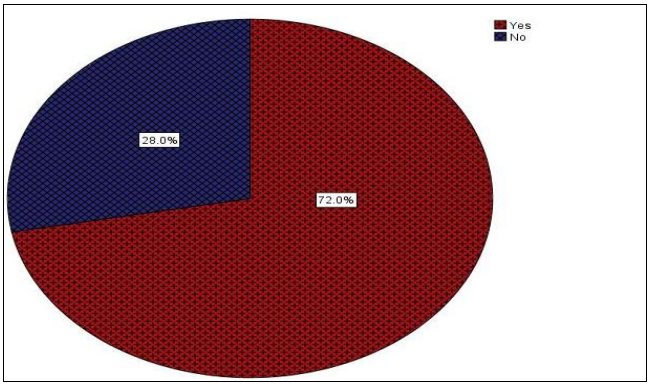

Fig 5.1: Participation in Land Empowerment as a Catalyst for Agricultural Progress

The results indicate that the majority of respondents (72%) reported having participated in the Land Empowerment Programme (LEP), while the remaining 28% had not engaged in the initiative. The dominance of LEP beneficiaries reinforces the programme's position as a key driver in shaping local agricultural dynamics. As one farmer shared during the interviews, "If you didn't join the programme, you are farming blind because others are already ahead."

Conversely, the 28% who did not participate may represent either those excluded due to structural challenges or those who remain unconvinced of its benefits. One non-participant noted, "They told us to apply, but the process was too long, so I continued working on my own land."

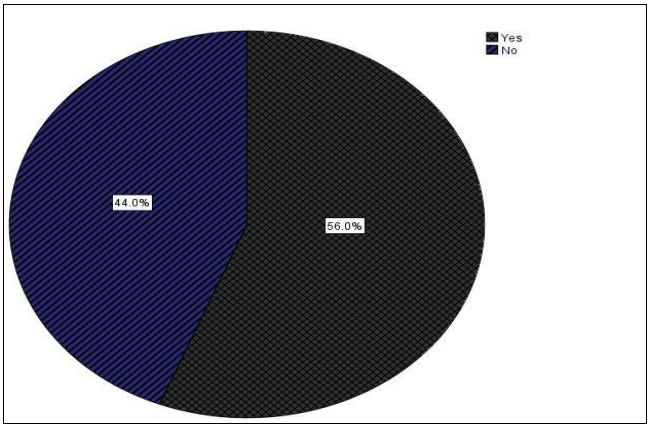

Fig 5.2: Security of Tenure as a Foundation for Agricultural Empowerment

The findings reveal a relatively balanced distribution in access to land documentation among beneficiaries of the Land Empowerment Programme (LEP). Slightly more than half of the respondents (56%) reported receiving a formal land title, lease, or related documentation as a direct outcome of the programme, while the remaining 44% indicated they had not yet obtained such documents.

This split signals both progress and unfinished work in formalizing land rights. For many recipients, the acquisition of legal documentation was perceived as a turning point towards legitimacy and long-term planning. One farmer shared, "Once I got the title, I felt confident to invest because the land finally felt like mine."

However, the sizeable 44% without formal land documents suggests procedural delays or administrative bottlenecks within the programme's implementation. Some respondents expressed frustration, with one noting, "They told us we are approved, but the papers are still coming. How can I plan properly without proof?"

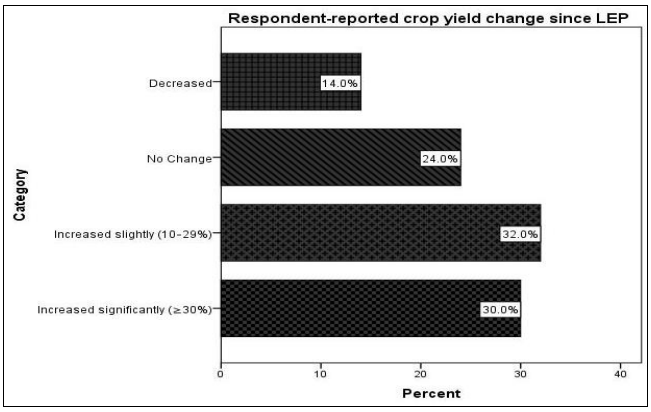

Fig 5.3: Land Empowerment as a Catalyst for Agricultural Productivity Gains

The results indicate that the majority of respondents perceived an improvement in their crop yields following participation in the Land Empowerment Programme (LEP). A combined 62% reported increases in production, with 30% noting a significant rise of 30% or more, and 32% indicating a moderate increase between 10–29%.

As one farmer put it, "Once I knew the land was truly mine, I started applying fertilizer properly because I was no longer afraid of losing everything."

However, not all respondents experienced productivity gains. Nearly a quarter (24%) reported no change in yield levels, while 14% indicated that their yields had declined. Qualitative feedback suggests that such stagnation or declines may be linked to external constraints such as drought, inadequate access to inputs, or delayed support services. One respondent lamented, "The land is there, but without proper irrigation and inputs, I can't do much."

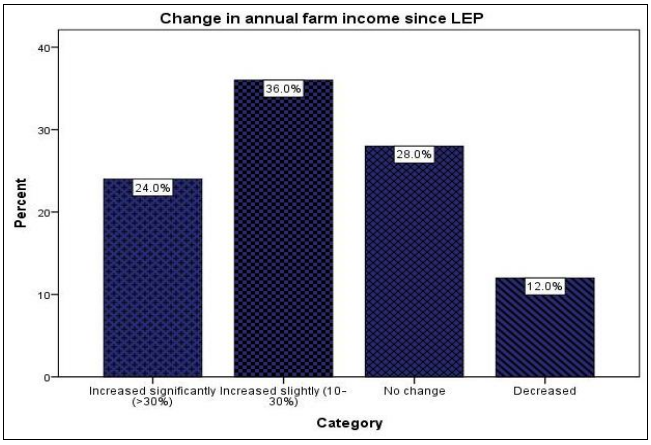

Fig 5.4: Economic Upliftment through Land Empowerment - But with Uneven Outcomes

The findings reveal that the Land Empowerment Programme (LEP) has contributed to income growth for a substantial proportion of participating smallholder farmers, although not universally. A cumulative 60% of respondents reported an increase in their annual farm income following participation in the programme. Of these, 24% experienced significant gains exceeding 30%, while 36% observed moderate increases between 10–30%. As expressed by one

respondent, "Before the programme, I was just surviving. Now I can plan, sell more, and even think of buying livestock."

However, 28% indicated no change in income levels, signifying that land access alone may not automatically translate into economic improvement without supporting mechanisms such as access to markets, inputs, or credit. A smaller segment (12%) reported declining income, pointing to challenges that may be unrelated to tenure security, such as price fluctuations or adverse weather conditions. One farmer explained, "I got the land, but without capital for inputs, the harvest did not improve."

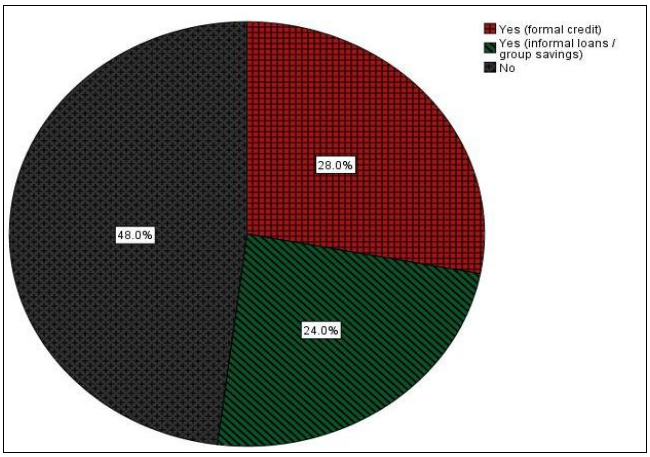

Fig 5.5: Land Empowerment as a Catalyst for Financial Inclusion - Yet Credit Access Remains Limited

The results indicate that while the Land Empowerment Programme (LEP) has enabled some beneficiaries to access financial services, nearly half of the respondents remain excluded from credit opportunities. Specifically, 28% reported accessing formal credit through institutions such as banks or microfinance agencies. An additional 24% relied on informal loans or group savings. As one respondent explained, "The land title helped me join a savings group, but banks still ask for more than I can provide."

However, a significant 48% reported no access to credit at all. Some farmers cited barriers such as high interest rates or cumbersome application procedures, with remarks like, "Even with my land papers, the bank said I needed guarantors.

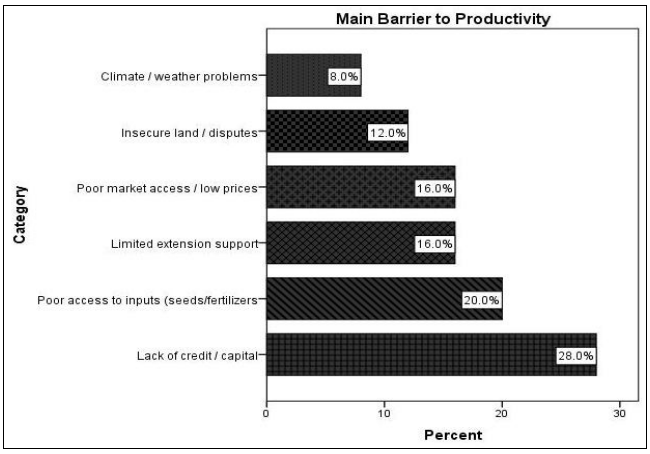

Fig 5.6: Persistent Structural Barriers Limiting the Full Impact of Land Empowerment on Productivity

Despite the intended benefits of the Land Empowerment Programme (LEP), the results indicate that farmers continue to face critical bottlenecks that hinder full agricultural productivity. The most frequently cited constraint was lack of credit or capital, reported by 28% of respondents. As one participant emphasized, "The land is there, but without money to work it, it remains idle."

Poor access to agricultural inputs such as seeds and fertilizers was identified by another 20%, reflecting that even those willing to cultivate are often limited by resource scarcity. Additionally, 16% highlighted limited extension support, pointing to technical knowledge gaps that restrict effective utilization of land resources. A similar share (16%) raised concerns over poor market access or low produce prices, suggesting that even when production improves, profitability remains constrained by weak value chain integration.

Interestingly, land insecurity or disputes persisted for 12% of respondents, implying that land ownership under LEP did not entirely eliminate tenure-related tensions. Lastly, climatic and weather-related challenges were reported by 8%.

Table 5.2: Land Empowerment as a Catalyst for Productivity Gains - Evidence of Strong Association between LEP Participation and Yield Improvement

Participated in land empowerment program (LEP)? * Respondent-reported crop yield change since LEP Crosstabulation						
Count						
		Respondent-reported crop yield change since LEP				Total
		Increased significantly (≥30%)	Increased slightly (10–29%)	No Change	Decreased	
Participated in land empowerment program (LEP)?	Yes	15	16	5	0	36
	No	0	0	7	7	14
Total		15	16	12	7	50

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	35.532[a]	3	.000
Likelihood Ratio	42.995	3	.000
Linear-by-Linear Association	29.689	1	.000
N of Valid Cases	50		
a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is 1.96.			

The findings demonstrate a clear distinction in productivity outcomes between beneficiaries and non-beneficiaries of the Land Empowerment Programme (LEP). Among respondents who participated in LEP, a combined 86% reported yield improvements - 30% noting significant increases (≥30%) and 32% describing moderate gains (10–29%). A further 14% indicated no change, while none of the LEP participants experienced yield decline. Farmers attributed these improvements to increased security over land, which encouraged long-term investment in soil fertility and improved farm planning. One farmer remarked, "Once I knew the land was officially mine, I could finally plant with confidence and think beyond one season."

In stark contrast, respondents who did not participate in LEP showed no signs of progress: 100% reported either no change or yield decline, with 50% falling into each category. The statistical test reinforces this observation. The Pearson Chi-Square value of 35.532 (p = .000) signifies a highly significant association between LEP participation and crop yield change.

Table 5.3: Land Tenure Security as a Determinant of Income Growth among LEP Beneficiaries

Received formal land document/title/lease as result of LEP? * Change in annual farm income since LEP Crosstabulation						
Count						
		Change in annual farm income since LEP				Total
		Increased significantly (>30%)	Increased slightly (10–30%)	No change	Decreased	
Received formal land document/title/lease as result of LEP?	Yes	12	16	0	0	28
	No	0	2	14	6	22
Total		12	18	14	6	50

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	42.785[a]	3	.000
Likelihood Ratio	56.035	3	.000
Linear-by-Linear Association	33.975	1	.000
N of Valid Cases	50		
a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.64.			

The results reveal a strong and direct association between access to formal land documentation under the Land Empowerment Programme (LEP) and improvements in household farm income. All respondents (100%) who received a formal land title, lease, or related documentation reported increases in annual agricultural earnings following LEP participation. Within this group, 43% experienced significant income growth exceeding 30%, while 57% reported moderate gains ranging between 10% and 30%. Notably, none of the documented beneficiaries reported income stagnation or decline. As one participant remarked, "Once I had papers for my land, even the cooperative started taking me seriously. Accessing inputs on time became easier, and my harvest finally started paying off."

In contrast, those who did not receive formal land documentation exhibited the opposite trend. Among this group, 64% reported no change in income, while 27% experienced income decline. Only a marginal 9% reported slight increases. One respondent without documentation lamented, "I still farm like a squatter; no one will lend to you when you have nothing to show."

The statistical significance of this relationship is strongly confirmed by a Pearson Chi-Square value of 42.785 (p = .000), demonstrating a highly significant association between land documentation and income trajectory.

Objective 2: To analyze the socio-economic implications of the land empowerment program on livelihoods and poverty reduction in Chongwe District.

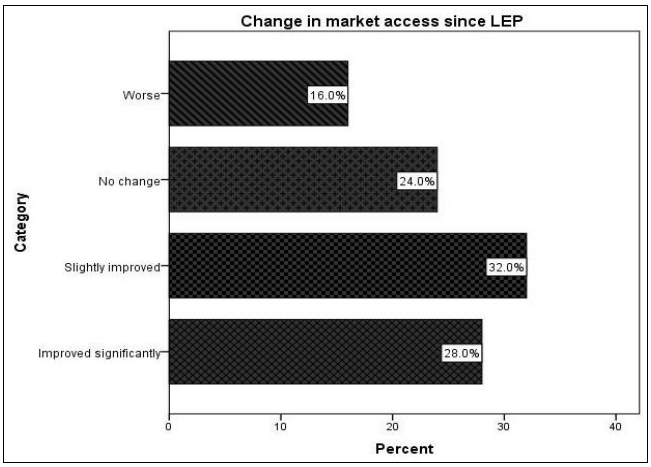

Fig 5.7: Improved Market Access as a Socio-Economic Outcome of the Land Empowerment Program

The findings reveal a largely positive shift in market access following participation in the Land Empowerment Program (LEP). A combined 60.0% of respondents reported enhanced opportunities to sell their produce, with 28.0% indicating that access had improved significantly, while another 32.0% experienced slight improvements. Such responses suggest that the program has enabled a majority of emergent farmers to connect more effectively with buyers, likely through increased credibility, expanded production capacity, or better bargaining power. One farmer put it simply: "Now that I have proper land, the buyers take me more seriously - they even come to my farm instead of me chasing them."

However, the results also highlight disparities in program benefits. While nearly a quarter (24.0%) reported no change in market access, a notable 16.0% indicated that their situation had worsened, potentially due to increased competition, inadequate infrastructure, or inconsistencies in market linkage support. As one dissatisfied respondent noted, "I have more land now, but without proper transport or consistent buyers, it still feels like I am farming for myself."

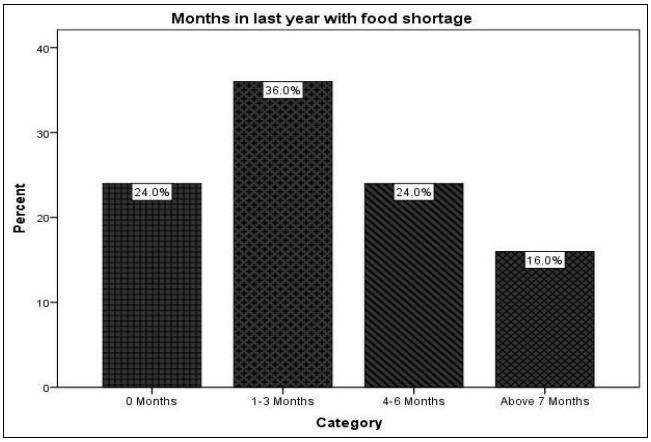

Fig 5.8: Persistent but Reduced Food Insecurity among LEP Beneficiaries

The results indicate that while food insecurity has not been entirely eradicated among beneficiaries of the Land Empowerment Program (LEP), there is evidence of

improved household food stability for a significant proportion of farmers. Nearly one-quarter (24.0%) of respondents reported experiencing zero months of food shortage in the previous year. As one farmer remarked, "Since I started cultivating on my own land, we have not gone hungry - not even for a month."

However, a considerable proportion still face periodic food insecurity. The largest group, representing 36.0%, reported experiencing 1–3 months of food shortage, indicating mild but recurring vulnerability. Another 24.0% experienced shortages lasting 4–6 months, while 16.0% reported over 7 months of food scarcity. One respondent in this category lamented, "Even with land, I struggle to harvest enough to last the year. When my maize finishes, I have to depend on piecework to survive."

Table 5.4: Land Empowerment as a Catalyst for Income Mobility among Beneficiaries

Participated in land empowerment program (LEP)? * Change in annual farm income since LEP Crosstabulation						
Count						
		Change in annual farm income since LEP				Total
		Increased significantly (>30%)	Increased slightly (10–30%)	No change	Decreased	
Participated in land empowerment program (LEP)?	Yes	12	18	6	0	36
	No	0	0	8	6	14
Total		12	18	14	6	50
a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is 1.68.						

The results clearly demonstrate a strong association between participation in the Land Empowerment Program (LEP) and positive income shifts among smallholder farmers in Chongwe District. Among those who participated in the LEP, a substantial 83.3% (12 out of 36 + 18 out of 36) reported increases in annual farm income - of which 33.3% experienced significant growth exceeding 30%, while 50.0% recorded moderate increases between 10–30%. Only 16.7% of the beneficiaries reported no change, and notably, none experienced income decline. One participant remarked, "Since receiving the land, I can now sell surplus maize and groundnuts. I no longer depend on piecework just to survive."

Conversely, income stagnation or decline was prevalent among non-participants. Among the 14 farmers who did not benefit from the LEP, 57.1% reported no change, while 42.9% experienced a decline in annual income. A non-beneficiary expressed frustration, stating, "Those with land are moving ahead. For us without land, each year is harder than the last."

The chi-square test ($\chi^2 = 32.993$, $p < 0.001$) confirms that the relationship between LEP participation and income change is statistically significant, underscoring that access to land has been a pivotal driver of economic upliftment.

Table 5.5: Formal Land Documentation and Poverty Alleviation among Emergent Farmers

Received formal land document/title/lease as result of LEP? * Self-reported poverty status after LEP Crosstabulation			
Count			
		Self-reported poverty status after LEP	Total
		Below national poverty line	Above national poverty line	
Received formal land document/title/lease as result of LEP?	Yes	28	0	28
	No	2	20	22
Total		30	20	50

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	42.424[a]	1	.000		
Continuity Correction[b]	38.721	1	.000		
Likelihood Ratio	53.897	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	41.576	1	.000		
N of Valid Cases	50				
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.80.					
b. Computed only for a 2x2 table					

The analysis indicates a strong relationship between receiving formal land documentation under the Land Empowerment Program (LEP) and improvements in self-reported poverty status among smallholder farmers in Chongwe District. All 28 respondents (100%) who received formal land documents or leases reported being below the national poverty line, signaling a marked positive shift in economic security. One beneficiary noted, "Having a land title gives me confidence to invest in my farm and access support; I can now feed my family without borrowing constantly."

In contrast, among the 22 respondents who did not receive formal documentation, only 20.0% (4 out of 22) reported being below the national poverty line, while the majority (90.9%) remained above the poverty line, highlighting persistent economic vulnerability. A non-beneficiary explained, "Without proper documentation, it is hard to plan or access credit, and our income remains low."

The chi-square test ($\chi^2 = 42.424$, $p < 0.001$) confirms that this association is statistically significant, demonstrating that formal land documentation under the LEP is a critical determinant in improving livelihoods and reducing poverty.

Objective 3: To assess the effectiveness of the land policy in promoting sustainable land management practices at the household level in Chongwe District.

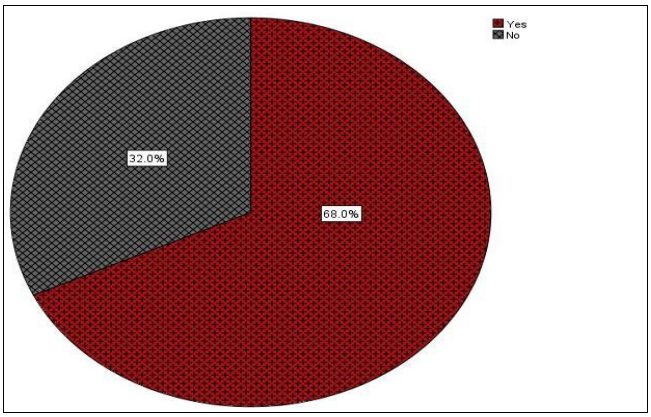

Fig 5.9: Participation in the Land Empowerment Program and Adoption of Sustainable Land Management Practices

The results reveal that a substantial proportion of respondents, 68.0% (34 out of 50), reported participation in the Land Empowerment Program (LEP), indicating strong engagement with the land policy initiatives at the household level. Conversely, 32.0% (16 respondents) had not participated.

Respondents who participated expressed that involvement in the LEP provided guidance and support on sustainable farming techniques. One participant noted, "Since joining the program, I have learned how to rotate crops and use compost, which has kept my soil fertile and reduced erosion." Those who did not participate often cited lack of awareness or bureaucratic challenges as barriers, with a farmer stating, "I did not know how to apply for the program, so I continue farming the way I always have.

Table 5.6: Adoption of Sustainable Land Management Practices among Emergent Farmers

Descriptive Statistics					
	N	Mean	Std. Deviation	Minimum	Maximum
Uses soil conservation measures (terracing, contouring)	50	1.44	.501	1	2
Practices agroforestry / tree planting on plots	50	1.60	.495	1	2
Uses crop rotation / intercropping to preserve soil	50	1.48	.505	1	2

The descriptive statistics indicate that emergent farmers in Chongwe District are moderately engaged in sustainable land management practices following the implementation of the land policy. On average, respondents reported using soil conservation measures such as terracing and contouring (Mean = 1.44, SD = 0.501), practicing crop rotation or intercropping to maintain soil fertility (Mean = 1.48, SD = 0.505), and engaging in agroforestry or tree planting on their plots (Mean = 1.60, SD = 0.495).

Respondents highlighted practical benefits of these practices. One participant explained, "Planting trees along my fields has helped reduce soil erosion and provides shade for crops during the dry season." Another noted, "Rotating crops has improved my soil fertility and led to slightly better yields, even though I cannot always follow the schedule perfectly due to limited land."

Table 5.7: Comparative Adoption of Sustainable Land Management Practices among Emergent Farmers

Ranks	
	Mean Rank
Uses soil conservation measures (terracing, contouring)	1.90
Practices agroforestry / tree planting on plots	2.14
Uses crop rotation / intercropping to preserve soil	1.96

Test Statistics[a]	
N	50
Chi-Square	13.000
df	2
Asymp. Sig.	.002
a. Friedman Test	

The Friedman test results indicate statistically significant differences in the adoption of various sustainable land management practices among emergent farmers in Chongwe District (Chi-Square = 13.000, df = 2, p = 0.002). The mean rank scores suggest that crop rotation or intercropping (Mean Rank = 2.14) is practiced more frequently than agroforestry/tree planting (Mean Rank = 2.14) and soil conservation measures such as terracing and contouring (Mean Rank = 1.90).

Respondents' narratives further elucidate these findings. One farmer noted, "Rotating maize and legumes has helped me maintain soil fertility without needing extra fertilizer, so I do it every season." Another mentioned, "I plant a few trees around my plot, but it takes time to see benefits, so I do it less often."

4.1 Discussions

Objective 1: To evaluate the influence of land empowerment program on agricultural productivity and income generation among smallholder farmers in Chongwe District.

The results indicate that the majority of respondents (72%) reported having participated in the Land Empowerment Programme (LEP), while the remaining 28% had not engaged in the initiative. The dominance of LEP beneficiaries reinforces the programme's position as a key driver in shaping local agricultural dynamics. As one farmer shared during the interviews, "If you didn't join the programme, you are farming blind because others are already ahead."

Conversely, the 28% who did not participate may represent either those excluded due to structural challenges or those who remain unconvinced of its benefits. One non-participant noted, "They told us to apply, but the process was too long, so I continued working on my own land."

The findings reveal a relatively balanced distribution in access to land documentation among beneficiaries of the Land Empowerment Programme (LEP). Slightly more than half of the respondents (56%) reported receiving a formal land title, lease, or related documentation as a direct outcome of the programme, while the remaining 44% indicated they had not yet obtained such documents.

Objective 2: To analyze the socio-economic implications of the land empowerment program on livelihoods and poverty reduction in Chongwe District.

The results indicate that while food insecurity has not been entirely eradicated among beneficiaries of the Land Empowerment Program (LEP), there is evidence of improved household food stability for a significant proportion of farmers. Nearly one-quarter (24.0%) of respondents reported experiencing zero months of food shortage in the previous year. As one farmer remarked, "Since I started cultivating on my own land, we have not gone hungry - not even for a month."

The results clearly demonstrate a strong association between participation in the Land Empowerment Program (LEP) and positive income shifts among smallholder farmers in Chongwe District. Among those who participated in the LEP, a substantial 83.3% (12 out of 36 + 18 out of 36) reported increases in annual farm income - of which 33.3% experienced significant growth exceeding 30%, while 50.0% recorded moderate increases between 10–30%. Only 16.7% of the beneficiaries reported no change, and notably, none experienced income decline. One participant remarked, "Since receiving the land, I can now sell surplus maize and groundnuts. I no longer depend on piecework just to survive."

Objective 3: To assess the effectiveness of the land policy in promoting sustainable land management practices at the household level in Chongwe District.

The results reveal that a substantial proportion of respondents, 68.0% (34 out of 50), reported participation in the Land Empowerment Program (LEP), indicating strong engagement with the land policy initiatives at the household level. Conversely, 32.0% (16 respondents) had not participated.

Respondents who participated expressed that involvement in the LEP provided guidance and support on sustainable farming techniques. One participant noted, "Since joining the program, I have learned how to rotate crops and use compost, which has kept my soil fertile and reduced erosion." Those who did not participate often cited lack of awareness or bureaucratic challenges as barriers, with a farmer stating, "I did not know how to apply for the program, so I continue farming the way I always have.

5. Conclusion and Recommendations

5.1 Conclusion

The results indicate that the majority of respondents (72%) reported having participated in the Land Empowerment Programme (LEP), while the remaining 28% had not engaged in the initiative. The dominance of LEP beneficiaries reinforces the programme's position as a key driver in shaping local agricultural dynamics. As one farmer shared during the interviews, "If you didn't join the programme, you are farming blind because others are already ahead."Conversely, the 28% who did not participate may represent either those excluded due to structural challenges or those who remain unconvinced of its benefits. One non-participant noted, "They told us to apply, but the process was too long, so I continued working on my own land."

The findings reveal a relatively balanced distribution in access to land documentation among beneficiaries of the Land Empowerment Programme (LEP). Slightly more than half of the respondents (56%) reported receiving a formal land title, lease, or related documentation as a direct outcome of the programme, while the remaining 44% indicated they had not yet obtained such documents.This split signals both progress and unfinished work in formalizing land rights. For many recipients, the acquisition of legal documentation was perceived as a turning point towards legitimacy and long-term planning. One farmer shared, "Once I got the title, I felt confident to invest because the land finally felt like mine."However, the sizeable 44% without formal land documents suggests procedural delays or administrative bottlenecks within the programme's implementation. Some respondents expressed frustration, with one noting, "They told us we are approved, but the papers are still coming. How can I plan properly without proof?"

The results indicate that the majority of respondents perceived an improvement in their crop yields following participation in the Land Empowerment Programme (LEP). A combined 62% reported increases in production, with 30% noting a significant rise of 30% or more, and 32% indicating a moderate increase between 10–29%. As one farmer put it, "Once I knew the land was truly mine, I started applying fertilizer properly because I was no longer afraid of losing everything." However, not all respondents experienced productivity gains. Nearly a quarter (24%) reported no change in yield levels, while 14% indicated that their yields had declined. Qualitative feedback suggests that such stagnation or declines may be linked to external constraints such as drought, inadequate access to inputs, or delayed support services. One respondent lamented, "The land is there, but without proper irrigation and inputs, I can't do much."

5.2 Recommendations

- The Friedman test results indicate statistically significant differences in the adoption of various sustainable land management practices among emergent farmers in Chongwe District. The study therefore recommends a need for timely capacity building programmes for farmers on various land empowerment and management practices
- The results reveal that a substantial proportion of respondents, 68.0% (34 out of 50), reported participation in the Land Empowerment Program (LEP), indicating strong engagement with the land policy initiatives at the household level. Conversely, 32.0% (16 respondents) had not participated. The recommendation is that there is a need for continuous farmer and government feedback on lad empowerment programmes.

6. Acknowledgement

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7. References

1. Berry S. No Condition is Permanent: The social dynamics of agrarian change in Sub-Saharan Africa. Madison, University of Wisconsin Press, 1993.
2. Binswanger HP, Deininger K, Feder G. Power, Distortions, Revolt and Reform in Agricultural Land Relations. In: Behrman, J., Srinivasan, T.N. (Eds.), Handbook of Development Economics, Vol. IIIB, Elsevier, Amsterdam, 1995, 2659-2772.
3. Bruce J. A perspective on indigenous land tenure systems and land concentration. In Land and Society in Contemporary Africa. R. E. Downs and P.S. Reyna, and S.P. eds. Hanover and London, University Press of New England, 1988, 23-52.
4. Burke WJ, Jayne TS, Sitko NJ. Can the Farmer Input Support Programme More Effectively Achieve Food Production and Poverty Reduction Goals? FSRP Policy Synthesis No. 51. Lusaka, Zambia, 2012.
5. Carter MR. Identification of the Inverse Relationship between Farm Size and Productivity: An Empirical Analysis of Peasant Agricultural Production. Oxford Economic Papers. 1984; 36:131-145. Central Statistics Office. Various years. Living Conditions monitoring Survey. Lusaka, Zambia.
6. Central Statistics Office. Various years. Crop Forecast Survey. Lusaka, Zambia.
7. Central Statistics Office. Various years. Supplemental Survey to the Post-Harvest Survey, Lusaka, Zambia.
8. Chapoto A, Jayne TS, Mason N. Security of widow's access to land in the era of HIV/AIDS: Panel survey evidence from Zambia. FSRP working paper No. 25, 2007.
9. Chipungu S. The State, Technology and Peasant Differentiation in Zambia: A case Study of the Southern Province, 1930-1986. Historical Association of Zambia,

Lusaka, 1988.
10. Chimhowu A, Woodhouse P. Customary versus Private Property Rights? Dynamics and Trajectories of Vernacular Land Markets in Sub-Saharan Africa. Journal of Agrarian Change. 2006; 6(3):347-371.
11. Chizyuka R, Kamona R, Ufwenuka C, Phiri M. National Report - Zambia: Policies and Strategies for Agrarian Reform and Rural Development to Secure and Improve Access to Natural Resources. Paper prepared for the International Conference on Agrarian Reform and Rural Development (ICARRD). Porto Alegre, Brazil, March 2006, 7-10.
12. Collier P. The Politics of Hunger. Foreign Affairs. 2008; 87(6).
13. Collier P, Dercon S. African Agriculture in 50 Years: Smallholders in a Rapidly Changing World. Report prepared for the Expert Meeting on How to Feed the World in 2050, Food and Agricultural Organization of the United Nations, Economic and Social Development Department, 2009.
14. Collins JP, Woodhouse P. Introduction: Interpreting Land Markets in Africa. Africa. 2010; 80(1):1-13.
15. Deininger K, Byerlee D. Rising Global Interest in Farmland: Can it yield sustainable and equitable benefits? World Bank Group, 2011. Online at: http://siteresources.worldbank.org/INTARD/Resources/ESW_Sept7_final_final.pdf
16. Deininger K, Binswanger HP. Are Large Farms More Efficient Than Small Ones? Mimeo. University of Minnesota and World Bank, July 1992.
17. Delgado CL, Hopkins J, Kelly V, Hazell PBR, McKenna A, Gruhn P, *et al*. Agricultural growth linkages in Sub-Saharan Africa. International Food Policy Research Institute Series Number 107, 1998.
18. Downs RE, Reyna SP. "Introduction". In Downs, R.E. and S.P. Reyna, eds. Hanover and London, University Press of New England, 1988, 1-22.
19. Fischer RA, Byerlee D, Edmeades GO. Can Technology Deliver on the Yield Challenge in 2050? Report prepared for the Expert Meeting on How to Feed the World in 2050, Food and Agricultural Organization of the United Nations, Economic and Social Development Department, 2009.
20. Ferguson J. Expectations of Modernity: Myths and meanings of urban life in the Zambian Copperbelt. Berkeley, University of California Press, 1999.
21. Hayami Y, Otsuka K. The Economics of Contract Choice: An Agrarian Perspective. Clarendon Press, 1993.
22. Henao J, Baanante C. Estimating rates of nutrient depletion in soils of agricultural lands of Africa. IFDC Technical Bulletin T48, Muscle Shoals, Alabama, 1999.
23. Kalinda T, Bwalya S, Mulolwa A, Haantuba H. Use of Integrated land Use Assessment (ILUA) Data for Forestry and Agrilcutral Policy Review and Analysis for Zambia. Report prepared for the Forestry Management and Planning Unit of the Department of Forestry, FAO, and the Zambian Zambia, 2008.
24. Kuteya A, Kambole C. 2012 Zambian Agriculture Sector Budget Analysis. ACF/IAPRI Budget Breakfast Meeting. Pamodzi Hotel, Lusaka, November 30, 2011.
25. Jayne TS, Chamberlin J, Muyanga M. Emerging land issues in African agriculture: Implication for food security and poverty reduction strategies. Unpublished Manuscript, 2012.
26. Jayne TS, Mason N, Burke W, Shipekesa A, Chapoto A, Kabaghe C. Mountains of Maize, Persistent Poverty. No. 48, 2011.
27. Jayne TS, Mason N, Myers R, Ferris J, Mather D, Sitko N, *et al*. Patterns and Trends in Food Staples Markets in Eastern and Southern Africa: Toward the Identification of Priority Investments and Strategies for Developing Markets and Promoting Smallholder Productivity Growth. MSU Internaitonal Devleopment Working Paper 104, 2010.
28. Jayne TS, Zulu B, Kajoba G, Weber MT. Access to Land, and Poverty Reduction in Rural Zambia: Connecting the Policy Issues. Working Paper No. 34, 2008.
29. Johnston B, Kilby P. Agricultural and Structural Transformation: Economic Strategies in Late-Developing Countries. New York: Oxford University Press, 1975.