BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF AGRICULTURE AND ENVIRONMENTAL SCIENCES

DEPARTMENT OF AGRICULTURE ECONOMICS, EDUCATION AND EXTENSION

THE EFFECTS OF COMMAND AGRICULTURE ON FOOD SECURITY IN WARD 26 MVURWI, MAZOWE DISTRICT

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A DISSERTATION SUBMITTED IN PARTIAL FULLFILMENT OF THE REQUIREMENTS OF BACHELOR OF SCIENCE IN AGRICULTURE ECONOMICS AND MANAGEMENT.

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The undersigned certify that they have read and recommended to the Bandura University of Science Education for acceptance a dissertation entitled: The effects of Command Agriculture on food security in ward 26 Mvurwi, Mazowe district.

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DECLARATION FORM

I, Milanzi David, do hereby declare that this dissertation is my original work and has never been presented to this or any other university or institution in support of any academic award.

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DEDICATION

This work is dedicated to all the loved ones who put their hands on deck to promote my academic progress.

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LIST OF ACRONYMS

A1	Small scale farmers
A2	Middle scale farmers
AGRIBANK	Agricultural Development Bank of Zimbabwe
AFC	Agricultural Finance Corporation
AGRITEX	Agricultural Technical and Extension Services
CAP	Command Agriculture Program
CBZ	Commercial Bank of Zimbabwe
CL	Communal Land
FSG	Fert Seed and Grain
IMF	International Monetary Fund
FTLRP	First Track Land Reform Program
GMB	Grain Marketing Board
RBZ	Reserve Bank of Zimbabwe
TTLCO	Tribal Trust Cooperation

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ABSTRACT

Zimbabwe is no longer a bread basket; it is now food insecure. This can be attributed to, among other factors, climatic changes and inadequacy agricultural finance which reduced agricultural yield and so the government intervened to provide farming financial support through many programs including Command Agriculture. Therefore, this work sought to assess the effects of Command Agriculture Program on food security in ward 26 Mvurwi, Mazowe district. Command Agriculture is one of the state-led agricultural policies, it was implemented in Zimbabwe to assist farmers with inputs of agriculture and improve food security. The research design used was descriptive, the research site was purposively chosen and a simple randomised sampling technique enhanced sampling. Quantitative and qualitative data was analysed using percentage, mean and frequency and presented on tables, charts ad figures and. It was found that Command Agriculture provides work to some villagers, improves local food availability and it is a means of life to contracted farmers who afford sufficient food, clothing, houses and other assets. It is noteworthy that the actual output of particularly maize was far less than the expected and it was falling since the introduction of the program, therefore, there is ineffectiveness and inefficiency in this program which can be attributed to input insufficiency, late input supply, water scarcity and poor management. There is a need for holistic to revive the agricultural sector and this entails that all stakeholders take seriously these financial aids meant to improve livelihood with one accord; timeous planting and hybrid seed use is promoted by early input supply. Favourable GMB maize price may be a good flavour and it is very crucial for the Agro yield to extend equipment loans to small scale farmers and make close monitoring through extension officers preaching farming knowledge. Transparency, funds leakage minimisation and enough room for agricultural economists can promote agriculture productivity.

Key word: Command Agriculture; Effectiveness; Food security; Input supply; Mazowe district.

CHAPTER 1

INTRODUCTION

This chapter states background of the study, problem statement, objectives, and significance of the study, research questions, delimitation and limitations of the study.

1.1. BACKGROUND OF THE STUDY.

Zimbabwe is now food insecure but it was once the "bread basket" of Southern Africa (The Economist, 2002). According to The Zimbabwean (2012), during 2002 to 2012, the annual maize production fell by 31%. „Over a million hectares converted from primarily export crops to primarily maize, production of maize finally reached pre-2001 volume in 2017 under "command agriculture" programme‟ (The Conversion, 2017).

The agricultural sector has been feeble in production of grains and other agricultural products since the Fast Track Land Reform Program (FTLRP). This was/is due to, among other factors, the sky-rocketing of input prices. Before and after 2009-2013, the lack of financing for agriculture has been a major constraint for all farmers. Farmers were unable to raise bank credit with their farm as collateral without leases being issued and so the government of

Zimbabwe implemented some agricultural financial schemes including Command Agriculture in 2016 to finance farming, providing contracted farmers with inputs they pay back after harvesting (Sinkole, 2022). „Command Agriculture is an import substitution-led industrialization concept meant to empower local producers of cereal crops and in the process boosting capacity for locals and creating employment for thousands of people in the sector‟

(Agriculture Journal, 2017)

1.2 PROBLEM STATEMENT.

The government of Zimbabwe mobilized over $500 billion to enhance the production and supply of inputs and machines that are probable to boost farming under Command Agriculture

(Agriculture Journal, 2017). People of Zimbabweans are confident that output will be abundant enough to bring a positive change resulting in reduction of cereal products prices, and thereby companies will start to enjoy economies of scale, thereby promoting production (Agriculture Journal, 2017).

Unless performance appraisal is done, the effectiveness of this financial scheme remains opaque and the agricultural economist would not be able to get a clear picture of how scarce resources are being allocated. Farmers also need to be aware of weather inputs tallies with output, clarity motivates them to work towards the objectives of the organization and it also assist others on making decisions on whether to join or to stay away from this financial scheme.

1.3 OBJECTIVES

1.3.1 Aim of the study

To assess the effects of Command Agriculture Programme on food security in ward 26 Mvurwi, Mazowe district from 2018/2019 to 2021/2022 season.

1.3.2 Specific objectives

-To identify the beneficiaries of CA programme.

-To identify crops grown under Command Agriculture.

-To compare maize output between contracted and non-Command farmers.

-To determine the effects of Command Agriculture on the community‟s way of life.
-To identify challenges and bottlenecks in CAP and possible solutions.

1.4 RESEARCH QUESTIONS

1. Is the maize output produced by contracted farmers tallying with the allocated inputs?
2. Who are the beneficiaries of Command Agriculture?
3. How CAP is affecting the welfare of the community?
4. What are the bottlenecks in Command Agriculture Program?

1.5 SIGNIFICANCE OF THE STUDY.

An assessment is to be done to examine the contribution of Command Agriculture input scheme and its significance to agriculture output, therefore, creating an environment in which the input-output relationship is clearly portrayed in order to identify efficiency and effective allocation and utilization of input subsidies. Chambati, Mazwi and Chemura (2019) put forward that to cover the shortfall in the financing of cereal crops production and other horticulture produces was the aim Command Agriculture. However, „there is a difference between policy formulation and implementation, which means also between the perceived and actual benefits", as shown by the impact of the program (Chinsinga, 2010).

1.6 DELIMITATION.

The focus of this research is on the efficacy of Command Agriculture in ward 26, Mazowe district. According to Agricultural Policy Research in Africa (2019) Mvurwi is located in the Agro-Ecological Region II of Zimbabwe; it receives an average rainfall of between 700 millimetres and 800 millimetres per annum, temperatures range between 20 to 35 degrees Celsius from November to March. Heavy clay loam soils are suitable for growing a wide range of crops in a variety of soils (Agricultural Policy Research in Africa 2019). The environment is ideal for maize production and so lured Command Agriculture.

1.7 LIMITATIONS.

1. The study was constrained by the fear of politics behind Command Agriculture.

2. Input and output data was uneasy to access.
3. The distance between farms was a limiting factor.
4. Some farm owners were frequently absent.

SUMMARY

To sum up, a background of the study, statement problem, objectives, and significance of the study, research questions, research hypothesis, delimitation and limitations of the study were exhausted. This chapter precedes literature review.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 INTRODUCTION

First things first and so it was considered quite crucial to review the Fast Track Land Reform Program of 2000 resulting in the agrarian change, reconfiguration of agricultural funding (Mazwi, Chemura, Mudimu and Chambati, 2019), falling market prices of high value agricultural products and a feeble agriculture sector. Literature review was also done on various financial systems which were put in place for allocating agricultural resources to small scale and middle scale farmers for the sake of reviving farming and food security in Zimbabwe.

Among others, there is Command Agriculture which is the integral part of the research, Presidential Input Scheme and the Land Bank; an institute specialized for agricultural financing with little restrictions over collateral security. Benefits of Command Agriculture and its effectiveness in attaining agricultural and rural development were critically reviewed. Some Zimbabweans hailed the introduction of Command Agriculture as an opportunity to improve agriculture and ultimately their living standard (News Day, 2021). However, others are still stuck in the spider web of inequality and poverty due to insufficient funds for farming.

2.1.1 Fast Track Land Reform Program

Prior to FTLRP the agrarian structure was so designed that the majority of Zimbabweans occupied marginal lands, while the minority white farmers owned water resources and farmed most of the prime land. The Government implemented the Fast Track Land Reform Program in 2000, acquiring all commercial farms and agro-industrial estates operated by whites.

In Mvurwi, 76 large-scale commercial farms over 128,386 hectares were redistributed to Zimbabweans except for Forrester Estate and Mazowe Citrus Estate resettling 5,290 people from diverse backgrounds and ethnicities (Agricultural Policy Research in Africa 2019). The government issued permits and leases so that the land could be held and utilized according to their preferences. The transfer of land from large-scale commercial farms to small-scale farms resulted in agrarian transformation in the rural landscape of Zimbabwe (Chigumira, 2018). It produced a tri-modal agrarian structure in Mvurwi with A2 schemes (large-scale agriculture), A1 schemes (smallholder farming), and communal areas (smallholder and/or subsistence farming) (Agricultural Policy Research in Africa 2019).

Changes in land ownership and production patterns were followed by significant economic challenges including hyperinflation and financial inaccessibility resulting in falling agricultural productivity, food insecurity and an increase in maize importation. To promote commercialization in Mvurwi, joint ventures with former white farmers and the Chinese were formed in A2 farms to invest capital for crop production and infrastructure development.

2.1.2 Command Agriculture Program

Initially, Command Agriculture Program was adopted by the government of Zimbabwe as rural development strategy in December 2005 termed „Operation Maguta" – Eat well, a nationwide program and specifically in Makwe rural community in Matabeleland South where there were horticulture cooperatives formed in 1968 under Tribal Trust Land Cooperation (TTLCO) (Mabhena, 2013). The introduction of a command-style in farming meant the nationalization of individual plots, cooperatives and the irrigation scheme. Eyes of soldiers watch every day farm operations. Local farmers were expected to collectively carryout delegated work in accordance with the army"s expectance and standards at the expense of indigenous knowledge. According to Mabhena (2013), it was the soldiers who would allocate a portion of output as food to the farmers and collect the remained portion to the Grain Marketing Board. This contrasted the past period of cooperatives in which farming was done according to the community"s willingness and means. Equality and poverty reduction was not achieved and so the program seemed futile.

Command Agriculture in 2016 was not a new concept but (Chambati et al, 2019) posits that a new dimension is brought to the program by involving private firms when compared to the previous „command agriculture" program implemented soon after the implementation of Fast Track Land Reform Program. It is the same top-down development approach aimed at resuscitating agriculture. CAP was financed by the Reserve Bank Zimbabwe and contracted Sakunda Holdings to purchase inputs from companies such as Windmill, ZFC, Sable Chemicals, Fert Seed and Grain, Valley Seeds under the Ministry of Finance and Economic

Development and the Ministry Of Lands, Agriculture, Water and rural Resettlement. „„The Ministry of Finance and Economic Development was in control in terms of operations and for day to day activities there was a Command Centre which was replicated at provincial level" (Veritas, 2021). In agricultural season 2020/21, the government of Zimbabwe warranted 80% of debts and it contracted Commercial Bank of Zimbabwe (CBZ) to be an agent of Command Agriculture providing loans to farmers, these loans were supposed to be paid after harvesting (Sinkole, 2022).

According to Scoones (2021), Command Agriculture scheme has been a loan/subsidy scheme supported by the party-state since 2016. It is intended to reduce the importation of maize by

empowering local producers of cereal crops and in the process boosting capacity for locals and creating employment for thousands of people in the sector (Agriculture Journal, 2017).The Grain Marketing Board ensures that suppliers and contractors supplied the contracted volumes and that they fulfilled all the material conditions of their contracts. Inputs which include maize seed, fertilisers, pesticides, and diesel are delivered to GMB which distributes them to beneficiaries. It also buys maize output from contracted farmers expected to be 5 tonnes per hectare and maintaining national food reserves. AGRITEX is responsible providing extension to the farmers. CAP was initially for grains production but it is now extended to horticulture and animal production.

CAP is similar to the merchant path which denotes the existence of modernised, mediumsized farms with absent management in the form of military personnel (Shonhe, 2017).

2.1.2 Presidential Inputs Scheme

This agricultural support program was introduced in 2011 and ran side by side with Command Agriculture Program in 2016 but this scheme is intended for the low income subsistence farmers. It provides them with free inputs such as maize seeds, fertilisers and pesticides. In 2016 the government spent US$42.7 million on the presidential inputs support scheme, and scaled it up substantially in 2017 and 2018, to US$125 million and US$263 million respectively (ZEPARU 2021).

Under Pfumvudza, a farming concept introduced in 2020 to support the Presidential Input Scheme, these inputs are distributed to GMB depots. 50 kg of basal, 50 kg of top dressing fertiliser and 5 kg of maize seeds are a standardized input package received by farmers in order to alleviate food insecurity due droughts caused by climatic changes. Core principles underlying Pfumvudza are: minimum soil disturbance or tillage; holing out, permanent soil cover by using organic mulch; crop rotations and intercropping cover crops with main crops (Mujere, 2021).

2.1.4 Land Bank

As reported by Xinhua (2021), land bank is one of four subsidiaries of the Agricultural Finance Corporation (AFC), along with insurance, leasing, and Agricultural Bank of Zimbabwe (AGRIBANK). It was established by the colonial government in 1912 to provide cheap loans

to settlers for the purchase of farms, equipment and inputs (APRA, 2019). Recently, land bank carter for loans, short to long-term financial products and packaging to medium scale, small scale and communal farmers basing on the availability of a tenure document, bankability and viability of the project. Land bank is designed to help drive growth in the agricultural sector through the provision of affordable finance to farmers (The Economist Intelligence, 2021).

2.2 BENEFITS OF COMMAND AGRICULTURE PROGRAMME

2.2.1 Beneficiaries receive inputs at zero deposit

CAP provides a good starting point for contracted farmers who just collect inputs from GMB depots proximity to their farms without making instant payments. Payments are made after harvesting. Initial accumulation of money to purchase inputs at the beginning of the growing season was not such easy and so impeded the participation of poor and low income earners in crop production but Command Agriculture Program is a source of capital which created a farming environment in which potential Zimbabweans became productive and took agriculture to a commercial level.

2.2.2 Cultivation of the land which was once idle

The provision of diesel to farmers facilitated the use of agricultural implements such as tractors and tractor-drawn implements to till the land which was impossible to cultivate using ox-drawn ploughs. Diesel is also a source of energy for pivots generators enhancing wheat production, all year farming and the supplementation of water during droughts.

Transportation of workers, agricultural tools and materials is promoted.

2.2.3 On-farm wages

Not all Zimbabweans are farmers, some are proletarians and so they earn a living on casual work in these CAP financed farms. People are hired to do tasks that require labor such as fertilizer application and spraying where there are no tractor-drawn boom sprays. On-farm wage is a flexible and immediate source of income for workers who are paid just after finishing up a

given task to meet daily financial needs instead of waiting to be paid after harvesting. This financial scheme provides inputs alongside money for labor, thereby promoting the continuity of non-farm business activities from which farmers purchase food and commodities throughout the year.

2.2.4 Using herbicides reduces labor costs

CAP financial scheme is intended for mass crop production. Therefore, it supply weed-killing chemicals in place of labor needed for weeding, thereby facilitating timely removal of weeds and efficient use of applied fertilisers to boost maize quality and yields. Knapsack spraying or tractor boom spraying requires very few workers.

2.2.5 The relationship between farmers and the government is maintained

The government is interested in promoting the success of these people who are participating in contract farming to achieve the expected objectives and refill the bread basket of Zimbabwe to improve food security. This means that the government will be there to ensure the prosperity of these farmers in the same trajectory with it. The beneficiaries tend to be loyal and support the existence of this government which provides a good source of income.

2.3 LOOPHOLES IN COMMAND AGRICULTURE PROGRAMME

2.3.1 Repayments defaults

Some farmers are failing to pay back the loan due to various reasons including: insufficient knowledge to manage their farms and produce output which tallies with the provided inputs; the misuse of received inputs - farmers sell inputs to small scale farmers and finance nonfarm activities such as running shops, buying cars, stands in towns and constructing houses at the expense of crop production; droughts and excessive rainfall contributes to poor output and ultimately payment default. According to The Sentry (2022), IMF estimated that 35% defaulted, while the World Bank and the government of Zimbabwe estimated that, in 2018, two thirds of Command Agriculture expenditure was not recovered.

2.3.2 Lack of due diligence on transactions

The Grain Market Board purchased maize from contracted farmers at high prices and sold it to its clients at low prices creating a loss to the nation. According to Veritas (2021), “a schedule received from the Auditor General, the Ministry of Agriculture was supposed to have received US$ 1 633 617 652 from Treasury. However as at 10 May 2018, the Ministry of Agriculture confirmed having received only $73 903 7851”.

2.3.3 Lack of transparency and accountability

According to The Sentry (2022), under normal circumstances, lucid public tender and a bidding process of bidding which is competitive that is examined by oversight institutions of government and the public ought to be involved. However, CAP suppliers were appointed without going to tender and without respect of the Public Procurement Act. There was no open tendering process for Command Agriculture, which would finally spend more money in public funds.

2.3.4 The majority of CL and A1 farmers are left out of the program

In 2016 Command Agriculture contracted 47.5% of middle scale, 5.5% of small scale and 2.9 % of communal farmers (Shonhe and Scoones, 2021). A2 farmers are said to have the ear of government and so they are the beneficiaries of this state-led program which boosted maize production amongst them resulting in accumulation from above, thus, promoting class formation and social differentiation.

2.4 SOURCES OF INCOME IN MVUWI

2.4.1 Farming

Farmers around Mvurwi town produce beans, potatoes, vegetables and butternut squashes which they sell at the local market all year round. Small scale farmers produce maize and sell the surplus to people living in the town at black market price but middle scale farmers sell their

maize and soya beans to National Foods and GMB. Mvurwi lies at the center of a high potential farming region, and that the farm economy has benefited from a long history of tobacco production, a high-value export crop, supported by the state (APRA, 2019). Contract farming serves to re-financialise small-scale tobacco farming and marketing. The level of income generating activities increases during the tobacco selling period.

2.4.2 On-farm wages

Some people in the villages and farms around the town earn a living from casual work such as planting, weeding, spraying, harvesting maize, reaping and grading tobacco.

2.4.3 Off-farm wages

People living in the town are canteen assistant, flea market attendant and others receive income from till operating, Early Childhood Development Teaching, shop keeping, mobile phone repairing, bricklaying, carpentry and hardware managing. Women generate money from savings, rentals and loan clubs.

2.4.4 Business operating

Fruits and vegetable selling, transport/taxi operating- hiring out cars or ferrying passengers in and around the Mvurwi areas (a practice commonly termed as pirating) (Agricultural Policy Research in Africa, 2019), grocery selling, flea market operating, meat seller/butchery, farm inputs selling (maize seed and fertilisers), grinding mill and firewood selling.

SUMMARY

All in all, Command Agriculture Program and other financial schemes such as the President Input Scheme and Land Bank were implemented to provide adequate farming funds, thus, addressing the financial crisis which impeded agriculture and caused food insecurity in Zimbabwe since the year 2000 when the Fast Track Landform Program was put in place. Documentary research reveals the afore-mentioned benefits and loopholes in CAP but its effectiveness in attaining favorable objectives such equality and poverty reduction remains abstruse.

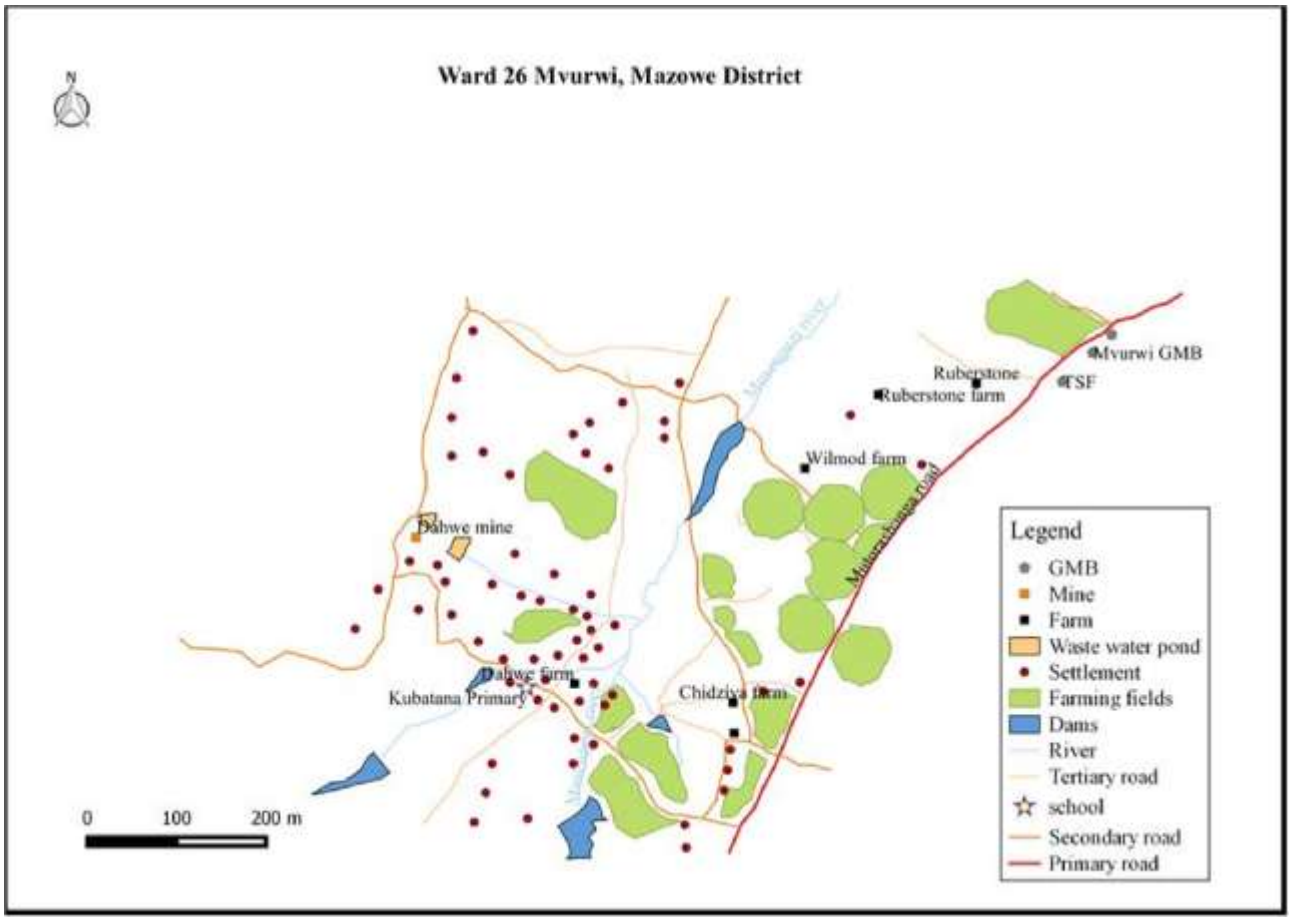
CHAPTER 3

METHODOLOGY

3.0 INTRODUCTION

A description of the methodology for this research was presented in this chapter. It focuses on research design, study site, target population, sample size, sampling procedure, research instruments, data collection and data analysis procedures. Ethics were also taken into consideration under this chapter.

3.1 RESEARCH SITE.



Source: (Google Map Shape file, 2023)

Figure 1 Map of ward 26 Mvurwi, Mazowe district

This work was carried out in ward 26, a settlement which stretches west from the boundary of Mvurwi town in the high veld of Mazowe district, Zimbabwe. Mvurwi is in agro-ecological region II with temperatures ranging from 20 – 35 degrees Celsius and receives an average of between 700ml and 800ml of rainfall per annum, with predominantly heavy clay loam soils suitable for a broad range of crops (Agricultural Policy Research in Africa 2019). Summer and winter are main seasons in this arable land with a savannah type of vegetation.

3.2 RESEARCH DESIGN.

This work is based on a descriptive research in order to explain the economic and social patterns existing in Command Agriculture Program in ward 26, Mvurwi. The study aimed at collecting information from the Grain Market Board and AGRITEX to identify the contracted farmers and also quantitative research facilitated the collection, measurement and comparison of input-output variables. According to Kombo and Tromp (2006), descriptive survey is a method of collecting information by interviewing or administering questionnaire to a sample of individuals. Information concerning social issues, attitudes and opinions of ward 26 residents towards CAP was collected. Qualitative research and thematic analysis facilitated the identification of meaningful patterns within data concerning the effects of CAP on the local people and their environment.

3.2.2 Data sources.

Primary and secondary sources of data were used in this work. Some information was gathered directly from respondents through interviews and questionnaires. AGRITEX members and extension workers, GMB manager and peasant households of ward 26 were sources of primary data. The internet provided e-journals and articles for documentary research and Mvurwi GMB depot database enabled desk research for input and output statistical data.

3.3. POPULATION AND SAMPLE

3.3.1 Population.

All households of ward 26 who sum up to 2017 was the population whose knowledge and opinions about the perceived social and economic fruitfulness of Command Agriculture were examined to achieve one of the chief objective of this research – assessing the effects of CAP on the welfare of community. Household heads are often the decision makers in as far as securing food and other necessities in their community is concerned. They decide whether to work for the contracted farmers or not and they are assumed to be mature enough to understand positive and negative results of projects intended to benefit their society. They even decide on whether to join Command Agriculture or not. From them, a number of people with characteristics ideal for making inferences were selected.

3.3.2 Sample and sample size.

The sample possesses elements representative of the research population (Kombo and Tromp, 2006) it was composed of household heads in ward 26. The respondents chosen for survey purposes are referred to sample, a subset of the population and was defined by a sample size of 334 which was calculated using the Slovin‟s formula for sample size determination (Slovin, 1960): $n = N / (1+Ne^2)$.

Where:

n = number of samples N = total

population e = error margin /

margin of error

Therefore:

$n = 2017 / (1+2017(0.05^2))$

$= 334$(rounded figure)

The higher the sample size the lower the margin error (ZACH, 2023).

3.3.3 Sampling procedure.

Mvurwi area is conducive to diverse farming activities, it lured CAP and so purposively selected for the study. Extreme Case sampling was used in choosing ward 26 since there are a comparable number of contracted farmers; it is accessible and rich in the required information. Stratified sampling grouped households into strata according to gender and a simple random sample was taken in these two key subgroups in such a way that either man or women were proportionate to their number in population to make a balanced sample size. The use of various sampling techniques reduces sampling bias; therefore, it is ideal for better statistical precisions.

3.4 RESEARCH INSTRUMENTS.

Instruments for collecting data were designed to bring information which carries answers for questions that prompted the researcher to carry out this study. Interviews and questionnaires were administered to ensure the collection of reliable results.

3.4.1 Interview.

A face to face interview was held with the Graining Market Board manager to gain complete and profound understanding of Command Agriculture Programme. It was based on an interview guide listing questions concerning input distribution and output delivery mechanism; requirements for one to join the contract and reasons for payment defaults.

The researcher posed oral questions to the extension officer of ward 26 that were deemed necessary for the identification of the contracted farmers, also to review their current performance and his perception on factors considered to impinge the programme. The absence

of pre-determined questions gave the extension officer a room to give a free response to raised questions. However, it goes unquestioned that it was complicated to synthesise and analyse data since there was no set format for conducting this type of interview.

3.4.3 Questionnaires.

These are documents administered to ask questions to all sampled households in the study location intended to gather quantitative and qualitative information explaining the patterns and effects of Command Agriculture in this community. Questionnaires were considered useful in the sense that they gathered data over a large sample; there was no opportunity for interview bias and the upheld of confidentiality was promoted. Respondents were given three days to complete the questionnaires during their own time therefore, were able to give reasonable answers.

3.5 DATA COLLECTION PROCEDURE.

In order to gather information concerning the effects of Command Agriculture on food security in ward 26, the researcher initially defined the sample by identifying the respondents and their accessibility. A reflection on research design was done to ensure the suitable format in which data was to be collected and obtain acceptable precise and accurate results. Research instruments (focused interviews, unstructured interviews and questionnaires) deemed useful in collecting the needed data were put in order and the nature of data to be collected was determined.

A letter from the chairperson of the department of Agriculture Economics, Education and Extension was obtained to confirm that the researcher was a student of Bindura University of Science Education carrying out a study on assessing the effects of Command Agriculture on food security in ward 26, Mvurwi. Semi-structured and focused interviews were held with the AGRITEX members, GMB manager and assistants to identify contracted farmers and other issues relating to CAP. This was followed by sending an advance letter to the sample respondents explaining the nature and purpose of the research and requesting for their

participation to provide answers needed in the study. A pilot study was conducted on 20 sample respondents to pre-test research instruments finding out if they were able to measure what they were supposed to measure and also to see if the wording was clear and all questions were to be interpreted in the same way by all respondents, thus, testing the feasibility of research techniques.

The researcher finally distributed 334 questionnaires containing questions which capture both quantitative and qualitative data to all sample respondents who were supposed to fill in answers in written form within three days and all questionnaires were gathered thereafter.

3.6 DATA ANALYSIS AND PRESENTATION.

3.6.1 Data presentation.

Various graphs were used to visually present the trend of maize output. The output of cereals grown under Command Agriculture Programme from year 2019 to 2022 is illustrated in bar diagrams for comparisons. Graphs were employed in categorising, differentiating maize output from contracted and no Command farmers and also to portray the output of wheat and soya beans produced from

3.6.2 Data analysis framework

Quantitative data analysis was carried out using descriptive statistics (frequencies, means and percentages). SPSS and Microsoft Excel were used for data processing and analysis.

3.7 ETHICAL CONSIDERATIONS

The conduct of this research was deemed necessary and attention was given to ethical issues associated with carrying out this study.

3.7.1Informed consent

Information about the title of the study, student‟s information, and purpose of the study, criteria for subject selection, study procedures, potential risks, cost and benefits was clearly given to participants so that they were well aware what it means to take part in the research. They responded affirmatively to the terms of the research and agreed to participate in the project voluntarily.

3.7.2 Confidentiality

The researcher was obligated not to disclose respondents‟ identity, personal details and responses to anyone outside the research. Personal identity of the respondents was restricted to the researcher and the research assistance only. Confidentiality was maintained at all times. Documents used in research were stored in a locked portfolio and encryption done to files in the computer. According to Holland (2019), Confidentiality pertains to protecting the participant‟s personally identifiable data.

3.7.3 Free from harm

More effort was put on protecting participants from mental and physical distress that might have resulted from their participation in responding to the research questions.

SUMMARY

This integral part of the project gives a detailed account of the methodology employed in the study. A brief research design and study area description was preceded by methods of data collection including sampling, sampling instruments, data presentation and analysis framework. Last but not least was the consideration of ethical issues in the research project.

CHAPTER 4

DATA ANALYSIS AND PRESENTATION

4.0 INTRODUCTION

The collected data was analysed and displayed on tables, pie charts and graphs. The results were discussed in this chapter. The first section depicts information gathered from household heads that were assumed to perceive the effects of Command Agriculture Programme through their interaction with the contracted farmers. Demographic characteristics of the respondents and their responses were visualised on tables to give a clear picture of the story from the peasants" point of view. A pictorial pattern of the number of middle scale and small scale contracted farmers was illustrated on pie chart and this was followed by an outlay of quantitative data of maize seed and, fertilisers distributed to farmers and output delivered from 2018/2019 to 2021/2022 seasons collected from Mvurwi GMB data base. In addition, graphs were used for maize output trend and bar charts showing output from contracted and non-Command farmers were presented enabling comparisons between the two. Output of white maize, wheat and soya beans is displayed on tables for a better analysis of the contribution of CAP to food security in Mvurwi. The outcome of presented statistics was dissertated and the contents of this chapter were briefly summed up.

4.1 RESPONSE RATE

A total of 334 questionnaires were administered to single, married and widowed household head and 272 were returned, a response rate of 81.4. The response rate for the single is 75%, married is 89.6 and widowed is 65.7%.

Figure 2 depicts questionnaire response rate

	Administered	Returned	Response rate (%)
for Questionnaire the single	72	54	75
Questionnaire for the married	192	172	89.6
Questionnaire for widowed	70	46	65.7
Total	**334**	**272**	**81.4**

4.2 RESPONDENTS' DEMOGRAPHIC CHARACTERISTICS

16% of the respondents are aged 30 and below, 19.9% is from 31 to 35, 21% from 36 to 40, 20% from 41 to 45, 23.9% is above 45 years.

Figure 3 Age and gender distribution of respondents

Age	Gender		**Total**
	Male	Female	
≤30years	21	23	**44**
31-35	24	30	**54**
36-40	22	34	**56**
41-45	27	26	**55**
>45	28	37	**65**
Total	**122**	**150**	**272**

The figure below illustrates that 54 household heads were single, 172 married, 46 widowed and females were dominant.

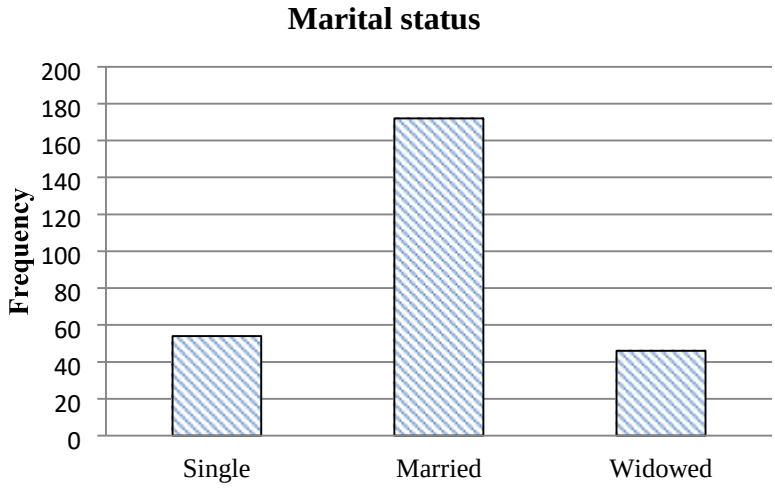


Figure 2: Marital status

The table below illustrates that 5% of the respondents have no formal education, 22% has primary education, 30% is below O‟ level, 35% has O‟ level and finally 1% has tertiary education.

Figure 4 Education level of the respondents.

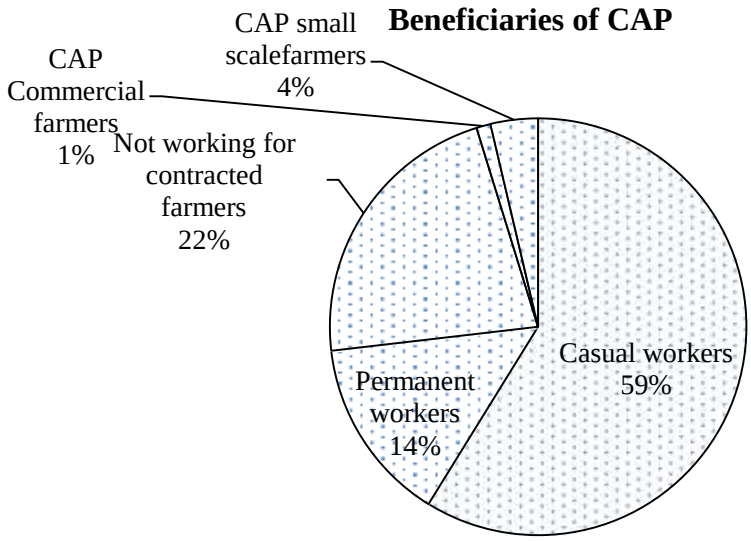
	Gender		
Education level	Male	Female	Total
No formal education	4	9	13
Grade 7 and below	20	40	60
Below O‟ level	41	41	82
O‟ level	49	46	95
A‟ level	7	13	20
Tertiary	1	1	2
Total	122	150	272

4.3 BENEFICIARIES OF COMMAND AGRICULTURE.

Among the respondents, 1% represents 3 commercial farmers which is 30% of all commercial farmers who received Command inputs, 4% represents 10 small scale farmers under Command Agriculture which is 20% of all small scale contracted famers around Mvurwi town. 14%

represents permanent workers, 59% casual workers and 22% of the respondents do not work for these farmers in Command Agriculture. This is shown on figure

4.5 below.



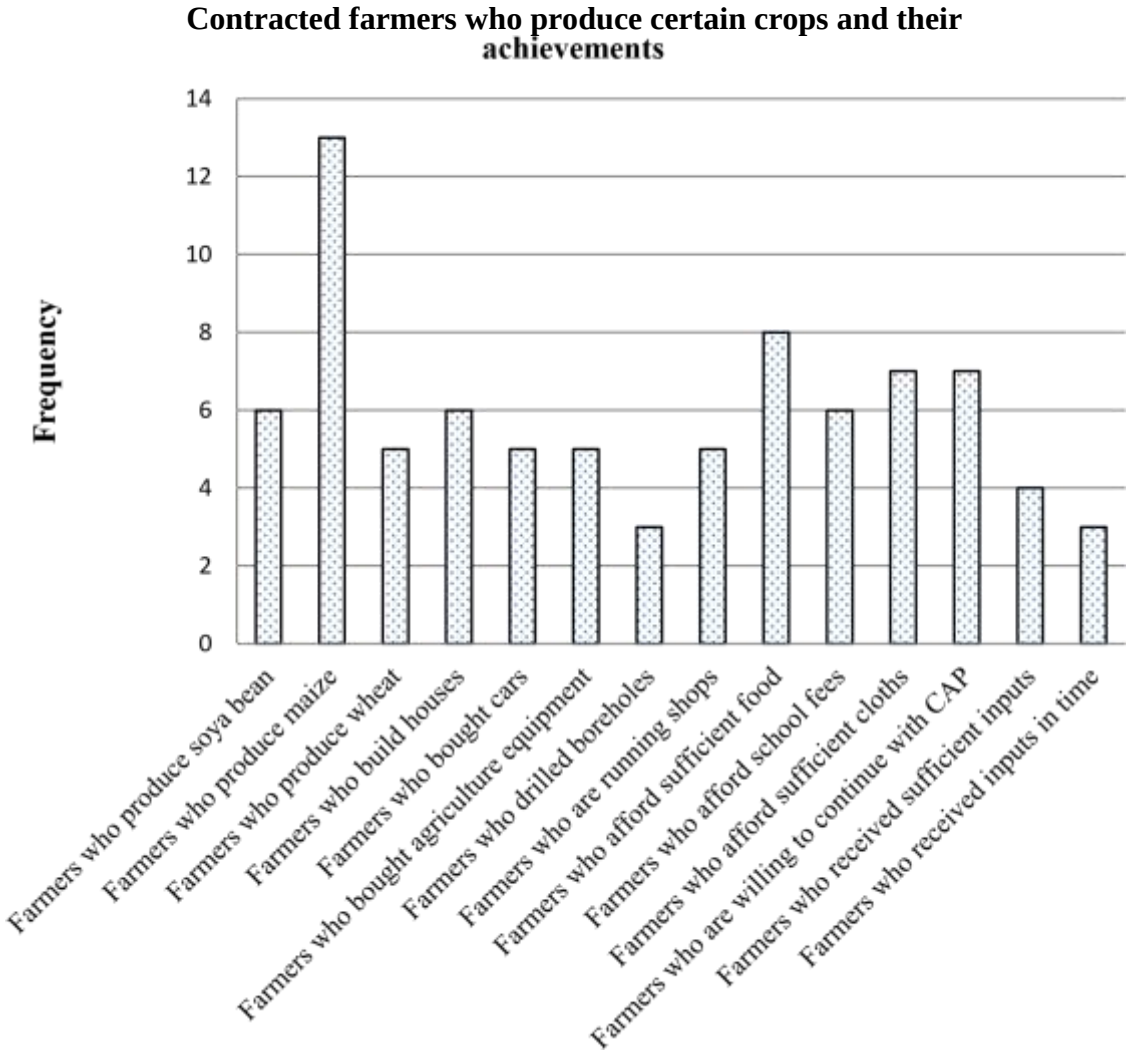
Source: Research questionnaires.

Figure 3: A summary of contracted farmers, respondents working and those not working for contracted farmers

4.4 ENTERPRISES UNDER COMMAND AGRICULTURE.

This research revealed that Command Agriculture in ward 26 is based on crop production and crops grown are maize, wheat and soya beans. According to Mazwi, Chemura, Mudimu and Chambati (2019), the introduction of the state-led TCAP program has aimed to cover the shortfall in the financing of production of cereal crops. Small scale farmers cultivate a minimum of 1.6 hectares and a maximum of 3 hectares of land commercial farmers cultivate a minimum of 75 hectares and a maximum of 100 hectares of maize. All 13 contracted farmers are in crop production, they all produce maize, 46.2% of them produce soya beans and 38.5 produce wheat. Among these farmers 61.5% is food secured, 53.8% afford cloths and 46.2% is able to pay school fees for the family. Concerning investment, 23% was able to drill boreholes, 38.5% is

running shops, 46.4% build houses, 38.5% bought agricultural equipment, 38.5% bought cars, 30.8% received inputs on time, 23.1% received sufficient inputs and 53.8% is willing to continue with Command Agriculture.



Source: Research questionnaire

Figure 4: illustrates the number of contracted farmers producing maize, wheat and soya beans and their achievements

4.5 BENEFITS OF COMMAND AGRICULTURE TO WORKERS

Some villagers are able to find casual and permanent work from contracted farmers. They work 6 hours on average per day and 15 days per month. The research revealed that $3 is a mean

daily wage or a bucket of maize. Contracted farmers are a source of maize in this community and one bucket is sold at $4 per bucket. This is portrayed on the table below.

Figure 5 Working hours, wage and the price of maize by contracted farmers to the local people

	minimum	**maximum**	**mean**
Working hours/day	4	8	6
Working days/month	10	20	15
Daily wage	$2.50	$3.50	$3
Maize price/bucket	$3	$5	$4

Source: research questionnaires

4.6 INPUTS DISTRIBUTED TO FARMERS AND THE MAIZE OUTPUT DELIVERED TO GMB.

Dispatched maize seed was 170 metric tonnes, 1640 metric tonnes of fertilisers and maize output of 3612.9 metric tonnes in 2018/2029. In 2019/2020, maize seed decreased to 165.175 metric tonnes, fertiliser was 1591 metric tonnes and output fell to 3016.21 metric tonnes. In 2020/2021 season, both maize seed and fertiliser increase to 167.45 and 4555.4 respectively but out decreased to 1753.407 metric tonnes. Maize seed and fertiliser decreased to 102.25 and 2394.05 metric tonnes but maize output increased to 2190.099 metric tonnes.

Figure 6 illustrates metric tonnes of inputs and maize output under Command Agriculture from 2018/2019-2021/2022 seasons

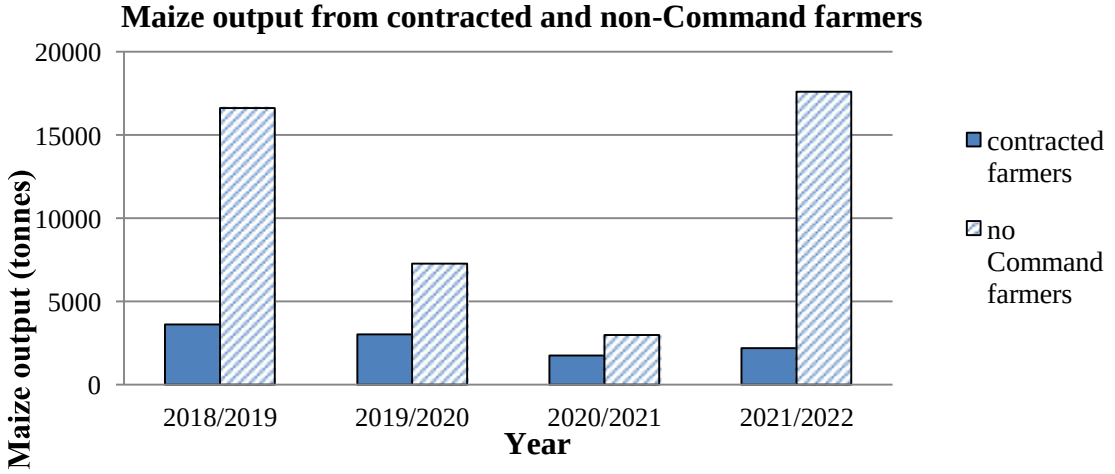
Seasons	**Maize output(met)**	**Maize seed(met)**	**Fertilisers(met)**
2018/2019	3612.9	170	1640
2019/2020	3016.21	165.175	1591
2020/2021	1753.407	167.45	4555.4
2021/2022	2190.099	102.25	2394.05

Source: Mvurwi GMB database (2023).

4.7 COMPARISONS OF MAIZE BETWEEN CONTRACTED FARMERS AND NONCOMMAND FARMERS.

In 2018/2019 season, maize output of contracted farmers and non-Command farmers was 3612.902 and 16603.816 metric tonnes respectively with a 78.2 percentage difference. In

2019/2020 season, contracted farmers‟ output decreased to 3016.214 metric tonnes and that of no Command farmers fell sharply to 7269.224 metric tonnes showing a 58.5 percentage difference. Moreover, maize output from contracted farmers and non-Command farmers was 1753.407 and 2976.764 metric tonnes with a 41 percentage difference and finally, 2021/2022 season output from contracted farmers increased to 2190.099 and non-Command farmers‟ output increased drastically to 17581.483 metric tonnes with a percentage difference of 87.5.



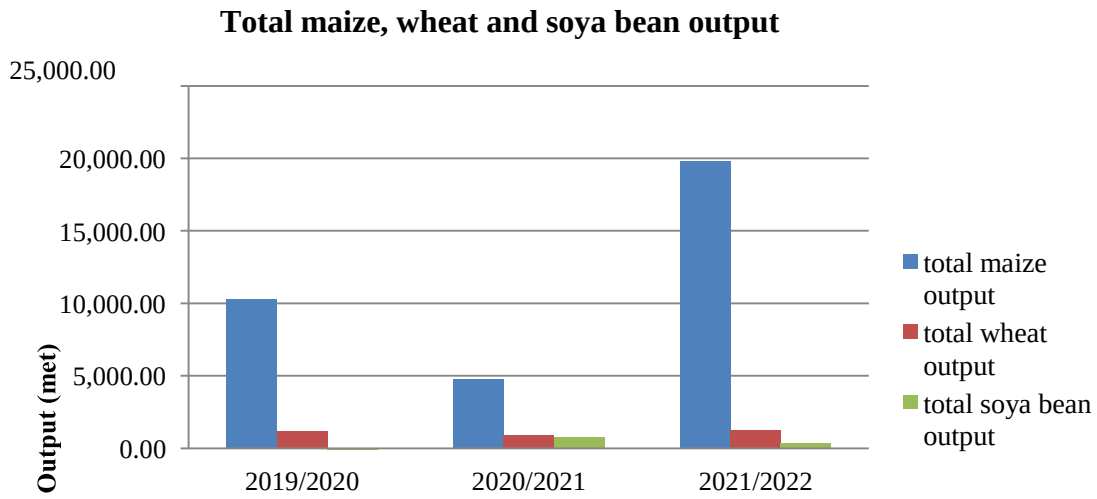
Source: Mvurwi GMB deport database (2023).

Figure 5: Maize output from contracted and non-Command farmers in metric tonnes

4.8 CONTRIBUTION OF COMMAND AGRICULTURE TO FOOD SECURITY.

The total output of maize, wheat and soya beans obtained by summing up corresponding output quantities from Command and non-Command farmers in respective seasons except of 2019/2020 season in which no soya bean was produced by contracted farmers. Command agriculture contribution to total maize output in 2019/2020, 2020/2021 and 2022 was 29.3%,

37% and 11% respectively. Contribution to wheat in 2019/2020, 2020/2021 and 2021/2022 was 37.2%, 80% and 53% respectively. However, CAP contributed nothing to soya bean output in 2019/2020 seasons, 0.004% in 2020/2021 and 23.8% in 2021/2022. This is presented on figure 4.8 below.



Source: (Mvurwi GMB, 2023).

Figure 6: Total output of maize, wheat and soya beans from 2019/2020-2021/2022

4.9 FACTORS IMPEDING THE SUCCESS OF COMMAND AGRICULTURE PROGRAM.

4.9.1 Late supply of inputs.

Late input distribution by the government severely affected all contracted farmers who reported late receipt of inputs (Chambati et al, 2019). Late input delivery affects productivity in the sense that farmers can't begin planting when they need to, leading to a delay in the harvest. This can mean that their crops are not ready in time for the next cropping season, forcing them to store the inputs for longer and leading to higher costs. Furthermore, due to the delay, farmers may not be able to repay their loans in a timely manner, leading to defaulting on the loan and potential withdrawal from the contract scheme.

4.9.2 Low maize price at GMB.

According to Zimbabwe Democracy Institute Report (2020), unfavourable price results in side marketing, thus CAP contracted farmers selling their produce to other markets not GMB.

This is seen on payment defaults and decreasing output deliveries.

4.9.3 Misuse of inputs.

Misuse of agricultural inputs is a contributing factor to a negative relationship between fertiliser and maize output. Large quantities of dispatched fertilisers are being used for nonfarm activities.

4.9.4 Water scarcity.

It is high in small scale farmers who don‟t have irrigation equipment and so rely on rainfall of which they are not able to predictable and control its distribution. Commercial farmers have infrastructure and access to irrigation (Chambati et al, 2019).

4.10 MITIGATION MEASURES.

4.10.1 Late input supply

The government and private sector partners involved in the program should ensure timely delivery of inputs to farmers. This can be achieved through efficient logistics and distribution systems, including pre-positioning of inputs in strategic locations to reduce transportation time and costs. Mazwi, Chambati, & Mutodi, (2018) posits that the full realization of maximum yields is impinged by sufficiency and the supply of inputs on time.

4.10.2 Misuse of agriculture inputs

Farmers should be trained on the proper use and handling of inputs such as fertilizers, herbicides, and pesticides. This can be done through extension services, farmer field schools,

and other forms of training and education. Monitoring and enforcement of input use regulations can also help to reduce misuse.

4.10.3 Poor crop management

Farmers should receive training on good agronomic practices, including crop rotation, soil conservation, weed and pest management, and irrigation. Access to improved seeds and other inputs can also help to improve crop management and productivity.

4.10.4 Water scarcity

The program should prioritize the use of water-efficient irrigation technologies, such as drip irrigation, and encourage the adoption of water harvesting and conservation practices. Water storage facilities such as dams and boreholes can also be constructed to increase water availability during dry periods.

A holistic approach that combines training, education, monitoring, and enforcement can help to mitigate the challenges associated with the Command Agriculture Program in Zimbabwe. Additionally, there should be a focus on promoting sustainable agricultural practices that prioritize long-term productivity and resilience, rather than short-term gains. This can include measures such as soil conservation, agroforestry, and integrated pest management. Furthermore, there should be efforts to improve market access and provide adequate support services to farmers, such as credit facilities and extension services, to ensure their success.

4.11 DISCUSSION OF THE FINDINGS.

An 81.4% total response rate on table 1 was obtained and considered a better figure for inferential statistics. 272 out of 334 administered questionnaires were returned (Author‟s Research questionnaire, 2023). This response rate is assumed to be attributed to the education level of this community illustrated on table 3 which facilitated the respondents‟ understanding of the significance of the research and their participation in the project. Among the respondents, 59% are casual workers, 14% are permanent workers and 22% do not work for the contracted

farmers as illustrated on chart 2. Casual workers are seasonally employed by small scale contracted farmers needing more labour as compared to commercial farmers who employ few permanent workers, thus, require less labour due to the use of more farm machines (tractors, planters, boom sprayers and combine harvesters) and herbicides.

Casual workers spend an average of 6 hours at work per day and working days are not fixed, they are determined by work availability and the willingness of the farmers to hire them. This concords with the Agriculture Journal (2017) which posits that Command Agriculture is an import substitution-led industrialization concept meant to empower local producers of cereal crops and in the process boosting capacity for locals and creating employment for thousands of people in the Table 6 illustrates a mean of 15 days per month and a reward of $3 per day summing up to $45. Permanent workers constitute farm guards, pivot operators and drivers who earn $70 on average per month. It tallies with the minimum wage rate set by the government (Dzwowa, 2023). Contracted farmers store some of their maize output which they sell to community members at an average of $3 after harvesting and $5 during summer, prices said to be lower than respective prevailing market prices. Sometimes workers are rewarded with maize, 1 bucket per day. This is based on that farmers are familiar with their employees and they seek to maintain good relations with community members. This corresponds to the findings of (Chemura, Chambati and Mazwi, 2018) who posits that some farmers reserve some maize to pay wage workers and for food consumption. 40% of the respondents confirmed that farmers in Command Agriculture obey societal institutions but they pointed out that the excessive use of chemicals in Command Agriculture may be detrimental to the environment. According to the research findings, 33% of them are willing to join this program in order to receive inputs and extension services, therefore, improving food security and standards of living.

Command Agriculture initially targeted commercial farmers who had a strong capital base to practice farming on large scales and a capability of repaying loans on time. Nonetheless, there was a need to finance small scale farmers who are the majority of Zimbabweans and so CAP started to contract them. According to the extension officer of ward 26 and research results, there are 3 commercial farmers in this ward and an average of 10 small scale farmers. Statistics from Mvurwi GMB data base (2023) illustrates a total of 10 commercial farmers and 50 small scale farmers who received dispatched inputs and delivered their output to this depot. All of them produce maize because they are obliged to do so, few produce wheat. It is grown in winter and so requires irrigation equipment but most small scale farmers don‟t afford. These farmers

are food secure since they produce grains including maize which is a staple a food. They afford basic commodities and also able to make some personal investments such as house building, purchasing cars, agricultural equipment, running shops and drilling boreholes which are helpful to the society. This concurs with (Chemura, Chambati and Mazwi, 2018) some contracted farmers consider themselves food secure and are planning to extend their homestead.

4.11.1 Maize seed, fertiliser dispatched to farmers and maize output delivered to GMB.

The actual yield of maize was far less than the expected one since the introduction of Command Agriculture Program. According to an interview with the GMB clerical, 5 metric tonnes of maize were expected from 0.025 metric tonnes of maize seed and 0.8 metric tonnes of fertiliser applied on a hector of land holding other factors constant. This concords with the work of Chambati et al (2019) which posits that the CAP is obliged to render seeds, fertilisers, pesticides, herbicides and extension advice, while 5 tonnes per hectare are expected from the farmer. Using 0, 8 metric tonnes of fertiliser, the mean of expected output is 10 221.7 metric tonnes, however, the mean of actual output is 2 545.3. Using 0.025 metric tonnes of maize seed, the mean of expected maize output is 30 221.25 but the mean of the actual output is 2 545.3. This illustrates resource wastage.

4.11.2 Contribution of CAP to food security.

Maize output was not tallying with the distributed maize seeds and fertilisers (Mvurwi GMB, 2023). However, there was an increase in total output of the products delivered to Mvurwi GMB depot by contracted and non-Command farmers since 2019. An increase in maize output percentage contribution of CAP on total output from 29.3% in 2019/2020 to 37% in 2020/2021 season did not result from increased productivity of contracted farmers. It was due to an acute decrease of maize output from non-Command farmers. In 2021/2022 season the output from Command and non-Command farmers increased but the contribution of contracted farmers fell to 11% because the output from non-Command increased many folds as compared to that of CAP. According to Chambati et al (2012), A2 farmers cultivate large pieces of land even if they do not have enough management hence low productivity. A significant contribution of Command Agriculture Programme to food security is noticed on total wheat output, very high

percentage output in 2020/2021 season. However, soya bean output figures depict a meagre CAP contribution to wheat output. Command agriculture beneficiaries and those who are food secure are very few. It cannot resuscitate the bread basket. According to Duve (2020), efforts directed at complementing Command Agriculture Program on agricultural training, mechanization of agriculture and adaptability to climate change notwithstanding policies that promote macroeconomic resilience helps to develop sustainable food security and self-sufficiency.

A falling trend line of maize output since the introduction of this agricultural financial scheme illustrates inefficiency of the policy in resuscitating agriculture in this settlement which was once productive. It may be sufficient enough to suggest that farmers who ventured in Command farming were lured by an opportunity of allocating fertilisers to uses other than maize production. In 2019/2020 season Command Agriculture were contracted under Agro Yield, CBZ Holdings as a means of choosing eligible farmers (CBZ Holdings, 2023).

However, the maize output fell acutely in following year and increased in 2021/2022 season.

SUMMARY

To sum up, this chapter analyse and display collected data and the respective processed information in various pictorial forms ideal for a better interpretation and discussion, therefore, shading more light on the effects of Command Agriculture on food security in ward 26, Mvurwi and its surroundings.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 INTRODUCTION.

This chapter sums up the aim and purpose of the research and all the findings integral to the study. It also presents opinions reached after a deep consideration of the effects of Command Agriculture Programme on food security in ward 26. Recommendations seal the chapter.

5.1 SUMMARY OF THE STUDY

The study was aimed at assessing the effects of Command Agriculture Programme on food security in ward 26 Mvurwi, Mazowe district from 2018/2019 to 2021/2022.

The purpose of the study was:

-To identify the beneficiaries of CA programme and crops grown under Command Agriculture.

-To assess whether the distributed inputs tallies with output in respective seasons.

-To compare maize output between contracted and non-Command farmers.

-To determine the effects of Command Agriculture on the welfare of the community.

-To identify bottlenecks and challenges in the project and possible mitigation measures.

Desk research and interviews with GMB clericals provided information on the number of Command contracted small scale and commercial farmers who received dispatched inputs who were 10 commercial and 50 small scale farmers (Mvurwi GMB, 2023). 30% of these commercial farmers and 20% of small scale farmers were in ward 26. Commercial farmers are fewer than small scale farmers. This can be attributed to the fact that only the few have farm equipment and capacity to operate on large scale farming. They have collateral security and they are eligible for big loans.

Primary research data revealed that people of ward 26 who were casual workers to Command contracted farmers were 144, permanent workers were 46 and the respondents who don‟t work for the contracted farmers were 82. These are 272 people who responded to 334 administered questionnaires tallying with a sample size determined using the Slovin‟s formula (Slovin, 1960), given a population of 2017 household heads. Casual workers‟ percentage was high. They can be employed by small scale farmers who need more labour than commercial farmers using more chemicals and machines; they just need few permanent farm guards, drivers and pivot operators.

Concerning inputs (seed and fertilisers) distributed to farmers and maize output under CAP, distributed seed and fertiliser quantities were increasing whilst maize output was decreasing except of 2021/2022 in which maize seed and fertiliser decreased whilst the maize increased (Mvurwi GMB, 2023). The use of fertilisers on non-farm activities, inadequate and late input supply, side marketing of maize output, weather aberration and poor crop management is linked to poor output that do not tally with dispatched seed and fertilisers inputs concurring with the findings of Mazwi, Chemura, Mudimu and Chambati (2019). This shows inefficiency in utilisation of scarce resources that need our attention.

The maize output trend was falling since 2018/2019 season with lowest output in 2020/2021 which was below the trend line. However, it increased to a point above the trend line in the following season. A comparison of, wheat soya bean and maize between contracted and nonCommand farmers revealed that non-Command farmers delivered more products as compared to CAP farmers. Nonetheless, Command Agriculture farmers contributed something to total output of wheat, maize and 3,7 metric tonnes of soya bean total output of soya in 2019/2020 seasons which increased in the following seasons. A better performance was in wheat production attributed to the use of irrigation equipment by commercial farmers.

This was a small contribution to food security but half a loaf is better than none.

The existence of CAP created casual work to some community members who work an average of 15 days per month and receive a daily wage of $3.50 and few permanent workers who receive

nearly $70. These wages and salaries are little but they help people to meet some financial needs such as food and clothes. Contracted farmers are a source of maize. They sell one bucket at $3.5 and $5 in winter and summer respectively. This one bucket of maize can also be used as a form of payment equivalent to a daily wage of $3.50. Contracted farmers unite with others in road maintenance for a better transportation of inputs from and output to the market. A number of opened tuck shops improved the accessibility of groceries and other products in ward 26. There is a difference between the period before and after the introduction of Command and 30% of the respondents is willing to join Command Agriculture when there is an opportunity.

Poor performance of Command Agriculture Programme can be attributed to, among other factors: late supply of inputs - late input distribution by the government severely affected all contracted farmers who reported late receipt of inputs (Chambati et al, 2019); misuse of resource - large quantities of dispatched fertilisers are being used for non-farm activities resulting in decreasing output; low maize price at GMB led to side marketing resulting in few deliveries and deliberate payments defaults; water scarcity among small scale farmers makes them prone vagaries of weather and ultimately poor output.

5.2 CONCLUSIONS.

From the findings of the study, the researcher reached the following determination:

5.2.1. Command contracted farmers are very few to achieve a sustainable food security and a better contribution to national output.

5.2.2. There is inefficiency in fertiliser allocation and utilisation hence not tallying with the maize output since the introduction of CAP.

5.2.3. Contracted farmers performed poorly and this unproductivity was given a room to increase since the introduction of the programme so to say that there was insufficient management.

5.2.4. Despite the inefficiency in CAP, it provides casual work to people residing close to contracted farmers which enable them to get food and some necessities.

5.2.5. Some contracted farmers contribute to common good when they unite with other community members in road maintenance. In addition, small entrepreneur businesses started by these contracted farmers improved the accessibility of goods in the community.

5.2.6. All in all, the contribution of Command Agriculture to total output of maize, wheat and soya bean increased in respective years, even though it was a small percentage contribution to food security. If the programme is implemented well nation-wide a bread basket is revived.

5.3 RECOMMENDATIONS.

5.3.1. The nation is recommended not to take these agricultural financial aids for granted. They are meant to revive the Agriculture sector which is a source of the livelihood of the majority of Zimbabwe.

5.3.2 All stakeholders in Command Agriculture should be of one accord.

5.3.3. Early supply of inputs can promote timeous planting and the use of hybrid seed.

5.3.4. GMB maize price should be corresponding with input costs and regional prices so that contracted farmers can be able to pay their loans and left with a profit, therefore, reducing side-marketing.

5.3.5. It is suggested that Agro yield extend equipment loans to small scale farmers and make close monitoring and follow up through the extension officers.

5.3.6. Agricultural economists and the sect of the wise should be given enough room to participate in this state-led agricultural financial scheme.

5.3.6 Last but not least, a culture of transparency is recommended to all participants in Command Agriculture Program

REFERENCES

Agriculture Journal (2017) Demystifying Command Agriculture https://www.herald.co.zw/demystifying-command-agriculture/. Accessed on 25/05/23

Agricultural Policy Research in Africa (2019) Building Livelihoods: Young People and Agricultural Commercialisation in Africa: Zimbabwe Country Study.

https://www.future-agricultures.org/publications/working-papers document/buildinglivelihoods-young-people-and-agricultural-commercialisation-in-africa-zimbabwe-countrystudy/

Accessed on25/05/25

Agricultural Policy Research in Africa (2019) Building Livelihoods: Young People and Agricultural Commercialisation in Africa: Zimbabwe Country Study. https://core.ac.uk/download/pdf/237087133.pdf

Accessed on 05/02/23

CBZ Holdings. (2023) Contract Farming https://www.cbz.co.zw/agro-business/contract-farming/

Accessed on 24/04/23

Chambati, W., Mazwi, F. and Chemura, A. (2019) Political Economy of Command Agriculture in Zimbabwe: A State-led Contract Farming Model

Chemura, A., Chambati, W. and Mazwi, F. (2018) State-led contract farming in maize production and farmers‟ lived experiences: The case of maize input support program for import substitution in Zimbabwe Harare: ZinLAN http://zilan.org.zw/downloads/Maize_Case_Stories_Final.pdf

Accessed on 28/05/23

Chigumira, E. (2018) Navigating Fast Track: From Bust to Boom in Mvurwi, Zimbabwe

https://www.future-agricultures.org/blog/navigating-fast-track-from-bust-to-boom-inmvurwi-zimbabwe/ Accessed on 22/12/22

Chinsinga, B. (2010) District Assemblies in a Fix: The Perils of Self-Seeking Tendencies in Decentralisation Policy Reforms in Malawi. Africa Development, 32(1) https://doi.org/10.4314/ad.v32i1.57161

Accessed on 25/05/23

Dube, L., M. (2020) Command Agriculture and Food Security: An interrogation of state Intervention in post Fast Track Land Redistribution Era in Zimbabwe https://www.academia.edu/45214091/_1_?email_work_card=view-paper

Accessed on 27/05/23

Dzwowa, C (2023) „Like slaves“: Zimbabwe farmworkers lash out at work conditions.

https://www.aljazeera.com/features/2023/2/21/in-zimbabwe-farm-labourers-decry-workingconditions#:~:text=Zimbabwe's%20agriculture%20sector%20remains%20the,(approximately %20%2470)%20per%20month Accessed on 24/04/23

“Growing Tobacco” (2012) https://web.archive.org/web/20030925222627/http://www.who.int/tobacco/en/atlas16.pdf

Accessed on 25/05/23

Fert Seed and Grain (2022) Local manufacturer and Distributor of all Fertilizers https://thedirectory.co.zw/company.cfm?companyid=4090 Accessed on 24/05/23

Holland, M. (2019) Dimensions of Discovery: Important Considerations for Protecting Human Research Participants

https://www.purdue.edu/research/dimensions/important-considerations-for-protectinghuman-researchparticipants/#:~:text=Confidentiality%20represents%20an%20agreement%20that,team%20u nless%20otherwise%20agreed%20upon. Accessed on 03/04/23

Kombo, D. & Tromp, D. (2006) Proposal and thesis writing: An introduction. Pauline‟s Publications Africa ISBN 9966-08-133-x

Mabhena, C. (2013) Command Agriculture: Local Knowledge and External Development Models in Rural Zimbabwe-The Case of the Makwe Irrigation Scheme.

https://www.academia.edu/63056598/Command_Agriculture_Local_Knowledge_and_External_Development_Models_in_Rural_Zimbabwe_The_Case_of_the_Makwe_Irrigation_Scheme?from_sitemaps=true&version=2

Accessed on 25/05/23

Mazwi, F., Chambati, W. and Mutodi, K. (2018) Contract farming arrangement and poorresourced farmers in Zimbabwe Harare. SMAIAS Publication. http://smaias%20policy%brief%20-%20tobacco%20contract%20farming%20arrangement_final/

Accessed on 28/05/23

Matondi, P. B. (2012) Zimbabwe‟s Fast Track Land Reform Program. London and New York: Zed Books

Mujere, N. (2021) Assessing the potential contribution of Pfumvudza towards climate smart agriculture in Zimbabwe: A review https://doi.org/10.20944/preprints202101.0619.v1

Accessed on 25/05/23

Murisa, T. (2011) Local farmer groups and collective action within fast track land reform in Zimbabwe. Journal of Peasant Studies, 38(5), 1145-1166.

Mvurwi GMB data base (2023) Command Agriculture Farmers, Inputs dispatched to Command farmers and output delivered to GMB by contacted and non-Command farmers. News Days (2021) Mvurwi farmer ups maize hectarage as wet season persists

https://www.newsday.co.zw/news/article/38552/mvurwi-farmer-ups-maize-hectarage-as-wetseason-persists Accessed on 22/05/23

Scoones, I. (2021) Medium-scale commercial farming in Zimbabwe: How has it fared since land reform?
https://www.cambridge.org/core/journals/journal-of-modern-africanstudies/article/mediumscale-commercial-agriculture-in-zimbabwe-the-experience-of-a2resettlement-farms/C43DEB37B2AA13EEF36BE243731D9EA3 Accessed on 25/05/23

Shonhe, T., Scoones, I. (2021) Private and State-led Contract farming in Zimbabwe: Accumulation, social differentiation and rural politics

https://www.researchgate.net/publication/357133117_Private_and_stateled_contract_farming_in_Zimbabwe_Accumulation_social_differentiation_and_rural_politic s Accessed on 21/02/23

Sinkole, D. (2022) Economic Governance Watch 02/2022 - Command Agriculture: The Debt Sinkhole https://www.veritaszim.net/node/5601 Accessed on 21/02/23

Slovin, E. (1960) Slovin‟s Formula for Sampling Technique.

https://prudencexd.weebly.com/ Accessed on 15/05/23

Statistics Solutions (2023) Complete Dissertation: Assumptions of Linear Regression.
https://www.statisticssolutions.com/free-resources/directory-of-statisticalanalyses/assumptions-of-linear-regression/ Accessed on 24/04/23

Stephanie, G. "Slovin‟s Formula: What is it and when do I use it?" From StatisticsHowTo.com: Elementary Statistics for the rest of us!

https://www.statisticshowto.com/probability-and-statistics/how-to-use-slovins-formula/

Accessed on 03/04/23

The Conversation (2017) "Land reform is a Zimbabwe success story – it will be the basis for economic recovery under Mnangagwa".

https://theconversation.com/land-reform-is-a-zimbabwe-success-story-it-will-be-the-basisfor-economic-recovery-under-mnangagwa-88205 Accessed on 25/05/23

The Economist Intelligence (2021) Zimbabwe: Zimbabwe launches land bank to improve access to credit https://country.eiu.com/article.aspx?articleid=781028461&Country=Zimbabwe&topic=Economy&subtopic=F_1 Accessed on 25/05/23

The Sentry (2022) Legal Tender: The Role of Sakunda and Reserve Bank of Zimbabwe in Command Agriculture.pdf https://thesentry.org/wp-content/uploads/2022/03/LegalTender-TheSentry.pdf

Accessed on 25/05/23

Veritas (2021) PAC Report: Command Agriculture Special Maize Programme SC 24 2021.pdf

https://www.veritaszim.net/sites/veritas_d/files/PAC%20Report%20-%20Command%20Agriculture%20Special%20Maize%20Programme%20SC%2024%202021.pdf Accessed on 25/05/23

Xinhua (2021) Zimbabwe launches land bank to drive agriculture growth.

http://www.xinhuanet.com/english/2021-05/01/c_139918056.htm

Accessed on 25/05/23

ZACH (2023) what is Slovin‟s Formula? (Definition & Example) https://www.statology.org/slovins-formula/ Accessed on 03/04/23

ZEPARU (2021) Agricultural free input support schemes, input usage, food insecurity and poverty in rural Zimbabwe

https://zepari.co.zw/sites/default/files/2022-03/Agricultural%20free%20input%20support%20schemes.pdf Accessed on 22/01/ 23

Zimbabwe Democracy Institute Report (2020) Command Agriculture: Post Mugabe Authoritarian Consolidation.

https://kubatana.net/wp-content/uploads/2020/01/ZDI-REPORT-FINAL-2020..pdf Accessed on 24/04/23

Zimstat (2022) Zimbabwe 2022 Population and Housing Census Report Volume 2. Population Distribution by District, Wards, Sex and Households.pdf

APPENDICES APPENDIX 1: QUESTIONNAIRE FOR COMMAND FARMERS, WORKERS AND NON-COMMAND HOUSEHOLDS.

My name is Milanzi David in part 4 (final year) student studying for a Bachelor of Science Honours‟ Degree in Agricultural Economics and management at Bindura University of Science Education. I am currently carrying out a research on the effects of Command Agriculture on food security. I have selected your ward and its members to freely respond to the following questions. The information you will provide is confidential, it will be used for academic purposes only. I greatly appreciate your cooperation.

Thank you.

A questionnaire for ward 26 households, Mvurwi

Questionnaire number……..

Enumerator‟s name……..

Respondent‟s name (code) …….

Demographic information

Tick in the boxes provided, yes/no or complete the spaces provided as appropriate.

Sex

Male	
Female	

Age

≤30years	
31-35	
36-40	
41-45	
>45	

Marital status

Single	
Married	
Widowed	

Education level

No formal education	
Primary	
Secondary	
Tertiary	

Beneficiaries of Command Agriculture

There is an agricultural financial scheme known as Command Agriculture to help farmers in Zimbabwe.

1. Do you know Command Agriculture Programme? YES/NO

2. Are you contracted by this programme? YES/NO

3. Tick the appropriate production scale:

Small scale farming	
Commercial farming	

4. How many hectares of maize did you cultivate?

…….....

5. What other crops are grown under Command Agriculture?
……..

6. Do you receive inputs on time? YES/NO

7. Are the inputs sufficient? YES/NO

8. Are the market prices favourable? YES/NO

9. Are there other enterprises under Command Agriculture? YES/NO

10. What are these enterprises?

……..

11. What investments you did since you joined Command Agriculture?

	YES	NO
Building houses		
Buying agricultural equipment		
Buying cars		
Drilling borehole		
Running shops		

10. Are you able to provide your families with enough:

	YES	NO

Food		
Cloths		
School fees		

11. What challenges do you face in Command farming?

……

……

12. Are you willing to continue with contract farming? YES/NO

13. If you are not in contract farming, do you work for the contracted farmers? YES/NO

14. If yes, is it a casual work or a permanent work?

……

15. If you do casual work, what tasks do you do?

.....

.....

16. How many hours do you work in these farms per day?

……..

17. How many days do you work per month?

……..

18. When do you receive your wages or salaries?

Just after completion of a given task	
On week-end	
On month-end	

After harvesting	

19. What is the minimum and maximum wage offered by farmers in Command Agriculture?

Minimum……, Maximum……..

Benefits from contracted farmers to the society

1. Do contracted farmers reserve some maize for selling to the community during seasons other than the harvesting time? YES/NO

2. If yes, what is the average price of one bucket of maize?

……..

3. Are the prices better or worse than those prevailing at the market or those offered by farmers not in this programme?

.....

.....

4. Are they able to assist when you meet problems like food shortage? YES/NO

5. Do you think that contracted farmers observe societal institutions and do farming in ways acceptable to community? YES/NO

6. Are there any differences between the period before and after the introduction of CAP? YES/NO

7. If yes, what are the differences?

.....

.....

8. If you are given an opportunity, are you interested in joining Command Agriculture Programme? YES/NO

THANK YOU.

APPENDIX 2: INTERVIEW GUIDE FOR THE GMB CLERICAL AND THE EXTENSION OFFICER OF WARD 26.

I‟m Milanzi David, a part 4 (final year) student studying for a Bachelor of Science Honours‟ Degree in Agricultural Economics and Management at Bindura University of Science Education. I am currently researching on the effects of Command Agriculture Program on food security. I kindly plead for your time to respond to the few questions I have prepared for my research. The information you will provide is confidential and shall be used for academic purposes only.

1. What is Command Agriculture?
2. When Command Agriculture was introduced?
3. Who are the beneficiaries of the beneficiaries of this program and how many are they?
4. What enterprises and crops are grown under Command Agriculture?
5. What quantities of seed and fertiliser are sufficient for a hectare of maize and how many tonnes of maize are expected from a hectare of land?
6. How many tonnes of seed and fertiliser were dispatched and maize delivered to GMB in each respective year since the introduction of CAP?
7. What do you think are the challenges impeding Command agriculture?
8. What should be done to enhance efficiency of the program?

THANK YOU.

APPENDIX 3: REQUISITION LETTER TO AGRITEX

Bindura University of science Education

Private Bag 1021

Bindura

AGRITEX Office, Mvurwi

Mvurwi

15 December 2022

Dear Sir/Madam

Ref: Request for permission to carry out a research project in ward 26.

May you kindly permit me to carry out a research project in ward 26 Mvurwi, district of Mazowe. I am studying for a Bachelors of Science Honours‟ Degree in Agriculture Economics and Management level. The research is based on assessing the effectiveness of Command Agriculture on food security. It will focus on: identifying the beneficiaries of Command agriculture, enterprises and crops grown under this program; comparing inputs and maize seed and also the output between contracted and non-Command farmers; identifying the contribution

of command agriculture to food security and its effects on the welfare of the community; finding out challenges, bottlenecks in CAP and possible solutions.

The data to be collect is needed just for academic reasons and confidentiality will be exercised. I really appreciate and expect for a positive response. Thank you.

Yours sincerely

Milanzi David

B1852795.

APPENDIX 4: INFORMED CONSENT FORM.

I am grateful for your consent to participate in this research project that will take place in ward 26. In this form, the description of your involvement and rights as a participant is outlined. The aim of this research is to assess the effectiveness of Command Agriculture on food security in your ward.

- I voluntarily agree to participate in a research project conducted by Milanzi David, who is an undergraduate student at Bindura University of Science Education.

- I understand that the study is entitled: an assessment on the effectiveness of Command Agriculture on food security in ward 26, Mazowe district.

- I understand that my personal details and the information I will provide shall be kept confidential.

- I am informed that there are no anticipated risks or no benefits to me.

- I understand that I have the right to withdraw from participating in the research at any time without possibility of a penalty.

- I understand that in the event that I have a question or require additional information regarding the research, I may freely contact the researcher Milanzi David at Manhenga township or contact him on +26377 425 3280.

Participant‟s signature……date……

Researcher‟s signature……date……...