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Assessing the Effectiveness of The Zambia's Agricultural Policy Towards Women Empowerment: A Case Study of Women in Chongwe District

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ABSTRACT

Zambia is in a unique position to not only leverage agriculture as an engine for poverty reduction and improved nutrition, but to become the breadbasket of southern Africa. Relative to other countries in the region. Zambia has an abundance of fertile land, water, and a generally favorable climate for agricultural production. Moreover, Zambia has a large and rapidly growing urban population, which creates opportunities for rural-urban development synergies that may not exist in other countries. Despite these unique endowments, agricultural growth in Zambia remains stagnant, poverty rates in rural Zambia remain stubbornly high, at 68% of the population, and incidences of stunting, malnutrition, and wasting continue to disproportionately affect rural Zambians. Low investment in the sector and low production and productivity especially among small-holder farmers especially women are some of the serious challenges currently affecting the agricultural sector. The general object of the study was to investigate the effectiveness of the Zambia's Agricultural Policy towards women empowerment. Specific Objectives included investigating how the policy has promoted gender equity in resource allocation and access to agriculture services focusing on women; analyzing how the policy improved access to markets for women farmers; investigate how the policy facilitated availability and accessing to land among women for agriculture development; investigate how the policy strengthened the collection and dissemination of information among women and investigate the development of appropriate technology in the sector. The study hoped to help policy makers, auxiliary government institutions, private sector players in the agriculture industry and smallscale farmers to effectively come up with interventions that

will improve agriculture in Zambia. It is envisaged that there will be strong backward and forward linkages in the agricultural sector that will result from the provision of information. Ultimately, this will contribute effectively to the economic empowerment among small scale farmers especially women. The study adopted descriptive research design and had a sample size of 50. The sample was drawn from small farmers. Simple random sampling was adopted in order to pick the respondents. Data was analyzed in SPSS and somewhere in Excel. From the study it can be deduced that most women small scale farmers interviewed are those who only had primary school education. 60% of the women attended primary school and only 10% had tertiary education. The research concludes that the economic emancipation of women and economic development of small-scale farmers is closely linked to their ability to good services for their agricultural business. This study provides evidence to the fact that indeed, the promotion and implementation of good agricultural policies can be a catalyst for spurning economic growth and development for women scale farmers in Zambia. The study recommends that that there is a need for financial institutions to bridge the gap for women to access credit financing. Financial institutions do not lack money to lend to low-income groups such women cooperatives. The research recommends that there is need to increase the range of assets accepted as collateral by financial institutions, given that most women claimed not to hold assets or title deeds even in cases where they own houses or land, formalization of assets such as houses is a way to increase their acceptance as collateral by banks.

Keywords: Agricultural policy, empowerment, women empowerment.

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1.0 INTRODUCTION 1.1 BACKGROUND

Agriculture is often the economic driving force in developing countries. WTO statistics show that agriculture accounts for over one-third of export earnings for almost 50 developing countries, and for about 40 of them this sector accounts for over half of export earnings. However, significant agricultural subsidies provided by Economic Cooperation and Development (OECD) country governments to their farmers compromises the ability of developing country farmers participate in global agricultural trade reducing their income and profit streams and their ability to escape poverty. At the same time, consumers in OECD countries are denied the benefits of the lower prices food and agricultural products resulting from a competitive marketplace while as tax payers they are forced to subsidize high-cost and often environmentally damaging production. Barriers to agricultural imports also remain high in both developed and many developing countries, creating obstacles not only to North-South trade but also to South-South trade (Boserup, 1970). The general object of the study was to investigate the effectiveness of the Zambia's Agricultural Policy towards women empowerment. Specific Objectives included investigating how the policy has promoted gender equity in resource allocation and access to agriculture services focusing on women: analyzing how the policy improved access to markets for women farmers; investigate how the policy facilitated availability and accessing to land among women for agriculture development; investigate how the policy strengthened the collection and dissemination of information among women and investigate the development of appropriate technology in the sector. The study will help policy makers, auxiliary government institutions, private sector players in agriculture industry and small-scale farmers to

effectively come up with interventions that will improve agriculture in Zambia. It is envisaged that there will be strong backward and forward linkages in the agricultural sector that will result from the provision of information. Ultimately, this will contribute effectively to the economic empowerment among small scale farmers especially women. Godfrey, A (2010).

Zambia is in a unique position to not only leverage agriculture as an engine for poverty reduction and improved nutrition, but to become the breadbasket of southern Africa. Relative to other countries in the region, Zambia has an abundance of fertile land, water, and a generally favorable climate for agricultural production. Moreover, Zambia has a large and rapidly growing urban population, which creates opportunities for rural-urban development synergies that may not exist in other countries. Despite these unique endowments, agricultural growth in Zambia remains stagnant, poverty rates in rural Zambia remain stubbornly high, at 68% of the population, and incidences of stunting, malnutrition. and continue wasting disproportionately affect rural Zambians.

According to the Sixth National Development Plan (SNDP), Zambia's poverty was as high as 68% in 2004 at the national level while at the rural level it stood at 78%. Furthermore, the SNDP further reveals that 60% of Zambia's population resides in the rural areas of which 70% are categorized as poor. The majority of the Zambian rural people depend on agriculture or agricultural related livelihoods which remained poor due to inadequate infrastructure and support services such as extension and marketing support. Government spending on agriculture has been as little as 5% of the annual budget (FNDP 2006). The rural small-scale farmers are hence categorized as poor and largely employed in the informal sector and compelled to migrate to urban centers in search of better livelihoods. The high poverty level in the rural

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areas in comparison to urban areas is an indication of the skewed allocation of national resources. It is for this reason that the government of the Republic of Zambia recognizes the need to prioritize investment in agriculture and rural development in general in order to ensure the delivery of development where the majority of its population resides.

1.3 Statement of the Problem

Despite the fact that the agricultural sector is key to the development of the Zambia economy and is the engine of growth for the next decade and beyond and that Agriculture generates between 18-20 % of the Gross Domestic Product (GDP) and provides livelihood for more than that 50 % of the population little has been provided for the small scale farmers especially women in Zambia's rural areas. Low investment in the sector and low production and productivity especially among small-holder farmers especially women are some of the serious challenges currently affecting the agricultural sector. Climate Change is exacerbating this challenge due to its threats which include droughts, water logging, increased temperatures, seasonal floods. shortening of the rain season (crop growing period) and long dry spells coupled with poor rainfall distribution. The constraints to growth of the sector include among others: inadequate extension services, high cost of financing, inadequate infrastructure, livestock diseases and poor functioning agricultural markets. In addition, the competitiveness of the sector has been adversely affected by poor road network, inadequate storage and limited access electricity and technology. Despite the government intention to foster growth in the industry little has been achieved especially among women small scale farmers.

1.4 Research Objective

The general objective of the study was to assess the effectiveness of the Zambia's Agricultural Policy towards women empowerment.

1.4.2 Specific Objectives

- 1. To investigate how the policy has promoted gender equity in resource allocation and access to agriculture services focusing on women
- 2. To analyse how the policy improved access to markets for women farmers
- 3. To investigate how the policy facilitated availability and accessing to land among women for agriculture development
- 4. To investigate how the policy strengthened the collection and dissemination of information among women
- 5. To investigate the development of appropriate technology in the sector

1.5 Research Questions

- 1. How has the policy promoted gender equity in resource allocation and access to agriculture services focusing on women?
- 2. How has the policy improved access to markets for women farmers?
- 3. How has the policy facilitated availability and accessing to land among women for agriculture development?
- 4. How has the policy strengthened the collection and dissemination of information among women?
- 5. Has there been development of appropriate technology in the sector?

1.6 Theoretical Framework

Theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge within the limits of critical bounding assumptions. The theoretical framework is the structure that can hold or support a theory of a research study. The theoretical framework introduces and describes

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the theory that explains why the research problem under study exists (Swanson, 2013)

For the purposes of this study, the Kotter's Change Management Theory

Kotter's Change Management Theory

There are many different change management models, but one that has been used successfully (Clark, 2010), and specifically to address the adoption of innovations (Campbell, 2008), is John Kotter's eight-stage process for transformational change (Kotter, 1996). This dynamic model is comprised of eight stages that can be organized into three phases. The first phase is "creating a climate for change" and includes establishing a sense of urgency, creating a guiding coalition, and developing a vision and strategy. The second phase is "engaging and enabling the organization" includes communicating the empowering action, and creating short-term wins. The final phase is "implementing and sustaining the change" and includes consolidating gains and producing more change, and anchoring new approaches in the culture.

Creating a climate for change

The first stage is establishing a sense of urgency. The biggest mistake in attempting change is to allow complacency (Kotter, 1996). This is a critical step because without a sense of urgency people will cling to the status quo and resist change. Creating urgency involves helping people see and feel first hand why a change needs to occur (Campbell, 2008).

The second stage is creating a guiding coalition. The guiding team members need to have the knowledge, credibility, influence, and skills required to mobilize change (Kotter, 1996). The third stage is developing a vision and strategy. In this stage you need to create a clear and defining vision that is shared by all stakeholders. The result should be a compelling statement that clearly articulates what you are trying to achieve that can be explained in five

minutes or less (Kotter, 1996). The vision needs to include a collective sense of what a desirable future looks like, in clear and measurable terms that all stakeholders can stand behind.

Engaging and enabling the organization

The first stage in this phase is communicating the vision. Once the vision has been created and agreed upon by members from all stakeholder groups, it is imperative that it be communicated frequently and convincingly to all groups. This involves communicating the vision in words and actions by leading through example. Members from all groups need to be hearing the same message from everyone in order to gain buy-in and guide them from awareness of the change to a state where they feel empowered to advocate for the change (Campbell, 2008). This involves engaging in continuous dialogue with stakeholders to build commitment and trust.

The next two stages in this phase are enabling action and creating short-term wins. At this stage all parties need to work together to remove obstacles and empower all members participate. It may involve providing incentives for embracing change, and feedback on how they can use the changes for their benefit (Campbell, 2008). Changing the culture of a workplace takes time, and as time goes on urgency drops and complacency rises (Kotter, 1996). Creating shortterm wins can help keep the momentum going. Wins should be celebrated in a highly visible way that is connected to the vision and then that momentum can be used to set new achievable goals after each win it is important to analyze what went right and what needs improvement. (Enakrire, O. G. 2007)

Implementing and sustaining the change

The seventh and eighth stages are consolidating gains to produce more change and anchoring new approaches in the organizational culture. The warning in these stages is not to declare victory prematurely. Declaring that the change has been

ISSN: 3471-7102, ISBN: 978-9982-70-318-5

successfully implemented means that people lose all urgency and if the changes have not been firmly anchored into the culture, people will slip back into the "old" way of doing things (Kotter, 1996). In this phase there needs to be a continued focus on the desired vision and the strategic steps required to achieve it until the change becomes a permanent part of the organization's culture and is reflected in the shared norms and values.

The successful adoption and implementation of electronic records used in institutions.

1.6 RATIONALE AND RELEVANCE

The study will help policy makers, auxiliary government institutions, private sector players in the agriculture industry and small-scale farmers to effectively come up with interventions that will improve agriculture in Zambia. It is envisaged that there will be strong backward and forward linkages in the agricultural sector that will result from the provision of information. Ultimately, this will contribute effectively to the economic empowerment among small scale farmers especially women.

70% of Zambia's population depends agriculture. However, the challenge is that farmers still experience lower yields and ultimately lower agriculturally based incomes leading to food insecurity. Food insecurity currently stands at 70%. Anecdotal evidence further suggests that 68% of the children are malnourished due to inadequate food intake. This is blamed on dysfunctional input markets, lower. The agricultural sector is key to the development of the Zambia economy and will be the engine of growth for the next decade and beyond. Agriculture generates between 18-20 % of the Gross Domestic Product (GDP) and provides livelihood for more than that 50 % of the population. The general object of the study is to investigate the effectiveness of the Zambia's Agricultural Policy towards women

empowerment. The specific objectives are to; To investigate how the policy has promoted gender equity in resource allocation and access to agriculture services focusing on women; To analyse how the policy improved access to markets for women farmers; To investigate how the policy facilitated availability and accessing to land among women for agriculture development; To investigate how the policy strengthened the collection and dissemination of information women: investigate among and To development of appropriate technology in the sector.

The study is important because it will identify the gaps that have existed in the period when the policy was implemented. The findings of the study will assist in providing the information that will help in improving the policy when reviewed. It brings out information that identifies the weaknesses and strengths of the policy.

2.0METHODOLOGY 2.1 RESEARCH PARADIGM

This research is centered on both positivist and post-positivist approaches. It is based on mixed methodology.

2.2 RESEARCH DESIGN

Brink and Wood (1998:100) state that the purpose of a research design is to provide a plan for answering the research question and "is a blueprint for action". It is the overall plan that spells out the strategies that the researcher uses to develop accurate, objective and interpretative information. Methodology used refers to the various aspects of the research process that where be put in place to ensure that relevant data is systematically and successfully collected. compiled, analyzed, interpreted and ultimately for production of comprehensive research findings. This research adopted descriptive research design. Descriptive research is used to

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describe characteristics of a population or phenomenon being studied. It does not answer questions about how/when/why the characteristics occurred. Rather it addresses the "what" question (what are the characteristics of the population or situation being studied). Saito, K (1994).

2.3 SCOPE OF THE STUDY

The target population is "the entire aggregation of respondents that meet the designated set of criteria" (Burns & Grove 1997:236). The population from which the sample was drawn consisted of women small scale farmers. A total of 180 ha is under cultivation with just under 36 ha being irrigated in Chongwe District. According to Zambian National Farmers Union, there are more than 150 small scale farmers abstracting water from Chongwe River.

2.4 SAMPLING PROCEDURE

Sampling involves a process of selecting a subsection of a population that represents the entire population in order to obtain information regarding the phenomenon of interest. A sample is a subsection of the population, which is selected to participate in a study. There are two methods of sampling, one yields probability samples in which the probability of selection of each respondent is assured. The other yields non-probability samples in which the probability of selection is unknown (Polit & Hungler 1995:279). The research employed probability sampling techniques. To be more specific, simple random sampling was used. In this procedure, each member of the population had an equal and non-zero chance of being selected.

2.5 RESEARCH METHODS

The researcher used both qualitative and quantitative research methods for data collection. In order to have full information, the researchers used specific suitable data collection tools such as

interviews and questionnaires. Since data collection is "a systemic way of gathering information, which is relevant to the research purpose or questions" (Burns & Grove 1997:383). The research dealt with a semi population. Therefore, interviews were used. Consistency was ensured because questions were asked in the same way for ease coding of data. Individual interviews were done and a structured questionnaire was used as the data collection instrument. The questionnaire was selected because it enabled the investigator to be consistent in asking questions and data yielded was easy to analyze. Saunders, Lewis and Thornhill (1997:243) maintain that a questionnaire is the best method of collecting data especially if the survey strategy is used and if the respondents cannot read or write.

2.6 DATA ANALYSIS

Simple statistical tools were used to analyse the data and the data collected was checked for consistency, accuracy and uniformity. Critical analysis of the data was done thoroughly. A computer program called SPSS was used to facilitate the analysis of the data collected since it was the most suitable instrument for analysis of quantitative data. The advantages of SPSS are: It is user friendly, It has enough space for long range number, Mathematical manipulations are easily dealt with through its own in-built functions, It saves time, SPSS package is used for both entry and analysis, Graphs, tables and percentages will be used to aid our interpretation of data, SPSS is efficient and allows cross tabulation of numerous variables.

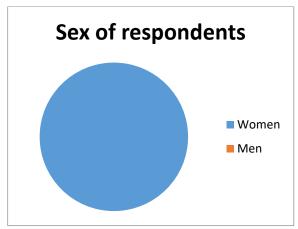
ISSN: 3471-7102, ISBN: 978-9982-70-318-5

3.0 PRESENTATION OF FINDINGS

3.1 Demographics characteristics

This chapter presents analyzed data. According to this study, analysis of data is a process of inspecting, cleaning, transforming, and modeling data with the goal of discovering useful information, suggesting conclusions, and supporting decision-making.

3.1.1 Sex of respondents



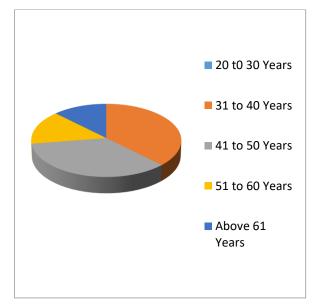
Source: Field Data, 2019. Figure i: sex of respondents

All the respondents in the study were women

4.2.2 Age of respondents

		Percentage
20 t0 30 Years	0	0
31 to 40 Years	15	30
41 to 50 Years	14	28
51 to 60 Years	6	12
Above 61 Years	5	10

Source: Field Data, 2019. Figure ii: Age of respondents



Source: Field Data, 2019.

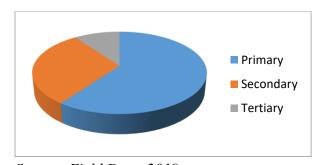
Figure ii: Age of respondents

The majority of the women interviewed are those between 31 and 40 years giving 30% whilst the least are those above 61 years giving 10%. None of the women farmers was below 30 years.

4.2.3 Level of education

		Percentage
Primary	30	60
Secondary	15	30
Tertiary	5	10

Source: Field Data, 2019.



Source: Field Data, 2019. Figure iii: level of education

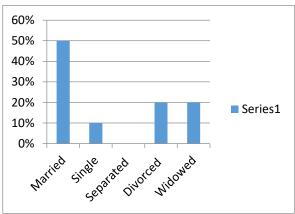
In the study 5 women from 50 had tertiary education giving 10%. 30 from 50 only attained primary education giving 60% whilst 30% attained secondary school education.

ISSN: 3471-7102, ISBN: 978-9982-70-318-5

1. Farming brackets

All the farmers were small scale farmers giving (100% women small scale farmers)

4.2.4 Marital status



Source: Field Data, 2019.

50 women were interviewed on their marital status, 50% were married, and 10% single and none of the women was on separation. 20% were divorced whilst 20 were widows.

2. Total annual income (In Zambian Kwacha)

		%
1,000 to 10,000	1	2
10,000 to 20,000	19	38
20,000 t0 30,000	20	40
30,000 to 40,000	5	10
40,000 to 50,000	2	4
above 60,000	3	6

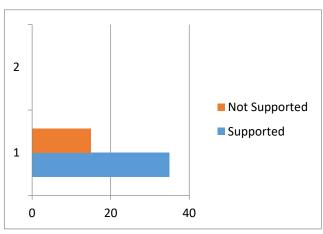
4.3 Training in any agricultural related activity to help in increasing output for agricultural products



Source: Field Data, 2019.

10 or 20% were trained whilst 40 or 80% where not trained in agricultural related activity to help in increasing output

4.4 Support to women by local government to access services



Source: Field Data, 2019.

35 women or 70% received support from the government Support to women by local government to access services whilst 15 or 30% did not.

Source: Field Data, 2019.

ISSN: 3471-7102, ISBN: 978-9982-70-318-5

4.5 Improved access to markets for women farmers

Commodity mostly produced

		%
Maize	40	80
Sorghum	1	2
Millet	1	2
Sunflower	1	2
Soya beans	1	2
Cassava	1	2
Wheat	0	0
Poultry related (Eggs or meat) Animal products related (Milk or	2	4
meat)	1	2
Vegetables	1	2
Fruits	0	2
Total	50	100
Source: Field Data, 2019.		

Source: Field Data, 2019.

Chart Title Animal products Soya beans Poultry related Wheat related ((Milk or Vegetables Eggs or meat) Sunflower Fruits 2% meat) 2% Millet Sorghum 2%

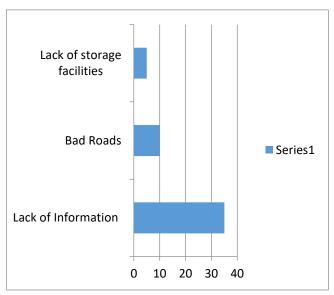
Source: Field Data, 2019.

Maize was the crop most grown by women taking 80% followed by women who reared chickens taking 4%.

All the women targeted Lusaka province as the final destination for their produce.

Challenge to accessing markets

	%	
Lack of Information	35	70
Bad Roads	10	20
Lack of storage		
facilities	5	10



Source: Field Data, 2019.

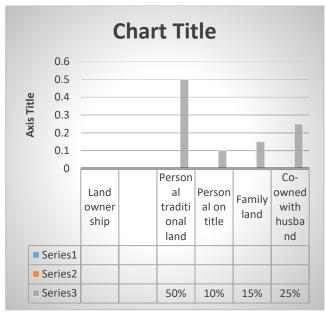
70 % of the women said they lacked information on commodity prices whilst 20% said poor road networks made it difficult to access markets and 10% lacked storage facilities

All the women interviewed said the setting up of floor prices by the government was not good.

ISSN: 3471-7102, ISBN: 978-9982-70-318-5

4.6 Availability and accessing to land among women for agriculture development

Status of the land / ownership



Source: Field Data, 2019.

Land ownership

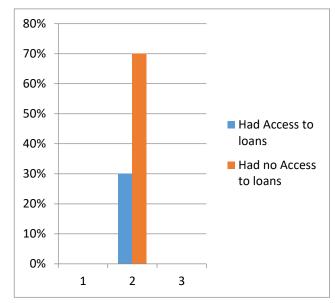
Personal traditional land	50%
Personal on title	10%
Family land	15%
Co-owned with husband	25%
Total	100%

Source: Field Data, 2019.

Of the women interviewed 25 or 50% were conducting agriculture on traditional land whilst only 10% had title. 15% was family land whilst 25% was co-owned with husbands.

All the women were conducting agriculture on land that is more than 5 acres with monetory value being over K100,000 for all of them

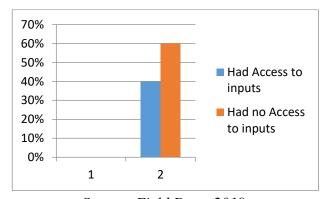
Access to loans meant to boost agriculture



Source: Field Data, 2019.

70% of the women had no access to loans whilst 30% has access to loans to boost agriculture. 100% of those that had access indicated that it was not easy to get loans from lending institutions.

Access to agriculture inputs supplied by the government



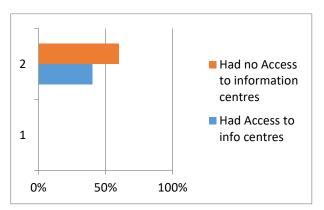
Source: Field Data, 2019.

40% of the women had access to agricutultural inputs supplied by the government through cooperatives. 60% of the women had no access to inputs. 100% of those who had access indiacted that it was easy to access inputs through cooperatives.

ISSN: 3471-7102, ISBN: 978-9982-70-318-5

Collection and dissemination of information among women.

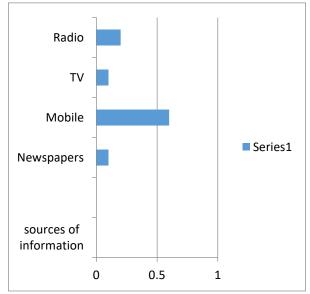
Access to information centers to help provide information on agricultural



Source: Field Data, 2019.

40% of the women had access to information through cooperatives on markets and places to sell crops. 60% had no access to information. Information is stored through books by cooperative clerks. None of the cooperatives had a computer.

Information sources



Source: Field Data, 2019.

Most farmers interviewed accessed information through mobile and this accounts for 60%. The least used medium is the newspaper taking 10%. TV had 10% and radio 20%. 100% of the farmers

said it was easy to disseminate information through phones.

4.7 Development of appropriate technology in the sector

Develop technologies to help improve yields

All the women interviewed agreed that technology was important in agriculture as it helped in increasing yields.

4.0 DISCUSSION OF FINDINGS

4.1 INTRODUCTION

The following are the responses to the specific objectives using the following headings:

GENDER AND AGE

All the respondents in the study were women. The majority of the women interviewed are those between 31 and 40 years giving 30% whilst the least are those above 61 years giving 10%. None of the women farmers was below 30 years. This entails that most young women do not take interest in agricultural related activities. This adds to traditional beliefs that suggest that farming is for men only. This simply means that the value of agriculture is not given to young women at ages between 20 and 30 thirty. Further it can be deduced from the evidence that most young women would take up other careers as opposed to farming. It is important therefore that young women be introduced to farming through social institutions in societies they live.

HIGHEST EDUCATION ATTAINMENT

From the study it can be deduced that most women small scale farmers interviewed are those who only had primary school education. 60% of the women attended primary school and only 10% had tertiary education. This has a bearing on understanding modern farming techniques. Most agricultural inputs and applications are either in a foreign language, English for the case in Zambia

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or selected local languages. Having basics in reading therefore is key in agriculture so as to know best knowledge practices in the industry.

FARMING BRACKET

All the farmers were small scale farmers giving (100% women small scale farmers). 70% of Zambia's population depends on agriculture. Women are the major players in the industry. The agricultural sector is key to the development of the Zambia economy and will be the engine of growth for the next decade and beyond. Agriculture generates between 18-20 % of the Gross Domestic Product (GDP) and provides livelihood for more than that 50 % of the population especially women.

TOTAL ANNUAL INCOME (IN ZAMBIAN KWACHA)

In farming related activities, 2% of the women earned K1,000 to K10,000 in a year, 6% earned above K60,000 in a year. The majority which is 40% earned between K30,000 and K40,000 in a year through agricultural related activities. This simply means that women need to be trained in taking agriculture as a source of livelihood. Most women grow food to feed their families but it's important to engage other stakeholders so that they start engaging women small scale farmers in this aspect.

TRAINING IN ANY AGRICULTURAL RELATED ACTIVITY TO HELP IN INCREASING OUTPUT FOR AGRICULTURAL PRODUCTS

10 or 20% were trained whilst 40 or 80% where not trained in agricultural related activity to help in increasing output. Training in key in agriculture as the sector is dynamic. Training ought to be done continuously by stakeholders

especially the government through extension services. A lot of women will benefit through such interventions. Training programmes need to be tailor made **Reræsntage** it the local needs found on the ground. The agricultural policy must therefore see to it that this aspect prevails in women farmers.

SUPPORT TO WOMEN BY GOVERNMENT TO ACCESS SERVICES

35 women or 70% received support from the government Support to women by government to access services whilst 15 or 30% did not. Government needs to ensure that agriculture packs are sent to all women groups through their respective cooperatives. Support in many areas such as pre- and post-harvest interventions need to be given to women. The agricultural policy must therefore see to it that this aspect prevails in women farmers.

IMPROVED ACCESS TO MARKETS FOR WOMEN FARMERS

Maize was the crop most grown by women taking 80% followed by women who reared chickens taking 4%. There is a need for government to start engaging farmers to diversify crops as the traditional crop for most people in along the line of rail is maize. Policies need to be produced that will assist crop diversification.

70 % of the women said they lacked information on commodity prices whilst 20% said poor road networks made it difficult to access markets and 10% lacked storage facilities. Information is vital in the process as it enables farmers to find markets for their produce. Information has to be timely as well. Most produce from the farms is perishable in nature and thus the need for government to assist groups with storage facilities. Road transport plays an important role

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in agricultural development. This is because it is the major means of transporting agricultural produce from the farms to the markets as well as to various urban communities.

All the women interviewed said the setting up of floor prices by the government was not good as it affects their profit margins. The government in a bid to provide food security in the country must engage farming bodies in setting prices for products.

AVAILABILITY AND ACCESSING TO LAND AMONG WOMEN FOR AGRICULTURE DEVELOPMENT

Of the women interviewed 25 or 50% were conducting agriculture on traditional land whilst only 10% had title. 15% was family land whilst 25% was co-owned with husbands. Land owernship is key as this has a bearing on production. Women need titles for their land anf the government must expedite the enaction of the land policy in Zambia. Women must also be given priority on land ownership.

ACCESS TO LOANS MEANT TO BOOST AGRICULTURE

70% of the women had no access to loans whilst 30% has access to loans to boost agriculture. 100% of those that had access indicated that it was not easy to get loans from lending institutions. This translates to the fact that lending institutions in Zambia have a bias towards lending as they favour mostly large-scale farmers. Government needs to look into re opening banks such as Lima Bank

ACCESS TO AGRICULTURE INPUTS SUPPLIED BY THE GOVERNMENT

40% of the women had access to agricutultural inputs supplied by the government through cooperatives. 60% of the women had no access to inputs. 100% of those who had access indiacted that it was easy to access inputs through cooperatives. The government must continue to support women through cooperatives in proving farming inputs. Basic inputs such as fertiliser need to be priotised.

COLLECTION AND DISSEMINATION OF INFORMATION AMONG WOMEN

40% of the women had access to information through cooperatives on markets and places to sell crops. 60% had no access to information. Information is stored through books cooperative clerks. None of the cooperatives had a computer. However, ICT in agriculture offers a wide range of solutions to some agricultural challenges. It is seen as an emerging field focusing on the enhancement of agricultural and rural development through improved information and communication processes. In this context, ICT, used as an umbrella term encompassing all information and communication technologies including devices, networks, mobiles, services and applications; these range from innovative Internet-era technologies and sensors to other preexisting aids such as fixed telephones, televisions, radios and satellites. E-agriculture continues to evolve in scope as new ICT applications continue to be harnessed in the agriculture sector. More specifically, agriculture involves the conceptualization, design, development, evaluation and application of innovative ways to use ICTs in the rural domain, with a primary focus on agriculture. Provisions of standards, norms, methodologies, and tools as well as development of individual and institutional

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capacities, and policy support are all key components of agriculture. Women need to be supported in creation, storage and dissemination of information.

INFORMATION SOURCES

Most farmers interviewed accessed information through mobile and this accounts for 60%. The least used medium is the newspaper taking 10%. TV had 10% and radio 20%. 100% of the farmers said it was easy to disseminate information through phones. Mobile phone usage in third world countries like Zambia is playing a vital role for the enhancement of farmers business towards agriculture. Recently, communication through mobile phones is considered very important in enhancing farmers' access to better understand agricultural market situation. Farming communities appreciate mobile phone as easy, fast and convenient way to communicate and get prompt answers respective of problems. Nowadays, the mobile phone has generated an opportunity for the farmers specially to get the information about marketing and weather. Through this important technology, they directly keep in touch with market personals and offer their produce with reasonable prices. The use of mobile phone also keeps them aware for weather forecast for agriculture input application like fertilizer and pesticides which might be affected by unforeseen seen disasters as communicated by meteorological department. This device has given new direction and approach to farmers to communicate directly and share about recent advances with each other. Other media is important too but is less accessed by farmers. The government and other stake holders need to take advantage of this by providing information to farmers through mobile phones either through codes or online platforms.

DEVELOPMENT OF APPROPRIATE TECHNOLOGY IN THE SECTOR

100% of the women interviewed agreed that technology was important in agriculture as it helped in increasing yields. Advantages of technology in agriculture include expediting crop production rate and crop quantity, which in turn reduces costs of production for farmers and food costs for consumers, and even makes crops more nutritious and livestock bigger meatier. Technology in agriculture produces benefits for small-scale farms and national farming operations alike. Government through its ministry and other auxiliary department must expedite policy implementation that will enhance access to technology by women farmers.

5.4 Conclusion

The research concludes that the economic emancipation of women and economic development of small-scale farmers is closely linked to their ability to good services for their business. agricultural This study provides evidence to the fact that indeed, the promotion and implementation of good agricultural policies can be a catalyst for spurning economic growth and development for women scale farmers in Zambia.

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5.5 Recommendation

- 1. The research recommends that there is a need for financial institutions to bridge the gap for women to access credit financing. Financial institutions do not lack money to lend to low-income groups such women cooperatives. It is the perceived risks, rightly or wrongly associated with low-income people that pushes them away, rather than providing credit lines and financial support to financial service providers. Therefore, it is prudent that the following aspects be embedded in interventions aimed at empowering women. These include financial education, business development services, market information and product design.
- 2. The research recommends that there is need to increase the range of assets accepted as collateral by financial institutions, given that most women claimed not to hold assets or title deeds even in cases where they own houses or land, formalization of assets such as houses is a way to increase their acceptance as collateral by banks.
- 3. The research recommends that there is need to create a collateral registry bureau to enable increased confidence in the financial institutions' acceptance of a variety of collaterals.
- 4. The research recommends that there is need to design financial products that respond to women's business and individual cash flow problems. Well-designed credit guarantee lines can be used to increase credit to business women while reducing the risk of commercial banks to lend to women in agriculture.
- 5. The research recommends that all publicity and advertisements on agriculture services and products should emphasize that those products and services are suitable for both male and female clients. These messages should

be tailored to address the needs that concern women and women farmers.

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