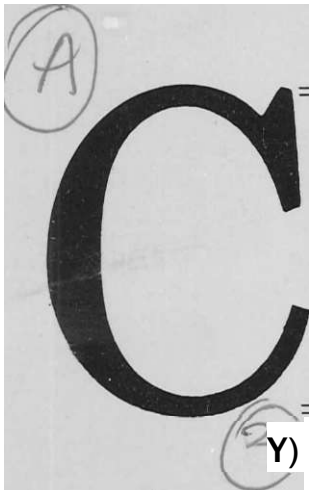

CONSULTANCY REPORTS

ZIMBABWE INSTITUTE OF DEVELOPMENT STUDIES

11

Feasibility Study for the MDU Central Warehouse and Its Market Potential at the Chinyudze Service Centre : 1987

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CONSULTANCY REPORT SERIES

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MARCH, 1988

by

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HARARE, 1989

P.O. Box 880
Harare, Zimbabwe

First printing 1989

The Consultancy Report was prepared by ZIDS for the Makoni District Union (OCCZIM) on contract. The views expressed here are those of the authors.

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ACKNOWLEDGEMENTS

The research team and ZIDS gratefully acknowledge the co-operation and assistance it received during this exercise. Our special thanks go particularly to Mr S Matsvai, the M.D.U. Management Consultant; Mr B Mutombwa and Mr J Mutaurwa, both students of U.Z.; Mr A Mugadza, M.D.U. Trainee Administrator; and Mr C Muropa, M.D.U. Support Personnel. Above all, we thank the resettlement farmers, the business community, Government officials and parastatal personnel, from the study area, for their patience during interviews and for the encouragement they gave us.

PREFACE

In 1986, ZIDS was contracted by HIVOS of Holland to carry out a comprehensive study of M.D.U. and its member co-operatives, the results of which were analysed in a seminar held at Tanhi Co-operative in December, 1986. It was at this seminar that, in view of the problems faced by the M.D.U. and its affiliates, a resolution calling on the M.D.U. "To organise central storage for inputs to ensure timely deliveries", was passed and adopted. What remained was to find ways and means of implementing this decision.

With this and other resolutions in mind, the M.D.U. and ZIDS organised planning Workshop for the M.D.U. co-operatives at Mukute Co-operative in July, 1987. One of the main objectives of this Workshop was,

> to identify concrete needs, actions and projects required by the M.D.U. and the means of their implementation, as basis for developing the M.D.U. Five-Year Development Plan, and to begin the reorganisation of the M.D.U.

To this end, a number of proposals of Income and Service projects, which included a warehouse, transport farm equipment, workshop/garage and a crop marketing scheme, were developed.

In October, 1987, the provincial and regional offices of the Ministry of Co-operative Development offered the M.D.U. land on which to build its headquarters and central operations depot. The M.D.O. swiftly grabbed the opportunity and immediately requested a feasibility study to guide their operations.

It was agreed by HIVOS and the M.D.U. to finance the exercise from the interim M.D.U. budget.

The ZIDS team then pooled together a variety of written materials, information and resources for the study and complemented these with a field survey. The results of this work which was undertaken during the months of December 1987 and January 1988, are reported here.

CHAPTER ONE

INTRODUCTION

Overview of the M.D.U.

The M.D.U. was formed as a district organ of OCCZIM in September, 1983. But, it was not until August this year, years later, that its operations were formally registered with the Ministry of Co-operatives. Before its registration, the M.D.U.'s operations and activities were sanctioned by the by-laws of the parent organisation, OCCZIM. Today, 14 co-operatives, mostly agricultural, are affiliated to the Union. This legal position of the M.D.U. made it possible to overcome a range of organisational and contractual constraints it had faced, including setting up a warehouse.

The M.D.U. lies to the east of Zimbabwe and to the south-east of Harare. Its headquarters are currently in Rusape, which is the district's administrative and main commercial centre. The provincial capital, Mutare, is to the south-east. The other main centres are Headlands and Nyazura. It is planned to move the M.D.U. Headquarters to Chinyudze near Headlands. The district is linked to Harare and Mutare by a major highway and by the Harare-Beira-via-Mutare railway line. In addition, the district has a network of other roads which include the Rusape-Nyanga road.

Makoni district generally lies in natural regions lib, III and IV, with a mean annual rainfall range of between 750-900 mm. The altitude is between 900-1, 700m, with annual temperatures which vary from 17,5%C to 20%C.

The economy is predominantly agricultural with a total population close to a quarter of a million people. This agricultural economy is organised into 5 sub sectors, which are: the communal areas (of which there are five), individual type resettlement schemes, collective co-operatives, small scale and large scale farms. The majority of the collective co-operatives are affiliated to the M.D.U. and they have been the subject of our study over the past two years.

M.D.U. Projects and their Environment

The M.D.U. has planned five income and service projects. These projects are:

- warehouse project,
- transport project,
- workrkshop/garage project,
- crop marketing scheme projects and 5) farm equipment project.

Although these are separate identifiable projects, it is necessary to view them in a broader sense as one whole unit. As shall be seen in our analysis, these projects actually feed into each other.

The M.D.U. warehouse is situated at Chinyudze, the largest of the eight rural service centres in Chinyika resettlement scheme.

This service centre lies about 20k to the east of Headlands, from which it is accessible by a gravel road, through to Nyati Mine, which is about 10km further east. Headlands, which

was the original choice for the M.D.U. headquarters, (because of its centrality, railway sidinq and major road which passes through it), is thus close to offer Chinyudze the advantages of transport modality.

Chinyudze itself lies on high ground in an area whose general terrain is undulating, well drained and with fairly rich soil, lending itself basically to agricultural activities with at least 4,000 ha of arable land.

A number of developments have already taken shape at the centre, including an almost complete Government housing project, a clinic, a shopping complex, a C.M.E.D. workshop, a primary and secondary school and a G.M.B. depot. Government AFC offices and a community hall are nearing completion. There is also a nearby dam and a borehole from which the centre gets its domestic supply of piped water. In addition, the centre is also connected to ZESA grid and telephone lines.

About 14 villages of an average of size of about 40 households are supposed to be served by this centre. These villages are scattered over a large area surrounding the centre.

Warehouse Project Objectives

The objectives of the project are framed in the general broader context of furthering the development of co-operatives affiliated to the M.D.U. through the provision of central storage facilities for inputs, produce and to effect efficient delivery systems.

In this context, the stated specific aims of the project, therefore, are:

- To ensure that inputs are delivered to co-operatives in good time.
- Bulk purchasing to reduce the price.
- To minimise problems of shortages by buying in advance.
- Food security function.
- Central availability of inputs.
- Reduction of transport costs.
- Reduction of post-harvest losses storage centre (for perishables).
- Generation of funds for the M.D.U.

While the main beneficiaries of this facility will be M.D.U. co-operatives, the local population including the business community will also benefit from its services.

Study Objectives

This study sought to evaluate the viability of the Chinyudze venture and to advise the M.D.U. on this investments decision. The specific study aims were:

- To ensure the nature and extent of the economic activities of the target market, so as to assess the viability and levels of the markets' potential buying power.
- To identify and establish the product range that would provide a viable market and also to establish the innovated dent and levels.
- To assess whether the M.D.U. is capable of satisfying the identified markets and its own needs.
- To assess the nature and extent of possibilities in market expansion and capacity utilisation of the warehouse.
- To provide insights into the management, financial and otherwise, of the warehouse.
- To address any other issues relevant to the study.

- To provide, on the basis of the above, an objective basis on which the M.D.U. could make an investment decision.

Study Approach and Method

The study was organised in two phases: The first deals with collecting information relating particularly to the M.D.U. collectives, as the primary users of this facility, whilst the second phase was directed at the local community around the warehouse as complementary users.

The local community was divided into business community and the local farmers.

The following methods were used in the study:

- A review of literature on market surveys, and the ZIDS/M.D.U. studies, including individual co-operative reports, the Tanhi and Mukute documents, and the analysis of data tables from the co-operative study tables from the co-operative study reports.
- Collection of information relating to the area around the centre, including its population, geography, soils and potential.
- Instructed verbal interviews with representatives of government ministries and other organisations operating in the area.
- Physical inspection of the warehouse and its surroundings.
- Questionnaire interviews of the households and business community serviced by the centre.

Study Approach

A total of 14 villages come under the administration of Chinyudze resettlement office. These are villages 14-25 and 50-51. These initial formed our population until it was found that although villages 14-16, 18,50 and 51 were under the Chinyudze office, they were nearer Headlands and logically, they were serviced there.

It also came to light that villages 40 (a), 41 and 53 were nearer Chinyudze than any other centres, and for the purposes of the warehouse market, came under the preview of Chinyudze office. Thus, ultimately our population was comprised of villages 17-25,40 (a), 41 and 53, a total of 12 villages with a total household population of 422.

A random sample of 174 households was drawn from 11 villages of the total population as shown in Table 1.

Table 1
THE POPULATION STUDY

VILLAGE NO.	NUMBER OF HOUSEHOLD	SAMPLE NO.	PERCENTAGE
17	73	26	35
19	66	11	16
20	22	3	13
21	44	14	32
22	30	14	46
23	54	27	50
24	18	9	50
25	47	40	85
40	30	13	43
41	18	10	56
53	20	7	35
11	442	174	41

Source: Ministry of Local Government, 1987. *Field Suwey,* 1987.
Notes: An average, the study population consisted of 41% of the population in the study area villages.

Study Constraints

The research encountered a range of problems including time limitations, inadequate transportation, inadequate funds, and at times rough weather conditions. This foiled our desire to cover a sample target of 50% of the population.

Another limitation was the time of the survey. Since the households were engaged in ploughing their fields, much time was spent walking long distances between homesteads and fields.

As is usual with surveys in Communal Areas, the data obtained should be treated with caution due to the following tendencies:

- Some households tend to provide answers which are congruent to officially recommended practices.
- Households conceal information on credit due to fears of official harassment.
- Some households understand the value of their previous year's output as well as their expectations for the coming season, believing that the information we obtained was for drought relief purposes.
- In some cases, the households could not clearly indicate how much land they used. It was also unclear as to whether they had an idea of the size of an acre, a hectare, or both.
- Seed varieties and quantities utilised, particularly those of sunflower and groundnuts were not easily obtainable because households tended to use seed from previous year's output.
- Output estimates for this forthcoming season could not be easily arrived at, because of the drought background and the uncertainty of the current whether.
- Information from the local proprietors was also difficult to get as they regarded the whole project as an attempt to force them out of business through competition.

Report Layout

In the following sections we present the study findings. These are presented in terms of the three groups of warehouse clients, namely: the co-operatives, the business community and the community in general.

CHAPTER TWO

COLLECTIVE CO-OPERATIVES MARKET SEGMENT

The market assessment aims at identifying the range of products and their specific volumes which could form the bulk of the stock for warehouse if it becomes operation. It should be noted that the figures presented **are** purely estimates which should be treated as indicative during the operationalisation process.

The 15 co-operatives affiliated to the M.D.U. are expected to constitute the largest market segment of the warehouse. Thirteen of these co-operatives are agricultural farm whilst one is industrial and the other commercial. Table 2 provides a broad statistical picture of these co-operatives.

Table 2
CO-OPERATIVES AFFILIATED TO THE M.D.U.

Sector Co-ops	No. of Co-ops	Total Membership (approximately)	Gross Area (ha)	Average Area (ha)
Agricultural	13	**454**	188	1,454
Industrial	1	**7**	.	.
Commercial	1	9	.	.
Total	**15**	**470**	18,887	1,454

Source: *M.D.U Main Report, 1987*

The Table shows that there is a sizeable amount of resources, both human and physical with a total membership of 470 and total land area of 18,887 ha. Each farm is about 1,454 ha on average.

Of the total area, about 38% is potentially arable whilst total membership currently stands at well below the recommended levels. (See main report).

Land Parcelisation and Crop Production

Of the potentially arable land 1,454 ha, currently only about 480 ha are under annual crops. This figures represent about 10% and 6% of total arable land for the 1986/87 and 87/88 seasons, respectively (See main report). The decrease in the area under crops can be partly explained by the following; foremost, is the lack of cash/credit facilities to enable them to buy sufficient inputs. Secondly, there is a serious mechanisation problem to enable them to put more land to use. Thirdly, the recent drought experience has tended to make them more sensitive to losses, that is, they are now more risk averse. (For details see report).

In terms of production, maize, groundnuts, beans, sunflower, potatoes, cotton, rapoko, peas and fruits are the crops grown in these farms. Our research found that maize occupied at least 60% of the cropped area in the previous season. This percentage has, however,

decreased just above 50% (see main report for more details). In fact, maize is the only crop grown by all the co-operatives.

The rest of the area was put under the other crops in the following proportions, with 1987/88 figures in brackets; sugar beans 2% (17%); potatoes 1% (-%); cotton -% (1); rapoko -% (-%) peas 1% (-%); other -% (-%).

This data indicates that with time, the potential co-operative cropped land is well over 2 00 hectares, which provides a sizeable base for a variety of inputs, equipment, spares and general materials which could be stored in the Chinyudze warehouse. The different crop regimes indicate the kinds of inputs that would be required.

Specific Inputs Requirements

The M.D.U. co-operatives use a range of inputs in different quantities in their farming operations. These inputs can be classified into three groups, namely; seed, fertilizer and chemicals. The diversity and volume of these inputs are presented and discussed below:

Overall, Table 3 shows that a total of about 27t of seed and 270t of the fertiliser were used in the previous season for all crops combined, whilst in the 1987/88 season, 16t of seed and 176t of fertiliser were used. This suggest that seed quantity dropped 41% from 1986/87 season whilst the volume of fertiliser dropped by 35%.

Table 3
INPUT UTILISATION

	SEED (Kg)			FERTILISER (Kg)						
				Compounds		Straights		Totals		
Input/Crop	1986/87	1987/88	%	1986/87	1987/88	1986/87	1987/88	1986/87	1987/88	%
Maize	17 000	6 390	-63	114 150	69 650	117 300	50 600	231 450	120 250	-48
	(63%)	(40%)		(77%)	(63%)	(97%)	(77%)	(86%)	(68%)	
Other Crops	10 090	9 668	-4	34 700	40 850	4 200	14 775	38 900	55 625	+ 43
	(37%)	(60%)		(23%)	(37%)	(3%)	(23%)	(14%)	(32%)	
Total		16 058		(55%)	(63%)	(45%)	(37%)	270 350	175 075	-35
	27190		-41	148 850	110 500	121 500	65 375			

Source: *M.D. U. Main Report*

NOTES
1) Bracketed figures below the main figures are column percentages.
2) Bracketed figures above the main figures are now percentages of total fertiliser.
3) Other crops include sugar beans, giants, soya beans, sunflower, potatoes, cotton, rapoko, peas and fruits for the 1986/87 season; whilst for the latter season they include the rest of these as well as tobacco, michigan beans and butter beans. Fruits have been excluded in the latter season.

This general decline in input use, excluding chemicals, is linked to the general decrease in the area put to crops, part of the reasons of which are explained above.

Seed

Total seed inputs were 9% of total inputs in 1986/87, going slightly down to 8% in the following season. Maize accounted for about 63% of this input and this figure went down to 40% in the respective seasons. This can be explained by the fact that there was a noticeable shift in the cropping patterns. This shift was a result of the new realism that maize is not profitable and is more prone to the ravages of the drought. The co-operatives are now using crop diversification to cushion themselves from the effects of the drought. A crop-by-crop analysis over the two seasons tells us that very early maturing crops and relative drought resistant crops such as sunflower, are gaining prominence in these farms.

Actually, maize seed requirements decreased by 63% whilst those of other crops decreased by a less than proportionate degree of 4%. In terms of varieties, for maize, R201 is the most popular, followed by R215. There is need to keep abreast of changes and to establish the exact requirements through the checking of orders made and the same applies for other crops.

On average, therefore, about 22 tonnes of various seeds could be stored at the warehouse, and given the scope for expanded cropping, a threshold of 50 tonnes is realisable with present resources.

Fertilisers

A total of 270t and 175t were used in the 1986/87 and 1987/88 seasons respectively, which is a decrease of 35%. This represents about 91% of total inputs, excluding chemicals, in the respective seasons. On average, therefore, based on the two seasons, about 223 are required.

Whilst compounds represented 55% of total fertilisers in 1986/87, it increased 15% to 64% in the latter season. On average, about 70% of these are compounds, all compound D, went into maize production over the two seasons. It is also interesting to note that the ratio of compound D to AN (straight) is round 1:1 for maize.

Diversification into other crops has brought with it a range of other compounds, L and J for fruits and potatoes.

Chemicals

Information on this, particularly that which relates to the quantities used and specific names could not be adequately assessed. Generally, there seems to be an increase in the use of chemicals as farmers realise the need to protect their crops and to reduce post-harvest losses. This has been facilitated by the ZIDS/R.S.S./M/D/U pesticides training programme and the increased role of Agritex services. With the involvement of agro-chemicals salesmen, a minimum threshold of 20 tonnes of chemicals is conceivable.

In conclusion, based on the quantities discussed and given the fact that the co-operatives have been able to purchase these quantities through cash or otherwise, there is great potential in this market segment. Moreover, this market is definitely there for tapping, as it is based on a problem defined by M.D.U. With well-developed extension services, a minimum inputs tonnage of 300 may reasonably be accounted for by the co-operatives, and this could well rise to over 500 tonnes over a three-year period. With such quantities and per unit mark-ups as well as reduced per unit transport costs. Those tonnages, however, are only part of the warehouse's potential capacity.

CHAPTER THREE

RESETTLEMENT FARMERS' MARKET SEGMENT

In this section we discuss first, farming system and inputs, etc., to derive goods demanded and second, the stated seeds or preferences of farmers in the resettlement scheme.

Agricultural Goods and Inputs Utilisation Requirements

Cropping Patterns

In order to assess the potential of the individual settlers' market segment, a market survey was conducted, in order to identify their major crops, hectares, input requirements, the input sources, modes of procurement, as well as to get an indication of the diversity and volume of other product requirements.

Maize, sunflower, beans and groundnuts are the major crops in this particular area. The Chinyudze G.M.B. depot ranked maize and sunflower highest in terms of quantity deliveries followed by rapoko, unshelled groundnuts, sorghum, soya beans and mhunga, in that order.

Table 4 that follows provides details of our findings whose main features are:

Table 4

AREA AND PRODUCTION ESTIMATES

	SEASON							
	1986-87					1987/88		
	AREA		OUTPUT (bags)			AREA hectares		
	Sample	Pop. Estimate	Sample	Pop. Estimate	Per Acre	Sample	Pop Estimate	Percent-age Change in area
Maize	741 (65%)	1853	3 421	8 553	12	672 (50%)	1680	-9
Beans	73 (5%)	183	89	223	3	112 (8%)	280	+ 53
Sunflower	197 (17%)	493	455	1113	6	466 (35%)	1 165	+ 137
Groundnuts	124 (11%)	310	182	455	2	100 (7%)	250	-19
TOTAL	1135	2 839	4137	10 344	23	1350	3 375	-19

Source: *Field Sun'ey, 1981*

Notes:
1. Based on sample data.
2. Area is in acres, whilst output is in 90 kg bags
3. Population estimates are proportionate projections of the sample.

- In terms of hectorage, maize and sunflower are the major crops occupying respectively 65% and 17% of total cropped area from the sample in 1986/87 season. Groundnuts and sugar beans are at the bottom of the scale in that order.
- The area put to maize registered a decrease of 9% between the 1986/87 and 1987/88 seasons respectively, whilst sunflower actually registered a 137% increase. Maize now occupies 50% of cropped land whilst sunflower covers 34%.

This change could be attributed to a number of factors including the shift in government policy and the ability of the crop to survive under drought conditions.

Groundnuts registered a decrease in area of 19%, dropping to the bottom of the rank, losing their third position to sugar beans which decreased its area by 53%. This shift in groundnuts production can probably be explained by its intensive labour requirements and demand for more technical skills to ensure high yields.

Although there was a noticeable shift in crop production, maize will undoubtedly assume the dominant position for some years to come. This is not unusual given that it is the staple food, whose production does not require specialised skills and whose demand for the inputs of labour and cash is not large. Overall, the area put to crops increased 19% and this trend is envisaged to continue with good rains as it is estimated that about 50% of the land allocated for crop production under the resettlement programme in this particular area is currently being utilised. From Table 4, the estimated population area put under crops was 2 839 (approx. 1136 ha) in 1986/87 season, rising to 3 375 acres (approx. 1350 ha) in 1987/88. This is against a total area allocated to crop production of close to 2 800 ha.

In terms of yields, based on our sample, maize achieved around 3 tonnes per hectare against a potential of 4-5 tonnes. This is bound to increase in the face of good weather patterns and with the extension activities programme currently going on in the area.

Thus, it is anticipated that the agricultural performance both of area and productivity will improve significantly, given the right policy and weather environment.

A shortage of packing materials was identified from our sample.

Input Utilisation

In order to arrive at estimates of potential demand for inputs, the survey inquired about the use of such inputs in agricultural activities. The Table below shows the diverse inputs and volumes used. The packing units, the sources of such inputs as well as the methods of payment are also discussed.

MAIZE

In the following, we concentrate our discussion on maize inputs, beginning with seed requirements.

Table 5
MAIZE INPUTS UTILISATION

	1986-1987 SEASON			1987-1988 SEASON		
Input	**Type**	**Survey Quantity (kg)**	**Pop. Quantity Estimate**	**Type**	**Quantity**	**Pop. Quantity Estimate**
Seed	*	**7 917**	**19 793**	*1	**6 836**	**17 090**
Fertiliser	**Com-**			**Com-**	**440**	**1 100**
	pound D	**569**	**1423**	**pound D**		
	AN	**689**	**1723**	**AN**	**631**	**1578**
Chemicals		**205**	**513**	**2	**144**	**360**
TOTALS		**9 380**	**23 452**		**8 051**	**20128**

Source: *Field Survey, 1987.*

Notes: **1) * See Table 6 below.**

2) **Could not be determined with certainty.

3. Population estimates are straight proportionate projections from 40% sample.

SEED MAIZE

From Table 5 it can be observed that seed maize requirements for the population were estimated at 19.7 tonnes in the 1986/87 season, dropping by about 14% to 17 tonnes in the 1987/88 season; as expected, given the cropped area decreases discussed before.

Table 6 below shows the range of seed varieties and the different units in which they are bought. It is clearly evident that R201 is the major variety. It registered more than 60% by frequency of mention in both seasons mainly due to its drought tolerance. R215 ranks second, being mentioned by 27% and 31% of the sample 1986/87 and 1987/88 seasons respectively. R52 and R14 are at the bottom of the list of preference in the former season, whilst they are joined by PNR547 and PNR549 in the latter season. R52 and R14 are high yielding, high rainfall and late maturing varieties. The PR range is still being tried out in many areas

As expected of the small land holdings, generally seed was bought in small 10kg units, instead of 20kg and 50kg units.

FERTILISERS

Only two types of fertilisers, namely Compound D and Ammonium Nitrate (AN) were applied in this crop. The total estimated population quantity requirements were found to be about 3,1 tonnes and 3 tonnes in the two respective seasons. On average, 43% of this quantity is Compound D, whilst the rest is AN.

TABLE 6
INPUT PACKAGING UNITS

	1986-1987 SEASON			1987-1988 SEASON					
	10 Kg unit	20 Kg unit	50 Kg unit	10 Kg unit		20 Kg unit	50 Kg unit		
	Frequency	Frequency	Frequency	Frequency		Frequency-	Frequency		
	(50%)	(25%)	(24%)	(54)		(19)	(28%)		
R201	117	60	56	233	107	37	56	200	
	(70%)	(72%)	(62%)	(68%)	(63%)	(56%)	(67%)	(63%)	
	(52%)	(19)	(29)	(50)		(23)	27		
R215	46	17	26	89	53	24	28	105	
	(27%)	(21)	(29)	(26)	(31)	(36%)	(33)	(33)	
	(13)	(40)	(47)	(50)		(50)			
R52	2	6	7	15	3	3		6	
	(1%)	(7)	(8)	(4)	(2)	(5)	(2)		
	(67)	(0)	(33)						
R14	2		1	3					
	(1%)		(1)	(1)					
PNR						(71)	(29)	7	
547						5	2	(2)	
						(3)	(3)	(2)	
PNR						(100)		1	
549						1		(0)	
						(1)			
	(49%)	(24)	(26)			(53)	(21)	(26)	
TOTAL	167	83	90	340		169	66	84 310	

Notes:
1. Figures in brackets below the main figures-are column percentages, whilst those above are row percentages.
2. All figures are based on the sample data.

The use of fertiliser in the area registered a decrease of approximately 15%, and is generally well below the average levels of fertiliser use in commercial farms. Again, with time, and as a result of expanded qualitative extension services, and fertiliser salesmanship, we could expect a large increase of fertiliser use, which eventually will provide business for the warehouse.

CHEMICALS

Whilst it was established that chemicals were used in certain instances, the specific names and quantities as well a units in which they were bought could not be established. However, the chemical known as "mushonga we rukonye" kept cropping up during the interviews and this was later learnt is the vernacular equivalent of chemical name Thiodan. This is an area which needs further investigation for the warehouse stocking decisions.

INPUTS PROCUREMENT

It was found that all the inputs were purchased in cash from distributors in Rusape. Furthermore, there were problems associated with the transportation of inputs, as individual farmers organised their own orders and transportation, at rates which are rather high per unit of inputs available to farmers in the region. This suggested the dire need for a collectively organised procurement facility. If there were such problems for a commonly grown crop such as maize, what more for other crops which were relatively new to the small farm systems.

Sugar Beans

SEED

Seed quantity increased from the total population estimate of just under a ton to just over two tonnes in the respective seasons. This increase of more that 100% is in line with the increase in the area planted to this crop over the two seasons.

Information pertaining to the exact type of sugar beanseeds as well as the unit in which they were bought was not easily forthcoming. This is an obvious area for further investigation, as could not even determine whether previous year seed stocks or new stocks were utilised as well as the source of such seeds.

FERTILISERS

The estimated quantity of fertilisers used in this crop was rather low, far below a quarter of a ton in each of the seasons. However, it is noteworthy that Compound D still constitutes the bulk of these fertilizers, followed by AN and Single Super Phosphate, in that order. But since the crop is gaining popularity in the area, it will be logical to plan for an increase in the use of this input. Again, this shows that extension services have not yet been effective in the area and that fertiliser companies are not yet active there. Given access to credit, it is conceivable that the rate of fertiliser utilisation could be much higher.

TABLE 7
BEANS INPUTS UTILISATION

1986-1987 SEASON				1987-1988 SEASON		
Input	**Type**	**Survey Quantity**	**Pop. Estimate**	**Type**	**Survey Quantity**	**Pop. Estimate**
Seed	*	**360**	**900**	*	**813**	**2 033**
Fertilisers	**Compound D**	**7**	**18**	**Compound D**	**21**	**53**
	AN	**6**	**15**	**AN**	**19**	**48**
	Single Super Phosphate	**4**	**10**	**Single Super Phosphate**	**8**	**20**
Chemicals		.	.	.		
TOTAL		**377**	**943**		**861**	**2154**

Source- *Field Survey, 1987.*

Notes: *Could not be determined.

CHEMICALS

Our survey found that no chemicals were applied to sugar beans. This is not surprising given thegenerally low application of pesticides among small holders in the country. Further work, however, is required to determine the potential minimum stocks of appropriate chemicals that could be stored by the warehouse.

Sunflower

As shown in Table 4 above, this crop is becoming one of the most popular crops in the area.

SEED

The estimated amount of seed used at planting increased by almost 50% from 2,6 (t) in 1986/87 to nearly 3,9 (t) in 1987/88. This rising trend is likely to continue although at a diminishing rate as more farmers allocate more land to this crop in an attempt to cushion the effects of uncertain weather patterns, although the study could not determined with certainty the exact types of varieties used, these can be determined specifically through consultations with Agritex officials.

The stocking levels of seed for this crop need to be carefully determined, conscious of the fact that our research found an exceptionally large incidence of households who used ungraded seed retained from the previous crop yields. Altogether the total quantities of inputs used for sunflower were 2,7t in 1986/87 rising to 4t in 1986/87 rising to 4t in 1987/88, an increase of almost 50%.

FERTILISERS AND CHEMICALS

Again, the results of our analysis reflect an extremely low incidence in the use of these two inputs. This is probable reflection of budget constraints. However, it was observed that Compound D once again constituted the bulk of fertilisers used followed by AN. The other type used was Compound L. It should be noted that small farmers through years of extension advise have become acquainted with Compound D and AN for cultivation. Their experience with these inputs and other types on different crops is not very high. This explains the generally low levels of application found in this study. Minimum stocks of sunflower inputs should be kept and the warehouse should monitor the increases in input demand for this crop as extension workers press the need for good crop production practices and crop diversification in the area, to ensure better returns to small farmers.

Table 8
SUNFLOWER INPUTS QUANTITIES

1986-1987 SEASON				1987-1988 SEASON		
Inputs	Type	Survey Quantity	Pop. Estimate (kg)	Type	Survey Quantity (kg)	Pop. Estimte (kg)
Seed	*	1059	2648	*	1540	3 850
Fertilisers	Compound D	14	35	Compound D	29	73
	Compound L	7	18	Compound L	8	20
	AN	5	13	AN	23	53
Chemicals	**	2	5 -			
TOTAL		1087	2 719		1600	3 996

Source: *Field Survey, 1987*

Notes: **1)** *Variety could not be determined.
2) **Specific names could not be determined.
3) Population projections are a proportion of our 40.

Groundnuts

As noted earlier, the area put to groundnuts decreased by 19% over the two seasons (see Table 4). Table 9 provides details of the inputs used in groundnuts. Regarding seed utilisation, Valencia, popularly known as "mukadzi usaende", was the most popular variety, with the total population seed quantity estimated at about 4,7t in 1986/87 and about l,5t in 1987/88: a decrease of approximately 70%. Most of the sec:d used was ungraded/untreated, having been retained from the previous yield. There also seems to be inter-household cash sales and barter deals involving groundnuts seed. It is critical to take these factors into account in determining the warehouse stocking levels for groundnut seed. The acceptability of other commonly used and high yielding varieties needs to be explored, and promoted through the existing extension services and the M.D.U. warehouse managements.

Table 9
GROUNDNUTS: INPUTS UTILISATION

1986-1987 SEASON				1987-1988 SEASON		
Input	Type	Survey Quantity (kg)	Pop. Estimate (kg)	Type	Survey Quantity (kg)	Pop. Estimate (kg)
Seed	*	1879	4 698	*	582	1455
Ferti-	Compound D	2	5	Compound D	·	
lisers	Luni	35	13	Luni	1	215
	Gypsum	35	88	Gypsum	7	18
	Super Phosphate	7	18	Super Phosphate 15	38	
TOTALS		1926	4 822		604	1 514

Source: *Field Survey, 1987*
Notes: 1) *Could not be determined.

FERTILISERS AND CHEMICALS

Four different kind of fertilisers were applied, namely; Compound D, Luni, Gypsum, and Single Super Phosphate, - although the quantities were rather small. However, it appears as though Gypsum and Single super phosphate have found widespread use over the years.

Resettlement Potential Warehouse Input Stocks

In this section, through a summary presentation of the crop inputs utilised by resettlement farmers, we delineate the total stocks for the warehouse that could be realised by the resettlement market segment (see Table 10).

Table 10
SUMMARY OF INPUTS UTILISATION PER CROP

	SEED (kg)		FERTILIZERS (kg)		CHEMICALS (kg)		TOTALS	
	1986/87	1987/88	1986/87	1987/88	1986/87	1987/88	1986/87	1987/88
Maize	19 793	17 090	3 416	2 678	513	360	23 452	20128
	(71%)	(70%)	(93%)	(89%)	(99%)	(100%)	(73%)	(72%)
Beans	900	2 033	43	121	·		943	2154
	(3)	(8)	**(1)**	**(4)**			**(3)**	(8)
Sunflower	2 648	3 850	66	151	5		2 719	3 996
	(9)	(16)	(2)	(5)	(1)		(9)	(14)
Groundnuts	4 698	1455	124	60	·		4 822	1514
	(16)	(6)	**(4)**	(2)			(15)	(5)
TOTAL	(88%)	(89%)	(11%)	(11%)	(2%)	(1%)		
	28 039	24 428	3 379	3 010	518	360	31936	27 798
Tonnes	28t	24,4t	3,4t	3t	,5t	>4t	31,**9t**	27,8t

Source: *Field Survey, 1987*

Notes:
1. Bracketed figures below the main figures are column percentages
2. Bracketed figures above the main figures are row percentages
3. All figures are population estimates

The main features of this segment of potential stocks are:

- The total physical quantity of inputs for all the crops is currently approximately 27,7t, down 13% from last season. This suggests that the warehouse stocking needs to have a flexibility which can cope with a demand variability of around 20% of a given average stock level. This average can be expected to rise gradually from 28 tonnes to approximately 40 tonnes over three years, depending on input utilisation promotion activities, which the M.D.U. could participate in.

- Seeds constitute the bulk of these inputs both in each crop and for all crops combined. The level of seed requirements increased 4% over the two seasons, and seed requirements as a proportion of total inputs used was around 70% in both seasons. Given the lower than 50% land utilisation levels noted, it could be expected that overall seed and other inputs requirements have a wide scope to increase.
- Although maize seed constitutes well over half of total seeds for all crops combined, this ratio is likely to change over time as more farmers move into other drought tolerant and higher value crops in line with government policy. Maize will, however, remain the dominant crop for reasons mentioned earlier. The warehouse management will thus need to be adaptable to the increasing crop diversification in terms of market information procurement and client servicing. This would require specially determined stocking and procurement management systems, until the markets stabilise.
- Sunflower seed increased over the two seasons. However, we note that this input as well as bean and ground seed normally were not traded in the open market in significant quantities. Stocking decisions must take this into account in addition to instituting research aimed at identifying the correct varieties.
- Fertiliser requirements are currently at around 3 tonnes for all crops combined. This low state of fertiliser utilisation can be attributed to a number of factors including the level of purchasing power, use of cattle manure and the generally good soils in the area. It is well known that most of the resettled people were not selected from amongst "master farmers" and well-established "progressive farmers" and that their cultural methods are below average. There is scope to improve these as extension services develop in resettlement schemes.
- Reasonable quantities of fertilisers directed at the growing market gardening activities should be stocked in the warehouse as demand for vegetables is growing in Chinyudze especially in surrounding growth points, new government institutions and in Rusape, which is expanding.
- The level of chemical utilisation is rather low. This level may increase as farmers realise the need to curb losses arising from pest and diseases. More effort should be put in identifying the specific types of chemicals required in the area. Research and Specialist Services could be useful in this respect.
- The M.D.U. warehouse management has to identify appropriate storage facilities within the warehouse to cater for these different input requirements.
- There is a certain level of inputs utilisation and sales promotion activities that the M.D.U. warehouse management has to adopt, vis-a-vis settlers in relation to existing extension agents and sales representatives, in order to realise maximum warehouse stocking.

In conclusion, therefore, we note that around 70% of the inputs which average about 30 tonnes are cash items bought from Rusape and Headlands. It is highly probable that this quantity and proportion will increase if the weather pattern improves and more land is put to use. Moreover, the inputs of current extension efforts will similarly show in improved farming methods. Thus, there is scope for expansion in agricultural activities. The warehouse should be able, with time, take advantage of its proximity and tap this potential.

There will, of course, be competition from other agents of inputs suppliers operating in the area.

Resettlement Warehouse Stock Preference

There is, of course a need to forge a socio-political linkage between the M.D.U. and resettled farmers, on the basis of economic gains that could be derived by settlers from the M.D.U. warehouse. This entails social mobilisation work by OCCZIM, in liaison with government officials, and close discussions on the pricing and mode of delivery of inputs distributed by the warehouse. The role of credit and methods of payment for input needs has to be carefully calculated in forum that brings all participants together.

Already, the survey among the settlers, begun this socio-political process through the community meeting addressed, and through the specific interview questions, which solicited the qualitative preferences of warehouse goods by the settlers in the resettlement scheme. Apparently, the settlers were able to identify themselves with this warehouse, due to the approach adopted.

In the following, we analyse these preferences under different categories of goods preferences, beginning with agricultural goods.

Agricultural Goods Preferences

Table 11 below is a breakdown of the agricultural goods which the farmers indicated they wanted to include int he warehouse stocks. The items are ranked in order of the number of respondents who indicated the need for the warehouse to stock such items. There

Table 11
AGRICULTURAL GOOD PREFERENCES

Ilem	Frequency of Mention	% of Total	% of Sample
Fertiliser	121	20	70
Seed (all varieties)	118	19	68
Plough parts	94	15	54
Ploughs	85	14	49
Cultivators	53	9	30
Harrows	51	8	29
Livestock Medicines	26	4	15
Stock Feed	24	4	14
Planters	21	3	12
Packing Materials	13	2	7
Hoes	7	1	4
Ridgers	3	0,5	2
TOTAL	616	100	

Source: ***Field Survey, 1987.***

As could be expected in a predominantly agricultural rural economy with no adequate or efficient input markets, fertilisers and seed ranked highest, accounting for 20% and 19% of total frequency of goods mentioned respectively. On average, 69% of the sample indicated their preferences for these items.

Ploughs and their spares parts occupied the second highest position in the ranking with 54% of the sample citing these respectively. Ox-drawn implements, cultivators and harrows, occupied the fifth and sixth position respectively. Planters were at ninth position below livestock medicines (seventh) and stock feed (eighth) which are mainly for poultry. At the bottom of the rank are packing materials, hoes and ridgers going down the line.

This information is quite indicative in so far as it throws light at the general requirements preferred by the farmers. The preference scale is also a rough indication of stocking levels for each of the listed items.

While the warehouse could engage in the machinery and equipment on an order by order basis through its sales agents, a more systematised demand management and thus procurement and stocking systems could definitely be developed around approximate medium to long-term payment purchase arrangements by the M.D.U. warehouse and in league with AFC.

Non-Agricultural Hardware Preferences

This resettlement programme is relatively new, with villagers having been resettled from various distant places. Thus the highly noticeable construction of new residence structures by the villagers bore witness to the infancy of this particular resettlement scheme. This construction effort is reflected in Table 12 below in which building materials, cement, house-hold utensils and fencing materials, in that order rank highest in hardware goods preferred by the villagers.

Building materials, refers to, door and window frames, roofing materials, padlocks and doors, among other things, whilst utensils include, among other things, pots, dishes, plates and cups. Fencing materials mainly refers to chicken mash wire, barbed wire and security wire.

Table 12

HARDWARE GOODS PREFERENCES

	Frequency of mention	% of Total	'7 of Sample
Building Material	99	40	N*
Cement	42	17	24
Household Utensils	37	15	_ i
Fencing Material	24	1(1	14
Furniture	18	7	10
Scotchcart	14	<>	>
Wheel Barrows	12	s	·
Olhcr	4		
TOTAL	2M)	100",	

Source: *f ield Survey IW7*

At the bottom we have furniture, scotchcarts and wheelbarrows in order. The furniture is of the kind which include beds, mattresses, chairs and kitchen units which should preferably be simple and inexpensive whilst the scotchcarts should not be stocked in large numbers as they are expensive and are firm of fixed assets.

Other Goods Preferences

It should be noted that the items as ranked inTable 13 below are basically the ones traded by the retail outlets at the service centre. This then presents scope for warehouse to assume the wholesale function to these outlets. This does not, however, inhibit the warehouse to trade directly in goods like blankets and cloth, and even school uniforms. There is a clear overlap in potential supplies between the business community and the MDU warehouse, when it comes to these other goods. This is discussed further in the next section.

Table 13
OTHER GOODS PREFERENCES

	Frequency of mention	% of Total	% of Sample
Grocery	118	49	100
Blankets	52	21	30
Clothing	35	14	20
Cloth	21	9	12
Toiletries	7	3	4
Footwear	5	2	3
Stationery	4	2	2
TOTAL	242	100%	

Source: *Field Survey, 1987*

To conclude this section, while we have been able to determine the range of goods, from seeds to toiletries, that would be required by settlers, and could therefore be stocked by the MDU warehouse for the resettlement market segment, it has only been possible to determine estimated quantities of seasonal agricultural inputs requirements. The MDU warehouse management would have to scrutinize these other goods more carefully, in relation to a procurement, supply and payments system, and with due consideration of the competition already existing amongst businesses in Chinyudze. It is type and level of competition by private individual businessmen that we discuss next, with a view to determining both the potential to fill in gaps on a complementary basis and to secure certain markets on the basis of more favourable services offered to the Chinyudze hinterland. These endeavours, however, should guarantee a level of profitability of the MDU warehouse and benefit of MDU members.

CHAPTER FOUR

CHINYUDZE BUSINESS (SERVICE) CENTRE ENTERPRISES AND MARKETS

The study investigated the relationship between the spatial arrangements of the Chinyudze region and its socio-economic relations of production in order to assess the possibility of improving economic opportunities, as these affect the nature of market facilities and services, and access to these by the various market segments discussed in previous sections.

With this in mind then, the object of the following analysis is the organisation (social and economic organisation) of the Chinyudze region market place.

This section deals particularly with the organisation of the physical channels of exchange at the Chinyudze business and service centre. Our survey clearly determined that there is no industrial infrastructure (small or large scale) at Chinyudze Service Centre,which means it is merely and solely a service centre. Like the other service centres in the surrounding regions (Chendambuya, Mayo, Weya) Chinyudze has no organically developed marketing infrastructure, which reflects the weak linkage between these small centres at the regional level. As already pointed out the major services developed at Chinyudze so far include:an almost complete housing project, a clinic, a shopping complex,C.M.E.D. workshop, a primary and secondary school and a G.M.B.department. Government, AFC Offices and community hall are nearing completion. There is also a nearby dam (earmarked for youth fishing project) and a borehole from which the centre gets its domestic supply of piped water. In addition, the centre is also connected to the ZESA grid and telephone facilities.

The main business ventures, their lines of trade, product sources and general characteristics are summarised in Table 12. These ventures basically deal in liquor, soft beverages, meat and general groceries -which are purchased from Rusape, Inyati Mine, and further afield Marondera and even Harare. All these business ventures reported problematic, unreliable and overpriced transport services, inadequate finances to widen their product ranges, and to build storage facilities.

These findings suggest the M.D.U. warehouse project backed up by inefficient transportation facility could stand a fair chance of profitable operations. As far as product market are concerned, the existing business ventures identified hardwares as the general range of products in demand but inadequate supply. Our survey found that these ventures only dealt in parts of ploughs, bolts and nuts, and household utensils, that is as far as hardwares were concerned. This indicates a broad scope of market expansion at Chinyudze, given the product demand identified in the different market segments discussed earlier. It would seem that agricultural inputs, implements and accessory hardware for agricultural or household production activities are the most viable lines of trade that the M.D.U. warehouse could engage in. Table 15 shows, the "soft goods" that are already being supplied by one of the enterprises while hardware goods and groceries available are shown in Tables 16 and 17 respectively.

TABLE 14
CHINYUDZE BUSINESS CENTRE (RURAL OUTLETS)

Name of Trade	Line of Trade	Source of Products	Remarks
Simabure	G/Dealer, Bottlestore and Grinding Mill, Farmer	Rusape Harare Marondera Mutare	- Use of own transport - Use of local bus service - No external finance (Financial Problems) to expand the Business - Would accept short term loans - high demand for hardware products.
Adulf	Grocery and Bottlestore	Marondera, Inyati Mine Rusape	- Transport problems - use of local bus service - High transport charges (costs) - Financial availability - Storage facilities

Source: *Field Survey, 1987*

Table 15
SOFT GOODS

Product	Available	Not Available	Available	Not Available
Blankets		x	x	
Sheets		x	x	
Clothing				
- Shirts		x	x	
- School Uniform			x	
- Dresses			x	
- Trousers				x
- Jackets				x
- Suits (Male, Female)				x
Stationery	x		x	
Shoes				
- Tennis		x		x
- Gum Boots		x		x
- Leather Shoes				x
Jerseys		x		x
Cloth		x		x

Source: ***Field Survey, 1987***

Table 16
HARDWARE PRODUCTS

SHOP NO. ONE (1)		SHOP NO. TWO (2)		
	Available	Not Available	Available	Not Available
Fertilizer		x		x
Ploughs		x		x
Ploughparts	x		x	
Harrows		x		x
Cultivators		x		x
Bolts & Nuts	x		x	
Building Materials		x		x
Fencing Materials		x		x
Wheelbarrows		x		x
Hoes		x		x
Stove (Paraffin)		x		x
Household Utensils	x	x		x
Dishes		x		x
Plates		x		x
Cutlery etc		x		x
Electric Appliances		x		x
Stockfeeds		x		x

Source: *Field Survey, 1987*

Table 17
GROCERIES

SHOP NO. ONE (1)		SHOP NO. TWO (2)		
Products	Available	NotAvailable	Available	Not Available
Sugar	x		x	
Salt	x		x	
Cooking	x		x	
Mealie Meal	x		x	
-Roller Meal				
-Super Refined				
Flour	x		x	
Baby Foods	x		x	
- Pronutro				
Confectioneries	x		x	
Tinned Foods	x		x	
-Beef				
Kapenta Fish	x		x	
Toiletries	x	x		
- Lotion (Body)				
- Soap Bars/Surf				
Powder				

Source: ***Field Survey, 1987.***

Specifically the most traded goods are groceries (sugar, salt, cooking oil, kapenta, etc.). These goods are easy to transport and Personal transport is mostly commonly used. Public transport has been suggested although there are many disadvantages associated with it.The number of breakages increase with the use of the Local bus service. In most cases (if not in all cases) the breakage costs are met by the traders. The use of the local bus services also limits the quantity of the products purchased for resale.

Clearly, therefore, the central problem is the poor distribution of productive resources into these centres, which limits the range of products traded in the region to those which can be easily transported and stored. There is thus a clear gap in the supply of the needs of the communities around Chinyudze, particularly their demands for agricultural equipment (ploughs cultivators, etc.) equipment parts, agricultural inputs (fertilizers, seeds, chemicals, etc), stock-feed, and building materials (cement, roofing planks, zinc or asbestos).

Whether this reflects inadequate incomes and savings or medium term credit to purchase goods, or even purchasing arrangements of product pricing, is yet to be determined. It is certain, however, that through an organised market process some of these products have an effective demand in the region. This situation points to the undeveloped linkages firstly with the regional market places, and secondly to those between the Chinyudze market place and the local community. This, of course is the hierarchical articulation of markets, whereby the Chinyudze regional market system is dominated by the cities of Marondera, Rusape, Mutare, Harare and to a lesser extent, the Headlands. To fill the gap left between these two market levels and in an attempt to enhance the economic opportunities of the region, the rural population tend to by-pass the existing market place infrastructure and higher per unit transportation to the more integrated town markets.

Availability of finance and storage facilities also have an impact on the capacity of the rural trader to meet the demand of the community.

Faced with these constraints the rural trader has no option but to add what it costs him to the margin of profit expected. But, given the low level of competition (at Chinyudze there are only two outlets) and the absence of any political directives on price control, prices are left to the trader to determine. All other factors included in the price formation formula or which influence the price levels are left to the trader himself. It is from here that the relationship between the rural trader and the local community is manifested.

This relationship at the regional level has propelled the need to develop direct links between the Chinyudze community and the urban market provided by the town of Rusape. Headlands, which is the nearest centre to the Chinyudze Growth Point, is only but a satellite of the towns of Marondera and Rusape. The influence of its market is hampered by the non-availability of most of the hardware products and the non existence of a market for local garden products from the community leaving Rusape as the only option.

The above analysis of the Chinyudze market facilities, products, process and constraints has shown that there is scope, though not quantified in exact terms yet, for the further establishment of trading enterprises, such as that proposed by MDU warehouse Project.

We now turn to an analysis of a variety of services, complementary to the development of Chinyudze as a service/growth point and to the effective management of market establishments at Chinyudze. Essentially, the viability of the MDU warehouse could be facilitated by its affiliation or integration with transport and tillage services.

CHAPTER FIVE

MARKET SERVICES COMPLEMENTARIES

Transport Service

There appears to be a critical shortage of transport services to effect efficient and timely delivery of both inputs and produce at reasonable cost. Concern was expressed at the absence of local transport operations leaving the area prone to the late invasion of outside contractors including bus operators who charge exorbitant costs. Some of the contractors come as far as Inyanga. It was noted that to transport a 50kg bag of inputs either to Rusape or Headlands cost them one dollar ($1.00). This shortage of transport services and its late availability as well as the exorbitant charges were confirmed by the local G.M.B. authorities.

This, therefore, raises the need to incorporate the M.D.U. transport services in the operations of warehouse. In fact, the idea of a truck stationed at the warehouse to effect input deliveries at reasonable charges needs to be examined closely.

Tillage Services

Although the DDF tillage unit is stationed at the centre, it was noted that the fleet was inadequate to service the villagers in good time. The M.D.U. equipment could come in hand to exploit this opportunity of meeting the unsatisfied demand. The M.D.U. equipment pool can also use the warehouse premises as its headquarters whilst still awaiting the construction of the M.D.U. centre. Apart from these services there are serious problems related to product procurement that require some attention.

Almost 100% of the respondents preferred cash generated from savings and then those from external sources to credit purchases. In fact, the AFC, which is the main vehicle by which agricultural credit is channelled and has a district office nearby, was strongly despised as a source of purchasing power. Data from this office (table) confirmed this point. The following information can be gleamed from this Table 18.

Table 18
CREDIT ALLOCATIONS

	APPLIED		GRANTED				
Village	No	%of Village	No	%of Village	% of Applied	Total Value	Average Size of Loan
17	3	4	3	4	100	1395	465
19	7	11	4	6	57	1770	443
20	5	23	4	18	80	2 301	575
21	3	7	3	7	100	1062	354
22	6	20	4	13	67	1239	310
23	3	6	2	4	67	764	382
24	4	22	3	16	75	1030	343
25	9	19	7	15	78	2 625	375
40	7	23	7	23	100	3 648	521
M1	8	44	6	33	75	2 392	399
53	4	20	3	15	75	1593	531
TOTAL	59	18	46	11	78	19818	Average 431

Source.' *AFC District Office*

* : 1987/88 Figures

- That credit demand in this particular area is extremely low. Despite an AFC office in the vicinity only about 11 % of the total households which constitute the ware house market actually applied for AFC loans. This reluctance to take up the loan facilities seems to have its roots, among other reasons, in the bad experiences encountered by these resettlement farmers. Specifically, this attitude has arisen due to the fact that many farmers failed to pay up other debts because of the effects of the drought. In fact, examples of individuals who were in trouble for failure to meet their obligations were sighted repeatedly in the course of this exercise

  Generally, the soil can manage without a lot of supplementary inputs. These reasons, coupled with the noticeable prevalence of use of cattle manure contributed to this reluctance to take up the loan facilities.
- A surprising feature from the table is that on average 75% of all loan applications were actually granted. This seems to suggest that although there is a general reluctance to take up loan facilities, credit services are apparently accessible to those who want them in the area. The figures suggest a rejection rate of only 25% of applications.
- Although the value of the highest single personal loan granted so far in the whole area was two thousand ($2 000.00), the average size of the majority of loans, which are predominantly of short-term duration (one season), is around four hundred and thirty dollars ($430.00). Otherwise, if group loan facilities are available, they were not taken up in this particular area.
- From our interviews, we noted that one hundred dollars ($100.00) was the minimum value of a loan to be granted. Granting rates for a half hectare of groundnuts and maize were one hundred and seventy-five dollars ($175.00) and one, hundred and twenty five dollars ($125.00) respectively.
- It was also noted that the AFC encouraged the villagers to source their input requirements from one supplier per village. This reduced the amount of paper work and alleviated delivery problems.
- AFC pre-loan meetings, where the credit policies and application proceedings were explained, are held between January and April. Loan applications should be between April and August. Agents of input suppliers will also be present on pre-loan meetings placing their orders.
- Maize currently received the bulk of AFC support.

This suggests that the incomes and access to loans are not the particular problem which limits the effective demand as such, and hence the range of products found in the business ventures at Chinyudze. There is more of a problem with the existing source of finance (AFC) and suppliers, and therefore the problems is largely a procurement one. This calls for innovative purchasing systems, based on amenable relations between the community and the suppliers.

Satellite Shops

Although our market study area spanned many kilometres, it was interesting to note the inadequacy of small retail outlets and milling facilities. The area was basically serviced by this rural service centre resulting in the villagers having to travel long distances for their day to day requirements. There is need, therefore, to explore expansion possibilities in the

direction of filling the gap, or even the organisation of periodic market days, on certain days at given points. Mobile markets and purchase order systems would certainly complement the marketing potential of the Chinyudze business centres. The M.D.U. warehouse management should look into these types of services to facilitate their central marketing project.

CHAPTER SIX

SUMMARY AND RECOMMENDATIONS

Summary

In this section we present a combined analysis of the three preceding market segments. This analysis will mainly be centred on the table presented below, which shows combined estimated quantities of input requirements from the cooperatives and the settlement farmers.

Table 19
SUMMARY OF INPUTS UTILISATION

INPUT / CROP	SEED		FERTILIZERS		CHEMICALS		TOTALS	
	1986/87	1987/88	1986/87	1987/88	1986/87	1987/88	1986/87	1987/88
Maize	(14) 36 893 (67) (32)	(16) 23 480 (58) (23)	(86) 234 596 (85) (68)	(0) 122 928 (69) (77)	(0) 513* (99) (0)	360* (100)	272 002 (83)	246 768 (57)
Crops	18 336 (33) (17)	17 006 (42) (18)	39 133 (15) (83)	55 957 (31) (81)	5* (1) (0)	- - (0)	57 474 (17)	72 263 (33)
TOTALS	55 229	40 486	273 729	178 885	518	360	329 476	21 9 731
Total (t)	55,5t	40,5t	274t	179t	0,5t	0,5t	329,5t	220t

Source: *Field Survey, 1987*

M.D.U. Main Report

Notes:
1. Bracketed figures above main figures are row percentages whilst those below are column percentages.
2) *Figures do not include cooperative requirements.
3) All figures are in Kgs unless otherwise stated.

FroM Table 19 the following salient features emerge:

- That the total estimated physical inputs being used by the two farming groups are at around 220t, down 33% from last year's figure of around 330t. This decrease can be attributed to a number of factors including the general pessimism at the start of the season which was caused by the previous year's drought conditions. It should be noted that in both years, the cooperatives accounted for the bulk, at least 87% of these inputs.
- Whilst the estimated input requirements for cooperatives declined by about 35% over the two years, that of resettlement farmers declined by only 14%.
- The bulk of these input requirements were for maize production which currently constitutes about 67% of the total estimated input requirements. Again, cooperatives constituted at least 80% of maize input requirements in both seasons. Although

maize input requirements generally decreased by about 46% during th 3 two seasons, this decrease was more pronounced for cooperatives, with a decrease of 49% as compared to 14% for resettlement farmers.

- The total estimated inputs for other crops actually increased almost two-fold.
- In both years, fertilizers constitute the bulk of inputs, at least 80% on average, 77% of these fertilizers were used in maize production whilst the rest went into the production of other crops.

These quantity estimates roughly constitute the potential market for the warehouse trading activities, particularly in agricultural inputs. In addition, it is expected that, with time, the wholesale function of the warehouse will expand with the establishment of more retail outlets in the area. A careful assessment has to be made in order to determine both kinds of stock and their respective levels for the wholesale section. The fundamental question to be addressed to is whether the M.D.U. will be able to tap this market potential particularly that of the business community and the resettlement farmers. This question needs to be carefully looked into with the view of developing strategies for exploiting this market.

Recommendations

Generally, there appears to be potential and scope for expansion/growth possibilities in the proposed programme. However, this will critically be determined by the planning capabilities of the M.D.U., as this is an ambitious programme requiring substantial cash outlays and involving risks. In fact, the M.D.U. should be content with a small market share in its initial stages in the face of the competition. The main thrust of the warehouse development strategies should therefore aim at building up this market share to a reasonable and sustainable proportion. The following are our main recommendations:

- The warehouse should be broad based; carrying out storage, trading and wholesale functions. Trading should be restricted mainly to agricultural inputs and hardware goods such as building materials and farm implements and their spares. The wholesale should cater for its business clientele whilst the storage function should be minimised in order to leave enough space for the trading wholesale activities.
- An aggressive marketing strategy is obviously needed if the warehouse is to gain and sustain a reasonable market share in the face of various forces and competition from other agencies in the area, particularly those of agricultural inputs.

  With a good pricing policy and reasonable transport charges, promptness of deliveries, good public relations and other "perks", the warehouse will tip the scale in its favour. The strategy should be one of exploiting the inadequacies and weaknesses in the current operations of its potential competitors.

  One way of making known its operations is for the M.D.U. to arrange for a grand opening of the warehouse where influential personalities and organisations are invited as an advertising/ marketing gimmick. In addition, the M.D.U. should also attend AFC pre-loan meetings in order to get more customers. In short, it is crucial, right from the start, to pay special attention on acquiring a reasonable and sustainable market share.
- The warehouse should also look into the possibility of being stockist for various agencies in the area.

- The warehouse should also aim at providing stimuli not only for the development of the centre and region, but for the M.D.U. as well. In fact by its mere presence, it may act as a price stabilising force.
- In order to meet its stocking requirements, the M.D.U. should apply immediately for loans from various sources including SEDCO and U.D.F.. The same should be done for medium term loan for improvements.
- The product range and volumes should try to follow the requirements as indicated in this report. This pattern of potential demand should be reviewed regularly by way of similar market studies. It is crucial that the warehouse keeps pace with market trends.
- The warehouse should try, as far as possible, to source its stocking requirements from M.D.U. member cooperatives. For instance, supply of building materials such as window and door frames as well as scotch carts can be obtained from Matunhu cooperative.
- A truck should be assigned to the warehouse in order to be able to provide transport services where a large order of inputs is placed. To this end, farmers should be encouraged to form "buying groups" according to their villages in order to reduce unit transport cost.
- As long as term expansion programme, the M.D.U. should plan for the establishment of satellite shops in the area which will be supplied by the warehouse. This should provide easy market outlets for the warehouse, and at the same time ease the pressure on the storage space of the warehouse.
- In order to increase holding capacity of the warehouse, storage sheds for hardwarestock such as ploughs and some building materials should be constructed outside.
- Given a reasonable and sustainable level of cash flow, the M.D.U. should consider the introduction of credit purchases to its customers. This may be a way of increasing its market share.
- As a long term development programme,in the event that the operations of the warehouse are restricted by space, it is recommended that the following be considered:

the construction of strictly storage facility near a railway siding at Headlands for the purposes of supplying this warehouse.

the opening up of similar warehouse in the whole resettlement scheme.

The latter option, however, may not be feasible with the passage of time as CACU is currently considering acquiring the available warehouses in the area.

- It is noted that if the input requirements are supplied directly from the warehouse this may cause serious storage problems at the expense of wholesale and trading operations. In this respect, it is recommended that the ideal of making the warehouse the "processing/buying centre/agent" for bulk purchases of input requirements for the cooperatives be looked into closely. This will remove the storage pressure from the warehouse as such inputs will be railed directly to the cooperatives concerned.

Basically, what the M.D.U. will be doing is to shift storage pressure from the warehouse to the cooperatives. It is therefore necessary to start educating the cooperatives on the need to have safe on-farm storage facilities for this purpose.

What remains after this analysis, is for the M.D.U. executive, and its administrator and all concerned to develop an appropriate management system for this project, and to operationalise it as soon as possible.