

The Political Economy of the 'Relief Approach' to Agricultural Inputs in Zimbabwe: Understanding the Socio-Political Position of Agro-dealers

(FAC STI Political Economy of Cereal Seed Systems in Africa)

Douglas Magunda

December 2011

Table of Contents

Introd	uction	5
Backg	round	6
Evoluti	ion of Relief Input Programmes (2002/03 - 2009/10)	8
3.1.	Overview of Past Government Input Support Schemes	8
3.2.	Overview of Past NGO Input Support Schemes	9
Input D	Distribution Systems – Current Thinking	9
4.1.	Market-Based Agricultural Input Approach	9
4.2.	Who are the Key Actors?	10
4.3.	Overview of Current Input Programmes (2010-2011 Summer Seasons)	11
4.4.	Input Delivery Mechanisms	14
Case St	tudies	15
5.1.	Study Sites	15
5.1.1.	Low Agricultural Yield Potential Study Sites	15
5.1.2.		
5.2.		
5.3.	The Outcome: Non-state (NGO) Programmes	
5.4.	The Outcome: Rural Agro-dealers	
Discus		
Refere	nces	22
	Backg Evoluti 3.1. 3.2. Input E 4.1. 4.2. 4.3. 4.4. Case St 5.1. 5.1.1. 5.1.2. 5.2. 5.3. 5.4. Discus	 3.2. Overview of Past NGO Input Support Schemes

List of Figures

Figure 1. Location of Case Study Sites	5
Figure 2. National Cereal Demand and Supply Situation	
Figure 3. Maize Production Trends 2002-2010	6
Figure 4: Sorghum Production Trends 2002-2010	7
Figure 5. Classification of Input Delivery Mechanisms	14
Figure 6. Proportion of Agricultural Inputs Purchased by Beneficiary Households in Gokwe South	17
Figure 7. Proportion of Agricultural Inputs Purchased by Beneficiary Households in Goromonzi	18
Figure 8. Poorly Stored Fertilisers	
Figure 9. Bottle Store Used as Agro-dealer Shop	
Figure 10. Typical Items in a Rural Agro-dealer Shop	

List of Tables

Table 1. Proportion of Households and Quantity of Inputs Distributed by NGOs 2003-2010	1
Table 2. Local Maize Seed and Fertiliser Production Trends	10
Table 3: Total Number of Households and Quantities of Inputs under State Input Support Programmes	11
Table 4. Summary of Input Packages by Type of Programme	12
Table 5. An Overview of the 2010/11 Input Programmes	13-14
Table 6. District Characterisation and Types of Input Programmes	15
Table 7. Proportion of Households to Access Inputs, by Source	

Acronyms

AGENT – Agribusiness Entrepreneur Development Network and Training AGRA - Alliance for a Green Revolution in Africa AGRITEX- Agricultural, Technical and Extension Services ARSTG - Agrarian Sector Technical Review Group AN – Ammonium Nitrate ASPEF - Agricultural Sector Productivity Enhancement Facility CAADP- Comprehensive Africa Agriculture Development Programme CADS - Cluster Agriculture Development Services COMESA - Common Market for Eastern and Southern Africa **CRS – Catholic Relief Services** DFID - Department for International Development DDF- District Development Fund EU – European Union FAO – Food and Agriculture Organization of the United Nations GMB- Grain Marketing Board GOZ - Government of Zimbabwe ICRISAT - International Crops Research Institute for the Semi-Arid Tropics IFAD – International Fund for Agricultural Development MOAMID - Ministry of Agriculture Mechanisation and Irrigation Development NEPAD - New Partnership for Africa's Development NGO – Non-Governmental Organisation NSHFISP – National Small Holder Farmer Input Support Programme For Food Security **OPV – Open Pollinated Variety** OVC - Orphan and Vulnerable Children PSF – Productive Sector Facility RBZ - Reserve Bank of Zimbabwe SADC - Southern Africa Development Community SDC - Swiss Development Corporation SNV - Netherlands Development Organisation USAID - United States Agency for International Development USD – United States Dollar ZFC - Zimbabwe Fertiliser Company

ZimVAC – Zimbabwe Vulnerability Assessment Committee

ZMDTF - Zimbabwe Multi Donor Trust Fund

1. Introduction

For almost a decade, the Zimbabwean Government, together with donor organisations, have implemented agricultural input support programmes that have bypassed the normal market chain. The normal market chain is composed of suppliers (seed houses and fertiliser manufacturers), wholesalers and rural agro-dealers. Analysts argue that these input support programmes resulted in the collapse of the agro input supply chain, hence contributing to declining agricultural productivity in Zimbabwe today. Functional markets, fronted by rural agro-dealers are seen as a prerequisite to the new African Green Revolution Model, therefore the market-friendly and non market-friendly programmes implemented by state and aid agencies in 2010/11 offers an opportunity to examine how the Green Revolution (GR) model interacts with the entrepreneurial agro-dealers in a humanitarian setting.

This paper explores how theoretical pros and cons of the different agricultural input delivery systems played out in the real world application. Using qualitative research methods, the study set out to interrogate the political economy of 'relief approach' to agricultural inputs provision in Zimbabwe, with a view of understanding the socio-political economy of agrodealers. The paper goes further to highlight the importance of political-economic factors in creating incentives, rent-seeking opportunities, patronage, and market power in the context of real markets that are affected by politics and not simply by demand and supply. In so doing, the paper also draws attention to the winners and losers within this system. The paper further examines other critical factors which are necessary in designing input delivery systems that work beyond the theoretically ideal models.

In order to explore how the agricultural input support programmes played out in reality, four case study sites were chosen (Figure 1): two in high agricultural yield potential areas and two in low agricultural yield potential areas. The research involved reviewing secondary information, discussions with a cross section of stakeholders, non-governmental organisations (NGOs), donors, input suppliers, agro-dealers, wholesalers, and government officials, as well as attending meetings organised by the various implementing agencies and various field visits. The study was complemented by analysis of household data on sources and quantities of inputs collected from 527 households from the four case study sites.¹



Source: Author's original based on map from Surveyor General of Zimbabwe

2. Background

Since 2002, Zimbabwe, which was previously a maize surplus-producing country, has failed to produce enough cereals to meet even national requirements (Figure 2). The country has had to rely on food imports by aid agencies, government and the private sector to cover the deficit. The production shortfall was mainly attributed to the combined effects of adverse weather, critical shortages of agricultural inputs and the collapse of government extension services (FAO 2009; UN 2009; Gandure and Marongwe 2006). During this period the Zimbabwean economy was characterised by negative Gross Domestic Product (GDP) growth rate, hyperinflation, the crumbling quality and quantity of social services, critical shortages of foreign currency and basic commodities, as well as erratic supplies of fuel (ZimVAC 2006; UNDP 2001). The agricultural policy environment, in turn, faced heavy state interventions that were funded through quasi-fiscal operations which distorted the markets and undermined the economy (Scoones et al. 2010; PricewaterhouseCoopers 2010). Due to price controls that were implemented by the Government in an economic environment of hyperinflation, input

suppliers, distributors and agro-dealers were therefore unable to effectively deliver agricultural inputs to farmers.

The national cereal supply gap that is highlighted in Figure 2 above was primarily a result of marked declines in agricultural productivity. Whilst the average maize yield between 2002 and 2010 was 695 kg/ha as shown in Figure 3, was well below the average yields of 1166 kg/ha realised during the 1990s.

This significant decline in yields can be attributed to the intermittent favourable weather conditions and the general shortage of improved seed varieties and fertilisers. As a result, farmers resorted to planting retained maize seed and the use of fertiliser declined considerably.

As demonstrated in Figure 4 below, the area planted with sorghum is on the increase, which can be attributed in part to relief programmes by the Government and NGOs that have distributed considerable quantities of sorghum seed during the period under review. However, sorghum production is increasing largely due to increases in land area planted rather than to increased productivity.

Reflecting on this background and the information provided by these figures, low agricultural productivity









Source: MOAMID & ZimVAC





Source: MOAMID & ZimVAC

and precarious national food security are serious challenges facing Zimbabwe. These challenges have been exasperated by government and NGO-led subsidized agricultural inputs programmes in the small holder sector. Running since 2001/02, these programmes have dominated the seed and fertilizer sales in the country, crowding out agricultural input wholesalers and ruralagro-dealers (Mutonodzo-Davies, 2010, Mutonodzo-Davies and Magunda 2011; Hanyani-Mlambo and Hobane 2010).

However, according to Amanor (2011), advocates of the new African Green Revolution support initiatives aimed at boosting food security through the provision of improved seed varieties and fertilizers, rather than food aid. Therefore, in part, input programmes implemented by government and aid agencies can be argued to fall in line with the thinking behind the new African Green Revolution. The GR is largely credited with the rapid industrialization that is taking place in Mexico (its country of origin) and in many Asian countries where it has been promoted. Adesina (2010) argues, however, that whilst Africa should learn from Asia's example, the contexts, cultures and environments of Africa are completely different. There is a real need in the African context to focus on small holder farmers to drive the green revolution in Africa.

The GR model, proposed by the Alliance for a Green Revolution in Africa (AGRA), is premised on the assumption that a private sector, fronted by rural agrodealers, will supply improved seed varieties and fertilizers to small holder farmers on either a pure commercial basis or through subsidized programmes. The model assumes that farmers, particularly women, will purchase improved varieties for as long as they are aware of the benefits, providing the right information is imparted to them (Kelly 2004). The transfer of accurate and sufficient knowledge is therefore a critical component of this model. Additionally, the ideal rural agro-dealer is one who has a good appreciation of appropriate crop varieties and inputs for a given area and also the necessary technical knowledge to pass this information on to the farmer. A number of powerful and influential organizations, including the World Bank, Rockefeller Foundation, International Fund for Agricultural Development (IFAD), New Partnership for Africa's Development (NEPAD), United States Agency for International Development (USAID), Bill and Melinda Gates Foundation, Africa Union through the Comprehensive Africa Agriculture Development Programme (CAADP), Food and Agriculture Organization of the United Nations (FAO) and Common Market for Eastern and Southern Africa (COMESA), believe that the GR can be the answer to Africa's agricultural productivity and food security problems. Such an ideal model, however, is difficult to come by in reality.

In general, the agricultural input subsidy programmes implemented by NGOs and the Zimbabwean Government negated the key feature of the new African Green Revolution model, which sees the private sector being at the centre of revitalizing agriculture in Zimbabwe. (Odame and Muange 2011; Otsuka and Kalirajan 2005; Alumira 2005; De Groote et al. 2005; FAO 2005). Markets themselves operate within a broad political economy where the power balance between the different actors/ institutions is unequal. This imbalance of power ultimately affects what inputs rural agro-dealers will be able to stock and offer farmers, as well as impacting the knowledge and advice that they will eventually pass on to the farmers. In practical terms, the African Green Revolution has an uphill battle in its fight for success.

As agro-dealers are considered a key component of the GR model, the question is therefore raised: Who is an Agro-dealer? As was observed by Odame and Muange (2011), defining an agro-dealer in practice is guite challenging. In Zimbabwe there is no single piece of legislation which defines an agro-dealer, though there are several informal explanations. To begin with, many agro-dealers may also be common traders who then sell agricultural inputs seasonally. An agro-dealer must carry a shop licence, obtained from the rural district councils. Additionally, for a retailer to legally sell seed in Zimbabwe, a Class B or Class C licence must be obtained from the **Environmental Management Authority Seed Services** (under the Seeds Act of 1965). Trading in the full range of agricultural inputs (seed, fertilisers, agro chemicals, agricultural implements) is included under both of these licences. However, a holder of a Class B license is allowed to import and repackage seed (most the wholesalers and seed producers are holders of this licence), while a holder of a Class C licence is only allowed to sell pre-packed seed supplied by wholesalers or seed producers; they are not allowed to repack.

Whilst this section has considered the history behind the agricultural input subsidy programmes, briefly outlining their impact on rural agro-dealers, the next section will offer further insight into the implementation of these programmes by the Zimbabwean Government and the humanitarian community during the last decade.

3. Evolution of Relief Input Programmes (2002/03 - 2009/10)

Between the 2002/03 and 2009/10 growing seasons in Zimbabwe, both the Government and humanitarian NGOs have implemented a number of agricultural input programmes aimed at improving agricultural inputs (seed, fertiliser, tillage and fuel) in order to boost agricultural production. Section 3.1 and 3.2 offer brief overviews of the Zimbabwean Government and NGO input programmes, respectively.

3.1. Overview of Past Government Input Support Schemes

The Zimbabwean Government has played a major role in the provision of agricultural inputs, in part through a drought-response initiative as well as acting in an effort to buttress the Fast Track Land Reform Programme (FTLRP) (Hanyani-Mlambo and Hobane 2010; Scoones et al. 2010; Govere et al. 2009). Government-led initiatives during this period included:

- Government Summer/Winter Crop Input Scheme, beginning 2000
- The Productive Sector Facility (PSF)
- The Agricultural Sector Productivity Enhancement Facility (ASPEF)
- Operation Maguta/Inala
- The Champion Farmer Programme
- Southern Africa Development Community (SADC)
 Agricultural Inputs Support Programme
- Subsidized input programme implemented through Grain Marketing Board (GMB)
- The Presidential Well Wishers Input Programme

In an effort to assist in ensuring food security in the face of recurrent droughts, the government started Crop and Livestock Inputs Schemes in 2000. The schemes were implemented mainly through parastatals such as GMB and District Development Fund (DDF). Due to its depot networks across the country, GMB played a crucial role in delivering agricultural inputs closer to farmers, whilst DDF provided tillage and harvesting support. Both organisations provided their services either free of charge or they were heavily subsidized.

During this time, banks played a critical role in agricultural input schemes, as they became conduits of funds to farmers. In 2004, the Reserve Bank of Zimbabwe (RBZ) became a major financier of agricultural programmes through the launching of the Governmentbacked Productive Sector Facility (PSF): an agricultural input support scheme aimed at cushioning farmers against the high input prices that were a consequence of high inflation in the economy. Banks played a critical role as they became conduits of channelling the funds to farmers, these banks include the Agricultural Development Bank of Zimbabwe (Agribank) and the Commercial Bank of Zimbabwe (CBZ).

This period also saw interest rates ranging from 300 to 400 percent and finances that were provided at a concessionary rate of 25 percent. In time, the PSF was succeeded by the Agricultural Sector Productivity Enhancement Facility (ASPEF). Unlike the PSF which was targeted at all the productive sectors of economy, ASPEF focused on providing low cost funds to primary producers in the agricultural sector.. This new facility supported food crop and livestock production, non-food crop production, and irrigation development and rehabilitation.

In 2005, the Zimbabwean government launched Operation Maguta/Inala, whose main objective it was to ensure food security at a national level and improve land utilisation (PricewaterhouseCoopers 2010; Scoones et al. 2010). This was a military-led programme supporting farmers with tillage assistance, seeds and fertilisers. Mechanization also formed a strong pillar of this programme, as crop production efforts were complimented by the construction or rehabilitation of many irrigation schemes. For the 2008/09 season, a successor programme to Operation Maguta/Inala was launched: the Champion Farmer Programme. In an effort to ensure that inputs were put to good use, the programme targeted farmers capable of achieving high yields. Also in 2008/09, Operation Maguta/Inala was complimented with support from SADC which came in the form of seed and fertiliser to smallholder farmers. All schemes gave support both for the main summer growing season, as well as for winter cropping.

During the 2009/10 growing season, the Government implemented a subsidized agricultural input scheme through GMB, with the goal of ensuring household food security for small holder farmers. Through the programme farmers accessed inputs at 25 percent of open market costs. For example, 10kg packs of maize seed were made available at 5 USD against an open market price of 20 USD, and 50 kg bags of fertiliser were made available at 7 USD against an open market price of 28 USD. In addition to this new GMB scheme, the Government also implemented the Presidential Well Wishers Input Programme, which provided input packs comprising of various combinations of maize, sorghum, rapoko and bean seed together with basal fertiliser. A common feature of all government programmes implemented throughout this period was bypass of the established agricultural input distribution chain involving wholesalers and agro-dealers. Instead, inputs were largely acquired in bulk from local or international input suppliers for distribution through the GMB network of depots, therefore contributing to the collapse of the agricultural input market chain.

3.2. Overview of Past NGO Input Support Schemes

A widespread response to natural disasters by NGOs in the agricultural sector is to distribute agricultural inputs, such as seed and fertiliser (Rohrbach et al. 2004). The current phase of free input distributions was initially begun in 2002/03 as a response to the third major drought since Zimbabwe's independence in 1980. Since this time, agro-input relief has been implemented annually due to general economic decline. Table 1 gives a breakdown of the number of households provided with "free" inputs by NGOs between the 2003/04 to 2009/10 growing seasons. The proportion of small holder farming households supported by NGOs ranged from 65 percent at its highest (2003/04) to 15 percent at its lowest (2007/08). The average contribution of NGOs to maize planted during time was 7 percent.

4. Input Distribution Systems Current Thinking

Notwithstanding a plethora of free or subsidized input programmes during the last decade, Zimbabwe has failed to produce enough cereals to meet national requirements. The Government and NGOs argue that rampant and chronic food insecurity among small holder farmers has escalated into an emergency situation which demands response. Sayce (2004), however, argues that declaring the situation an emergency gives aid agencies and politicians an excuse to get involved. Hence, the patronage of the 'relief approach' to agriculture will be a part of Zimbabwe's national input distribution agenda for some time to come.

4.1. Market-Based Agricultural Input Approach

Even though the main mode of input distribution by NGOs has been direct circulation to farmers, the idea of market-based inputs assistance programmes was mooted as early as June 2004 by FAO, as a potential exit strategy for farmers from humanitarian assistance. Over the past decade, relief programmes have experimented with several market-friendly input delivery strategies.

Table 1. Proportion of Households and Quantity of Inputs Distributed by NGOs 2003 -2010								
Year	Households Cereal Seed (Tonnes)			Fertilisers				
	Supported	Maize		Small Grains				
	(%)		Hybrid					
2003/04	65	3,304	3,061	2,835	7,737			
2004/05	28	1, 972	291	847	5,828			
2005/06	24	1,605	31	771	8,626			
2006/07	21	696	175	981	9,049			
2007/08	15	307	138	1,119	8,598			
2008/09	20	1,282	54	939	15,509			
2009/10	48	5,877	641	1,157	51,356			

Source: (FAO 2010)

As shown in Table 1, NGOs mainly distributed open pollinated maize varieties (OPV) and small grains after 2003/04. According to the seed situation report produced by the Zimbabwe Seed Traders Association in 2010, in an effort to capture the NGO seed market, ten of the eleven national companies had switched to producing OPV maize seed.

The dominant strategy used by NGOs to deliver inputs, procured mainly from seed or fertiliser companies, to beneficiary households during this period was direct distribution. NGOs also took up the position of promoting maize seed recycling by farmers, arguably undermining rural agro-dealers in the process.

These strategies include:

- providing farmers with inputs on credit with the agreement that participating farmers would deliver a portion of their produce equivalent to the input support provided
- conducting seed fairs where vouchers provided by NGOs to vulnerable members of the community would be exchanged for inputs supplied by commercial and informal traders
- making vouchers redeemable for inputs through rural agro-dealers

The advent of the inclusive government in 2009 brought a degree of economic stability to the country, as a number of economic policies were implemented that led to a considerable improvement in the macroeconomic environment. These policies included the adoption of multi currencies, the removal of price controls, and the removal of GMB's monopoly on grain trade. The resultant effect was the instant restocking of basic commodities by rural general dealers, a development which gave hope for the revival of the agricultural inputs market chain. In response, the agricultural sector grew by 14.9 percent in 2009 and is expected to grow by 18.8 percent in 2010 (GOZ 2010a).

As a result of the improved macroeconomic policy environment, impetus was also given to the argument for market-friendly interventions in the agricultural sector. In direct response to this, the Netherlands Development Organisation (SNV) implemented the Rural Agro-dealer Restocking Programme (RARP), facilitating the linkage of wholesalers and rural agro-dealers by providing insurance to protect stock placed with rural agro-dealers on consignment. To further guide agricultural interventions a number of studies were undertaken by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), USAID and the Agrarian Sector Technical Review Groupⁱⁱ (ARSTG), a working group of the Zimbabwe Multi Donor Trust Fund (ZMDTF) (Murendo et al. 2010; USAID 2010; USAID 2009). All studies noted that the macroeconomic situation prevailing in Zimbabwe offered an opportunity for market-based interventions. The study conducted by ARSTG also revealed that efficient agro-dealership practiced in cereal-growing areas, supported by input vouchers that are redeemable by farmers through rural agro-dealers, can be a source of growth for the agricultural sector (PricewaterhouseCoopers 2010).

Table 2. Local Maize Seed and Fertiliser Production Trends						
Season	Seed produced/ sales (Tonnes	AN Fertiliser (Tonnes)	Basal Fertiliser (Tonnes)			
2002/03	45,000	91,169	196,298			
2003/04	22,000	79,699	180,121			
2006/07	43,000	65,460	99,265			
2007/08	50,000	65,700	91,650			
2008/09	32,000	20,000	50,000			
2009/10	22,672	54,000	100,000			
2010/11	55,263	60,000	140,000			

Source: (Davies 2010; ZSTA; Zimbabwe Fertiliser Industry)

The dramatic recovery of the seed industry, as shown in the figures listed in Table 2, also provided ammunition to proponents of the market-based agricultural input approach. Local maize seed production jumped from 22,672 tonnes in 2009/10 to 55,263ⁱⁱⁱ tonnes in 2010/11, whilst in previous years, most of the local seed production was being absorbed by the Government and NGOs, crowding out rural agro-dealers. The current five year average of maize area planted is estimated at roughly 1.6 million Ha (hectares), calculating the national seed requirements at approximately 40,000^{iv} tonnes . Total maize seed available for 2010/11 summer season was roughly calculated at 63,491 tonnes, including stocks of 8,228^v tonnes that were held by GMB. Therefore, the country as a whole had seed well in excess of its national requirements. As a result, seed companies were forced to use all possible avenues to expose their products to the market, consequently creating opportunities for more involvement by rural agro-dealers. The general availability of agricultural inputs on the market, particularly maize seed, helped to shift the dominant seed narrative from supply gap to that of limited access.

4.2. Who are the Key Actors?

Given the current socio-political environment in Zimbabwe, the 'relief approach' to delivering agricultural inputs is of interest to many stakeholders, including donors, NGOs, private sector companies and farmers (who receive cheap or free inputs). Within the uncertain political climate, it is in the clear interest of politicians to maintain the 'relief approach' for patronage by funds donors, especially as the provision of free or subsidized agricultural inputs has become an electoral issue (Mhinde et al. 2008). Additionally, most of the funding coming into Zimbabwe is earmarked for humanitarian interventions^{vi}. The signals from government regarding the participation of NGOs in the distribution of inputs are mixed, however, many argue that the Government is satisfied with any programmes that improve national food insecurity. Therefore, the 'relief approach' is currently the only way NGOs can continue to both access resources from western donors and continue their work in Zimbabwe.

For input suppliers, such as seed companies, the 'relief approach' provides guaranteed markets and an increase in the demand for agricultural inputs. However, there is no consensus on the appropriate input delivery mechanism by input suppliers. One input delivery preference is to supply seed varieties and fertilisers that small holder farmers are familiar with, in exchange for vouchers given to farmers by NGOs. On the other hand, input supply companies producing varieties that are less well-known prefer a direct distribution mechanism. In addition to these methods, some seed companies are partnering with NGOs in producing seed for secondary crops, such as small grains and legumes that generally do not have commercial value in the open market; these companies are also practicing direct distribution. As this method of input delivery guarantees the strongest market for seed and other agricultural inputs, it is likely that these companies will continue to lobby for the direct distribution method.

Wholesalers are also key actors in the current 'relief approach' debate in Zimbabwe, particularly those newly established wholesalers who are dependent on the 'relief approach' to establish a network of rural agro-dealers. Six of the nine wholesalers who participated in the rural agro-dealer restocking programme were new enterprises, having only just registered as companies between 2009 and 2010. It is uncertain whether these wholesalers are genuine or whether they are opportunists who have set up business to pick up vouchers distributed by NGOs.

Although advocates of the 'relief approach' to agricultural input provision retain their own narrow interests in their arguments for its practice, there is substance in some of their claims. Of particularly strong sway is the assertion that small holder farmers currently command a very limited purchasing power (FAO 2010; Hanyani-Mlambo and Hobane 2010; USAID 2010; ZimVAC 2010). To illustrate, during the 2010/11 agricultural season, the Government, together with farmer unions, implemented several subsidized input programmes. However, even with the subsidized prices, farmers could not afford to buy fertiliser. Additionally, there is a need to resuscitate the agricultural input industry as a whole. Analysts argue that there is merit in the Government implementation of subsidized input programmes to facilitate the revitalisation of the agricultural input supply chain (Kelly 2004; PricewaterhouseCoopers 2010; Scoones et al. 2010; Govere et al. 2009;). The most forceful argument for subsidies is presented by Adesina (2010: 19):

"Subsidies for farmers in Africa are directed at addressing issues of food insecurity and malnutrition. How does one measure the cost of a life of a child that is malnourished but for whom the mother can produce the food if she can afford the farm inputs? How does one measure the benefit of a child being able to attend school due to higher food production of the parents?"

Given the protracted food insecurity situation, high chronic malnutrition rates and years of economic meltdown, it is therefore argued by many that there is room for the 'relief approach' in Zimbabwe. Some of the interest groups that hold to this position (also highlighted above) collaborated with the Zimbabwean Government to draw up a framework for the 2010/11 input programme, discussed in section 4.3.

4.3. Overview of Current Input Programmes (2010-2011 Summer Seasons)

In line with the Post-Washington Consensus context, in which alliances between the state, private sector and aid agencies are struck in order to deliver agricultural inputs, the Zimbabwean Government joined forces with donors and NGOs to develop a framework for the National Small Holder Farmer Input Support Programme for Food Security (NSHFISP) to guide agricultural input support for the 2010/11 cropping season. In principle, the framework positioned rural agro-dealers at the centre of delivering inputs to small holder farmers, broadly stating that "where possible, the Government remains committed to market-based approaches which assist the continued recovery of the rural economy". Consciously or otherwise, the Zimbabwean input programme is being aligned with the call for a "uniquely African Green Revolution", whose focus is on technical and marketbased agricultural solutions.

The NSHFISP framework places farmers into three categories. Category A comprises those households which are considered "labour constrained households/ farmers with chronically ill household members, [those households with a] high ratio of dependents (including orphaned vulnerable children, or OVCs, and the elderly), and female-headed families" (GOZ 2010b: 5). Category A is to receive free inputs.

Category B covers those households that are described as transitory poor farmers, those who, because of the structural changes in the economy, cannot afford to buy inputs. This category was earmarked to undertake community work in order to receive inputs.

The remainder of households/farmers were allotted to Category C. These are considered to have enough resources to purchase inputs if they are available on the market. Experience, however, has taught us that in reality these categories do not exist and it is a formidable task to try and cluster communal households into such categories.

According to the NSHFISP framework, beneficiary households were expected to be provided with an input pack containing 50kg of Compound D basal fertiliser, 50kg of ammonium nitrate fertiliser (AN), 10kg of maize or 5 kg of sorghum seed, and 50kg of lime. The estimated value of the input pack was 88 USD, and a provision of 30 USD was made for administration and logistics costs.

Supported by the Zimbabwean Government and aid agencies, a number of input programmes were born out of NSHFISP, all of which were designed on the assumption that the major constraint faced by farmers is limited access to improved seed varieties and fertiliser (Mhinde et al. 2008; World Bank 2008). Thus, the programmes focused on providing improved seed varieties and fertilisers to farmers.

Table 3: Total Number of Households and Quantities of Inputs under State Input Support Programmes								
Input Support Scheme	No of Households	Maize Seed (Mt)	Small Grains Seed (Mt)	Basal Fertilizer(Mt)	AN (Mt)			
Presidential Input support scheme	560,000	5,000	220	6 ,525	13, 050			
Government	443, 640	7,300	100	22,182	22, 182			
Total	1,003,640	12,300	320	28, 707	35,232			

Source: (MOAMID 2011)

The Government of Zimbabwe acted on this by setting aside 30 million USD for summer cropping season inputs, dividing this into two funds pools of 8 million and 22 million. The 8 million fund pool was targeted at 100,000 vulnerable households, that were allocated 10kg of maize seed or 5kg of sorghum seed, a 50 kg bag of Compound D fertiliser, and a 50kg bag of AN fertilisers. Recipients accessed inputs through a voucher system redeemable at GMB depots. The 22 million fund pool was designed to support 343,643 communal, old resettlement and A1 farmers (i.e. smallholders living in communal areas) with inputs subsidised at roughly 75 percent and 50 percent of open market costs for maize seed and fertilisers, respectively. Effectively, 22 USD 10kg bags of hybrid maize seed were subsided at 5 USD each and 29 USD 50kg bags of fertiliser were subsidised at 15 USD each.

In December 2010, the President of Zimbabwe launched an additional 33 million USD agricultural input scheme, trebling the 10 million USD scheme of the previous year. The programme designated 560,000 beneficiary households, providing these with maize seed, small grains, sunflower seed, groundnuts and cotton seed. The total number of beneficiary households and quantities of inputs distributed under the state input support programmes is shown in Table 3. (previous page)

A key feature of the relief seed distribution in Zimbabwe is its domination by international NGOs at the expense of local NGOs. As was observed by Chatiza and Borrel (2011), local NGOs are taking on increasingly reduced roles in the distribution of agricultural inputs. The estimated value of support given by aid agencies during the 2010/11 summer growing season was 52 million USD from 19 donors. The programme receiving these funds was implemented by approximately 70 NGOs, most of which were international.

Through this programme small holder farmers were provided with inputs under the arrangements of direct distributions and vouchers (valued at 60 and 70 USD), redeemable at rural agro-dealers. Although there was a harmonised input pack agreed to by all parties, ultimately input packages varied among NGOs. The 60 USD voucher assisted farmers in procuring a 50kg bag of fertiliser and a 10kg bag of OPV maize seed, whilst the 70 USD voucher was designed to enable each beneficiary to procure two 50kg bags of fertiliser and a 10kg bag of OPV maize seed. In an effort to limit corruption, address security fears and reduce dependency, aid agencies implementing this programme experimented with contributory and non-contributory electronic vouchers/ bank cards. For contributory electronic vouchers, beneficiaries were required to 15 - 20 towards the purchase of inputs.

The total number of small holder farmers which were allocated support during the 2010/11 summer season was estimated at 1,552,643 – enough to cover all the small holder farmers in Zimbabwe. Table 4 gives a summary of input packages provided by the various input programmes.

Although NSHFISP was designed by an alliance of government and aid agencies, it is interesting to note that almost all stakeholders departed from the agreed framework in terms of design and implementation. To illustrate, although the programme was designed to be implemented through rural agro-dealers, the Government did not follow through with its commitment to use market channels for agricultural input distribution. In preparation for programme implementation agrodealers were identified and trained, however, at the last minute a decision was made by the Government to put the programme into operation exclusively through GMB. This decision was even more surprising given that distributing inputs through GMB was far more expensive

Table 4. Summary of Input Packages by Type of Programme						
Input Programme Packa	Input Programme Package or Potential Package					
Government Vulnerable Farmer Free Input Scheme	 10kg of maize/ 5kg of sorghum seed 50kg of Compound D and 50 kg AN fertiliser 					
Government Subsidized Scheme	 10kg of maize/ 5kg of sorghum seed (5 USD) 50kg of Compound D and AN fertiliser each (15 US) 					
Presidential Input Scheme	 The programme was fluid, with the input pack changing from time to time. 10kg of maize/ 5kg of sorghum seed 50kg of Compound D and 50kg AN fertiliser 					
NGO Voucher Scheme (USD60)	 10kg of maize seed 50kg of fertiliser (AN or Compound D) 					
NGO Voucher Scheme (USD70)	 10kg of OPV maize seed 50kg of Compound D and 50kg AN fertiliser 					
NGO Direct Distribution	 5kg sorghum, 5kg groundnuts, 3kg cowpeas, 2kg millet, 12.5kg AN and 12.5kg Compound D fertilisers 50kg AN and 25kg basal fertilisers, 10Kg maize seed, 3kg cowpeas 50kg AN and 25kg basal fertilisers, 5kg sorghum, 10kg groundnuts 					

compared to distribution through agro-dealers: input distribution through GMB was 6 million USD compared to the projected 1.2 million USD to circulate the inputs through agro-dealers. To some, this was seen as a way of perpetuating agricultural input abuse by top government officials, as had been observed in previous

years (Davies 2010; Mlambo et al. 2010; Scoones et al. 2010; Govere et al. 2009). Another setback of NSHFISP was the reduction of the input pack offered by aid agencies, although it was noted that this did not come as a surprise to many. As was observed by Rohrbach et al (2004), the main consideration of aid agencies is to

Table 5. An Overview of the 2010/11 Input Programmes							
Programmes	Objective	Intended Outcomes	Possible Unintended Outcomes				
Government Input Programmes							
Government Social Assistance Scheme	Provide inputs to vulnerable communal households without excess labor for public works.	 Appropriate varieties are distributed due to technical expertise at the government's disposal Benefit the most vulnerable small holder farmers 	 Partisan beneficiary selection, untimely distribution of inputs Distortion of input markets, leakages and rent-seeking Create dependency on free inputs 				
Government Subsidized Input Programme	Provide agricultural inputs to transitory poor farmers, who are considered able-bodied and are able to farm if they are provided with input assistance.	 Benefit transitory poor farmers who, because of the structural changes in the economy, could not afford to buy inputs. Reduce dependency syndrome 	 Untimely distribution of inputs, distortion of input markets Leakages and rent-seeking Difficult to target 				
	A	id Agencies Input Programmes					
Value-Based Voucher Input Scheme	Provide inputs to vulnerable communal households whilst simultaneously resuscitating the rural economy	 Provide inputs in a transparent and non-partisan manner Cost efficient: distributing vouchers is likely to be cheaper than commodity- based alternatives because transport and logistics costs are lower Choice: farmers decide what they will buy with access to preferred input types if there is competition Resuscitate the agro input value chain Beneficial knock -on effect in the economy 	 Expose farmers to supply failures and prone to price fluctuations Disadvantage those engaging the market on a cash basis Prone to corruption and diversion e.g. trader provides partial allotments or asks for bribes Attractive to everyone therefore difficult to target Inflationary risk resulting in beneficiaries getting less for the voucher with a knock-on effect for non-beneficiaries 				
Commodity- Based Vouchers	Provide inputs to vulnerable communal households whilst simultaneously resuscitating the rural economy	 Inputs are provided in a transparent and non-partisan manner Minimize the disruption of the markets Farmers are provided with appropriate inputs Contribute to the resuscitation of the agro input value chain Farmers are guaranteed to receive a certain input pack 	 Late distribution of inputs due to lack of incentive for suppliers to deliver inputs in a timely manner because they will have banked the cash. Undermine farmers' preferences resulting in provision of inputs which are not used by farmers. 				
Contributory Electronic Voucher Input Scheme	Provide agricultural inputs to transitory poor farmers, who are considered able to farm if they are provided with input assistance	 Provide inputs in a transparent and non-partisan manner Minimize the disruption of the markets Limit corruption Reduce dependency syndrome 	 Untimely distribution of inputs, distortion of input markets Distribution to unintended beneficiary groups 				

Aid Agencies Direct Input Programme	Provide inputs to vulnerable communal households where gaps in the market are noted	 Good quality agricultural inputs Inputs are provided in a transparent and non-partisan manner Farmers are guaranteed to receive a certain input pack 	 Poor quality inputs due to lack of due diligence Untimely delivery of inputs due to lack of urgency by the private sector companies
	Presidentia	Well-wishers Agricultural Inputs Scher	ne
Presidential Well Wishers Input Support Programme	Provide inputs to vulnerable communal households where gaps in the market are noted		 Partisan beneficiary selection, untimely distribution of inputs

Source: (Rohrbach et al. 2004; Harvey 2005; Govere et al. 2009, Author's)

reach as many beneficiaries as possible within a tight budget. Therefore, to reach the 500,000 household target set by the NSHFISP framework, aid agencies reduced the input pack. Considering that NGOs are paid per household supported, the reduction of the input pack and increase in the number of households supported also directly benefited NGOs. The amount earmarked for NGO administration costs was a staggering 34 percent^{vii} of the total value of the voucher, a quite liberal amount given the limited role that NGOs played in the actual distribution of inputs through the voucher system. Additionally, an initial agreement was made to ensure that state and aid agencies implemented in different regions in order to complement each other and to maximise efficiency. However, in practice as many as 18.5 percent of those who benefited from agricultural support programmes received overlapping inputs from the Government and NGOs.

4.4. Input Delivery Mechanisms

Input delivery mechanisms can be categorised as market-friendly or non market-friendly systems. For the purposes of this paper a mode of distribution was considered market-friendly when the inputs were delivered through the normal chain, terminating at a rural agro-dealer, as shown in Figure 5.

Figure 5. Classification of Input Delivery Mechanisms



NGOs involved in the direct distribution of agricultural inputs to farmers oversaw the transportation and allocation of these inputs to beneficiaries, bypassing rural agro-dealers. All Government and Presidential input programmes also delivered inputs directly to farmers, again shunning rural agro-dealers as inputs were delivered through the GMB network of depots. All such circumventive approaches were considered non marketfriendly and damaging to the national (normal) agricultural input distribution chain.

Commodity-based vouchers, or'closed'vouchers, were another form of input distribution. A beneficiary was given a voucher redeemable for a predetermined package of inputs which they would then collect from a local agro-dealer, instead of directly from an NGO.

The purpose of this mechanism was to re-connect recipient farmers with agro-dealers. Additionally, elected agro-dealers were expected to stock inputs in excess of the requirements of the commodity vouchers distributed in the area to allow for supplementary cash purchases.

This mode of distribution was classified as marketfriendly because the inputs were delivered through the normal agricultural input delivery value chain.

The majority of value-based vouchers, that were limited to such agricultural inputs as seed, fertiliser, chemicals and agricultural tools, were also considered a market-friendly intervention strategy.

5. Case Studies

5.1. Study Sites

The configuration of the 2010/11 input programmes can be broadly categorised into state and non-state, market-friendly and non market-friendly programmes. Four case study sites were chosen in order to explore how these programmes actually performed (Table 5). Two sites were chosen in low agricultural yield potential areas and two were chosen in high agricultural yield potential areas.

5.1.1. Low Agricultural Yield Potential Study Sites

The low agricultural yield potential study sites chosen were Chivi in Masvingo and Beitbridge in South Matabeleland. In examining the interaction between the state and non-state programmes of Chivi, it was found that state input support programmes targeted 2,300 vulnerable households, whilst the subsidized input scheme benefited 3,500 households. Additionally, an estimated 8,000 households were earmarked to be supported by the Presidential Input Scheme. In contrast, non-state (NGO) programmes supported approximately 17,661 households. Without occurrences of overlap, the total support was projected to be enough to cover all of the communal households in Chivi^{viii}.

Only state programmes were implemented in Beitbridge, with an estimated 4,000 beneficiaries receiving support from the Government-subsidised programme and a further 1,700 vulnerable households were were allotted additional inputs. Moreover, the Presidential Input Scheme aimed to support about 7,707 households. In total, Government support was assessed at covering around 54 percent of the households in Beitbridge, assuming that each household received inputs from only one source.

5.1.2. High Agricultural Yield Potential Study Sites

Goromonzi in East Mashonaland and Gokwe South were chosen for the high agricultural yield potential study sites. In Goromonzi a total of 10,000 communal households received value-based vouchers from non-state NGO programmes. Conversely, state programmes directed their support to 700 vulnerable households, whilst the subsidized input scheme benefited 3,700 households. In addition to these, the Presidential Input Scheme was proposed to benefit 1,200 households. The overall aid given was estimated to be

Table 6. District Characterisation and Types of Input Programmes							
District	District Characterisation	NGO Programmes		Government Programmes		Presidential	
		Direct	Manual Voucher	Electronic Voucher	Free	Subsidised	
Beitbridge	 Lies in NRV Rainfall in this region is too low and erratic for reliable production 				NM	NM	NM
Chivi	 Lies in NR IV and V Annual rainfall less than 450mm in NRV and ranges between 450-650mm in NR IV Of the 32 districts, 29 are communal, 2 are old resettlement and 1 is a small scale communal farming area 	NM	М		NM	NM	NM
Goromonzi	Lies in NR II Annual rainfall ranges between 750-1000 mm	м	м	М	NM	NM	NM
Gokwe South	 Lies in NR III & IV Annual rainfall ranges between 650-800 mm in NR III and 450 – 650 in NR IV 	NM	М		NM	NM	NM

Table 6. District Characterisation and Types of Input Programmes

Note: NR - Natural Region; NM - Non Market-friendly; M - Market friendly

to cover approximately 41 percent of the households in Goromonzi, assuming that each household received inputs from only one source

In Gokwe South a total of 25,116 communal households were supported by non-state input aid efforts. Of these, 20,366 households received vouchers redeemable at local agro-dealers and the remainder received inputs directly from NGOs. State programmes, on the other hand, directed their funds to vulnerable and subsidized input support programmes benefiting 3,860 and 7,000 households, respectively. The Presidential Input Scheme was also intended to benefit 10,401 households. Altogether, the aid was sufficient to cover 73 percent of the communal households in Gokwe South, provided that there was no overlap of programme beneficiaries.

The characterisation of the cases study districts and the types of programmes implemented in each district is presented in Table 6 below.

5.2. The Outcome: State Programmes

Across the study sites the implementation structures of state programmes were largely determined by personalities on the ground rather than directives from central level. The configuration of committees which implemented the programmes varied among the districts, though in all cases the key actors included Government officers (District Administrator, Extension Officers, District Social Welfare Officer, and Zimbabwe Republic Police), GMB, the Rural District Council and Community Leadership (Chiefs, Councillors and Village Heads), and beneficiary households.

Agricultural input programmes are an electoral issue. To demonstrate, representatives of Members of Parliament and Senate in Chivi were co-opted into the input distribution committees to safe guard the interest of their constituencies. In some districts, technical considerations were put aside in order to accommodate political interests. Agricultural inputs were equitably shared among all communal and A1 wards, although in some cases there were clear technical reasons why this should not have been the case. Agro-ecological zones, number of households per ward and the potential of overlap with NGO programmes were not considered in the allocation of beneficiaries. Additionally, unlike in other case study site, the District Input Coordination Committee in Beitbridge considered technical input from extension officers in the allocation of inputs. Priority was given to farmers with the greatest potential to utilise the inputs, particulary those in irrigation schemes.

For all of the state programmes, primary beneficiary selection was undertaken by community leaders who were generally viewed as partisan participants. During field missions to the case study sites it was clear that information about state programmes was not widely disseminated; small holder farmers interviewed professed ignorance about these programmes. This is an indication that the programmes were open to a select and closed group of people connected to the officials who were responsible for selecting beneficiaries. In most districts the majority of farmers who were initially registered to benefit from the programme failed to raise the required 35 USD contribution. As a result, the programme ended up excluding those who needed it most, and benefiting the elite that had cash available to buy the initial inputs.

The configuration of the government-subsidized input programme changed considerably within the space of three months. Although initially farmers were expected to buy an input pack comprising seed and fertiliser, this was then relaxed to allow farmers to purchase inputs of their choice. Another major change that was made concerned a directive to GMB to establish satellite depots, resulting in inputs ending up with agro-dealers that were then made open for anyone with money to buy. In some districts the programme was later converted to an input credit scheme. Considering the perfomance of previous government loan schemes, it is fair to conclude that the scheme was basically converted into a free input scheme, leading to product leakages and creating opportunities for corruption.

Although by government standards the 2010/11 agricultural inputs programme was launched early in the season, the timely delivery of inputs was compromised due to programme design challenges. Delays were observed owing to the push to compel farmers to buy an input pack comprising seed and fertiliser, even in areas where the economic value of using fertiliser is limited Hence, the potential impact of the programme was also impeded. Although GMB was given 6 million USD for administering the programme, there was no supplementary budgetary provision for Agritex and Social Services for beneficiary selection. The lack of budgetary provision particularly for the social services department delayed the beneficiary selection process, and consequently farmers' access to the inputs.

5.3. The Outcome: Non-state (NGO) Programmes

In the course of investigating the non-state (NGO) programmes, it was found that community leadership had a hand in the selection of beneficiaries. Similarly, therefore, to state programmes, NGO programmes were also vulnerable to political interference. In Chivi and Gokwe South, beneficiaries were selected through a participatory community ranking process facilitated by community leadership, government extension officers and officers from the implementing NGOs. In Goromonzi, the overriding selection criterion was willingness to practice conservation farming. However, according to data from the first round crop assessment conducted by Agritex, approximately 30 percent of those who benefited from NGO support in Goromonzi did not dig planting basins (a conservation farming strategy). This proportion, however, does not correspond with farmer accounts of being excluded from aid benefits even after digging the planting basins. Some farmers complained of their names being 'used' to acquire inputs that were then given to those households with connections.

Figures 6 and 7 illustrate the types of inputs purchased by beneficiaries who received value-based vouchers. In Gokwe South, the dominant commodity purchased was maize seed, followed by knapsack sprayers and cotton chemicals. In Goromonzi, fertilisers were the product of choice among beneficiaries, AN fertiliser being the most popular. Agro-dealers in this area felt that if it was not for supply failures, the proportion of AN fertilisers purchased would have been higher. One agro-dealer remarked that "beneficiaries did not consider vouchers as cash, therefore when preferred varieties were not available they bought any product on offer." Beneficiaries were keen to redeem the vouchers as soon as possible for fear of forfeiting the vouchers. OPV maize seed varieties, promoted by NGOs over the years, were the last product of choice for many farmers. This is seen to have probable negative knock-on effects for smaller seed houses whose business models were developed around producing OPV seed for the captive NGO market.

Many of the farmers who benefitted from NGO aid in Chivi were not happy with the inputs provided. Farmers preferred maize to sorghum seed that was supplied, and as a result, some farmers did not even plant the sorghum seed that they were given. Moreover, according to extension officers the germination rates of the groundnut seed distributed was as low as 5 percent. Some farmers expressed concerns about the quality of inputs distributed through NGO programmes, one such remark being: "Why do NGOs experiment with our lives? Do you know that in agriculture if you miss the season that spells hunger for the family?" Other farmers wanted to know why "donors buy inputs from indigenous business people when there are tried and tested seed companies in the country". Inputs were also distributed to farmers late, as private sector companies did not have the incentive to deliver inputs in a timely manner owing to many having already deposited their payment cheques.

For the contributory programme implemented in Goromonzi, beneficiaries presented 15 USD towards the purchase of agricultural inputs. As a strategy of the contributory programme, electronic vouchers were printed on scratch cards with pin codes linked to a central database containing beneficiary details. Beneficiaries would present the voucher to an agro-dealer who in turn would send a message to the central database through a mobile phone for authentication. Once authenticated the farmer was allowed to proceed with purchase. This system, however, was considered cumbersome by both farmers and agro-dealers. Due to poor network connectivity most of the vouchers were redeemed manually, therefore revoking all the benefits which this system possessed. One wonders why this system was even tried in areas where there was no network at all.



Figure 6. Proportion of Agricultural Inputs Purchased by Beneficiary Households in Gokwe South



Figure 7. Proportion of Agricultural Inputs Purchased by Beneficiary Households in Goromonzi

5.4. The Outcome: Rural Agro-dealers

Across all case study sites, with the exception of Beitbridge agro-dealers could be classified into two broad categories: those who rented and those who owned the buildings from which they were operating. The majority of dealers renting their site were younger entrepreneurs who were taking advantage of the improved macroeconomic environment to start up a business. In general, most of these entrepreneurs began their businesses to retail basic commodities, and were either fortunate to be selected to be part of the NGO input programmes or decided to sell agricultural inputs out of their own initiative.

Those agro-dealers who enjoyed the ownership of their businesses had been in operation for generations, many started by parents and now largely being run by their children. These retailers had a long history of selling agricultural inputs. As such, their knowledge of what small holder farmers in the area required was informed by their own experience. They were not provided with formal training on any of the agricultural products they were trading. One such agro-dealer remarked that "we are also farmers in this area, therefore, we know varieties which do well here."

According to Gambetta (1998), cited in Lyon (1999), trust operates when there is confidence in other agents, despite uncertainty, risk and possibility for them to act opportunistically. As is demonstrated in the following paragraphs, there was a genuine lack of trust between wholesalers and agro-dealers, leading to the two bodies often working at variance with one another, rather than in unified partnerships.

Wholesalers at this stage were undercut by NGOs in their work, as they were given a small window of time in which to begin operation of the value-based programme, especially in Gokwe South and Goromonzi. The major selection criterion for their partnership with the programme was the ability of a wholesaler to provide warehouse space, which few were able to comply with on such short notice. To maximize profits and minimise losses, one wholesaler that was interviewed had set up temporary distribution structures that ran parallel to the NGO-led programmes, undermining the very agrodealers the programme was meant to support. This particular wholesaler was able to rent warehouse space and deployed its own staff to redeem vouchers, using a former bottle store as a dealers shop (Figure 8). Although seen as a shrewd business decision, it points to flaws in the design of the original programme and a lack of enforcement of the rules of engagement.

MacGaffey (Scoones et al 2010) made the observation that the emergence of the informal economy in Zimbabwe has blurred the boundaries between the legal and illegal. Largely motivated by the desire to pick up vouchers distributed by the CARE-AGENT programme, wholesalers set up an extensive network of rural agrodealers, some of which were immediately closed down when the vouchers dried up.

According to findings within the case study areas, most rural agro-dealers engaged by wholesalers during this time were not licensed for trade in agricultural inputs. Worse still, most of these agro-dealers were not even aware that they needed an additional licence besides their own shop license. Regulatory authorities did not have the manpower or financial resources to enforce this legislation.

The systems included restricting agro-dealers to the redemption of vouchers only and undertaking frequent monitoring visits. Wholesalers were of the view that agro-dealers lacked capacity in areas of business ethics particularly respecting contracts and also required training in business and product handling, activities which they could undertake because of the emergency nature of the programmes. The photograph in Figure 9 shows poorly stored fertiliser. The fertiliser, which should have been stacked on pallets, was exposed to moisture when an adjacent refridgerator defrosted.

The value-based voucher programme was implemented at the back of a Rural Agro-dealer Restocking Program (RARP) that was coordinated by SNV. The programme provided insurance to wholesalers to protect stock that was placed with rural agro-dealers on consignment, covering risks such as theft, fire and payments for transportation of stock back to warehouse in the event of low performance by agro-dealers. One wholesaler reported during an interview that as many as 17 percent of the agro-dealers with whom they had signed contracts recorded shortfalls which they refused to honour to the police.

Figure 8. Poorly Stored Fertilisers



Source: (Douglas Magunda)



Figure 9. Bottle Store Used as Agro-dealer Shop

Source: (Douglas Magunda)

These practices again verified that the agro-input programmes ultimately benefitted the elite, whilst overlooking disadvantaged rural agro-dealers.

The NGO input distribution programmes in Goromonzi, Gokwe South, and Chivi placed agro-dealers at the centre of programme implementation. However, inquiries were not made into how many agro-dealers would be appropriate per ward, as traditionally agro-dealers were limited to growth point sites and a few major business centres. As a consequence, an average of three agrodealers per ward were engaged, which led to clear overtrading in the areas. Ultimately, the model used by NGOs to deliver value-based vouchers was at variance to the tradition systems where agro-dealers collected inputs from wholesalers in the main business centres.

In some cases the NGO model increased costs to such an extent that inputs sold by agro-dealers through the programme were more expensive than those sourced by agro-dealers through their normal wholesaler business channels.

The majority of agro-dealers who participated in the humanitarian programme in Chivi were those who were trained through the CARE Agribusiness Entrepreneur DevelopmentNetworkandTraining (AGENT) programme. Unlike in Goromonzi & Gokwe South, there were a number of rural retailers in this area who sold agricultural inputs (mainly maize seed) out of their own initiative. The business models used by these agro-dealers were based on consignment and sales were conducted in cash or credit. Through the AGENT programme, CARE linked Chivi agro-dealers to a wholesaler based in Masvingo. These agro-dealers were able to access agricultural inputs worth 840 USD^{ix} on a 14-day credit cycle, although many dealers objected that a 14-day repayment period was too short. On the other hand, agro-dealers unanimously agreed that the major benefit of the CARE-AGENT programme was a credit line that was negotiated for grocery stocking facilities. This development was praised by most participating agro-dealers, as it allowed them to be in business throughout the year, rather than operate less-stable seasonal agricultural input shops. Many of the Chivi agro-dealers reported doing far more busines in 2010/11 than they had been able to do in the past decade,

Agricultural input traders in Beitbridge were confined to selling within the town, most inputs being made available at the Spar Supermaket, which were supplied on consignment from a wholesaler based in Masvingo. Interviews held with rural retailers indicated that they mainly sell seed per order; seed stocks are not kept. Figure 10 shows typical items found in a rural agro-dealer in Beitbridge, including such items as plough shares and agricultural chemicals.

Figure 10. Typical Items in a Rural Agro-dealer Shop



Source: (Douglas Magunda)

Although some agro-dealers seemed happy simply to have profited from the CARE-AGENT programme, others suffered exclusion from the benefits, which were generally perceived to be heavily skewed in favour of wholesalers. Some agro-dealers were of the view that they were not being accorded the respect they deserved as business people, particularly in light of wholesalers setting input prices without agro-dealer consultation. In some cases, agro-dealers lost respect and good will from the communities with which they worked due to such excessive prices. Yet another injurious situation that arose between agro-dealers and wholesalers involved the accusation that some wholesalers were glibly 'recalling' and 'dumping' products, moving them between agrodealers in order to charge for their loading and off-loading. These agro-dealers who incurred these expenses were not able to make sufficient sales to offset their costs.

As has been demonstrated by research findings discussed above, although wholesalers and agro-dealers were intended to work in complimentary roles, the inability of NGOs to implement their programmes in a way that reconciled the interests of the private sector, led to miscarried humanitarian intentions.

6. Discussion and Conclusion

The aim of this paper has been to interrogate the 'relief approach' applied to the provision of agricultural inputs in Zimbabwe, with a view to understanding the sociopolitical environment of agro-dealers. The study used case studies to gain clearer insight into how the theoretical pros and cons of the various state and non-state input delivery systems played out in actuality.

The political economy of the agricultural inputs 'relief approach' was found to be largely dominated by the Zimbabwean Government and international NGOs. Driving the agenda on the ground were input (seed and fertiliser) suppliers and a new breed of wholesalers. Research uncovered that rural agro-dealers and farmers were more peripheral figures in the political environment of the 'relief approach', regarded mainly as beneficiaries. The study was able to conclude that, for various political interests, the 'relief approach' will be applied to the Zimbabwean input delivery landscape for some time to come. The departure of all the input programmes from their agreed frameworks is a clear indication that politicaleconomic factors matter in the design and implementation of agricultural programmes. The Government retracted its commitment to use the market to deliver inputs, whilst aid agencies reduced the input pack size in order to reach the greatest number of beneficiaries possible as they were paid administration costs by donors based on the number of beneficiaries supported. Additionally, the Government programme was implemented in all of the communal and A1 wards, the areas that were designated to NGO programmes. Therefore, a great deal of overlap occurred with programme benefits, resulting in excess for some to the exclusion of others.

For the first time in many years, as a result of involvement in NGO-led agricultural input programmes, agro-dealers were able to play a role in delivering agricultural inputs to farmers. However, research conducted within the case study areas established that whilst agro-dealers were at the centre of NGO input distribution to beneficiaries, the relationship between agro-dealers and participating wholesalers was characterised by a strong lack of trust and respect. The power relations were skewed in favour of wholesalers, with rural agro-dealers being reduced to the role of providing warehouse space and dispatching clerks. Wholesalers also determined the input varieties that were stocked by rural agro-dealers, with very little input from the dealers, further deteriorating any chance for a unified partnership. Entrepreneurial agro-dealers, those who ventured into business out of their own initiative, stocked input varieties that were based on the CARE-AGENT business model.

An estimated 55.8 percent of the households across the case study sites engaged the market to access inputs (seed or fertiliser) (Table 7). Research revealed that the greatest proportion of housheolds that purchased inputs was surprisingly found in the low agricultural yield potential area of Chivi. This discovery was in part explained by the knowledge that aid agencies distributed sorghum and legume seed which is not preferred by farmers, hence farmers engaged the market to buy the desired maize seed.

Based on evidence gathered during this study, rural agro-dealers have the potential to play their own part in delivering the Green Revolution in Zimbabwe. The ideal rural agro-dealer is expected to make appropriate agricultural inputs available to farmers, in addition to acting as a source of extension. The question that this research poses is: Are agro-dealers able to play this role in the Zimbabwean context?

Agro-dealers are first and foremost business people, and are one link of a chain of actors in the agricultural support arena. Inputs that are stocked by dealers are determined by a number of factors, including terms with which they acquire their products from suppliers, the purchasing power of the small holder farmers, and to some extent, the preference of farmers to particular

Table 7. Proportion of Households to Access Inputs, by Source						
District	Purchases (%)	NGO (%)	Government (%)	NGO or Government (%)		
Beitbridge	38.3		41.1	41.1		
Chivi	64.2	47.5	22.5	58.3		
Gokwe South	62.7	28.7	57.3	74		
Goromonzi	54.7	60.7	28	74		
Overall	55.8	36.4	37.8	64		

inputs and seed varieties. Although the majority of agrodealers are also farmers in their own right, and are aware of farmer preferences, trading terms with wholesalers and other input suppliers are the key determinants of what agro-dealers are able to offer. In almost all study sites, farmers reportedly relied on the advice of government extension services rather than agro-dealers. Due to their need to push their products, agro-dealers were not perceived by farmers as neutral extension agencies, but rather as being biased to their own products.

As was observed by the UNDP (2008), decades of state and humanitarian interventions have created a blame culture within the Zimbabwean business community. In the course of the study it was found that most seed companies were in possession of considerable quantities of seed, using all possible avenues to expose their products to the market. Despite the apparent improvement in the availability and sales of agricultural inputs, seed companies blamed free or subsidized input assistance schemes implemented by government and NGOs for their poor seeds sales. However, only a small fraction of the seed available on the market was distributed through direct aid programmes, and some of the state-led programmes were reported as being implemented too late to have had a negative impact on seed sales on the open market.

In high agricultural yield potential areas the seed market was dominated by large seed companies, distributing mainly hybrid maize varieties. However, in cases of limited financial resources, farmers in high agricultural yield potential areas tended to give more priority to fertiliser procurement rather than hybrid seed. Products of smaller seed companies were visible in low agricultural yield potential areas, mainly selling public varieties such as ZM521, R201 and R215. It was noted by this study that the demand for hybrid seed is on the decline, with a significant proportion of farmers relying on informal seed systems and even growing their own seed (OPVs). These occurrences are indicative of clear market segmentation. A realisation of how the seed industry has evolved over the years can help in developing strategies to sustain that sector, as well as provide guidance in the design of future relief programmes.

Throughout the course of this study, it was found that the valued-based voucher system, driven by the private sector, was the most efficient in terms of timely delivery of inputs. This arrangement was also favoured for the range of choice it allowed farmers. The direct and commodity-based voucher systems, on the other hand, were reported to be consistently late in the delivery of inputs. This was due to there being little incentive for suppliers to deliver inputs efficiently because of prior receipt of their payment. Priority was therefore given to areas where value-based vouchers were distributed, in an effort to acquire additional profits. Additionally, inputs delivered through these programmes were sometimes of such poor quality that farmers questioned the motive behind the programmes. A setback of the value-based voucher system occurred in cases where inputs were far more expensive than those sourced through the normal agro-dealer business channels. An evaluation conducted by Concern World Wide in Gokwe South revealed that, compared to direct distributions, the value-based programme was 21 percent more expensive (Concern World Wide, 2010). One can argue that when offered as a part of a relief programme, this is too high a cost for impoverished farmers to pay in an effort to resuscitate the market.

Regarding agro-input beneficiaries, it was found that both Government and NGOs programmes were vulnerable to political interference from community leadership due to its partisan nature and its place at the centre of the beneficiary selection processes. In areas where both NGOs and the Government supported households, survey data showed an 18.5 percent overlap of households in receipt of goods. Those in positions of authority within the community constituted the majority of households which benefited from both programmes. As one informant explained, "It is common knowledge that those in position of authority always benefit from all programmes, regardless of the selection criteria".

Due to design failures government-subsidized programmes ended up benefitting the elite. The majority of households initially identified to benefit from this programme failed to raise the 35 USD required to enter the programme, therefore the entrance condition was relaxed. Mhinde et al (2008) noted that it is hard to find examples of subsidy programmes where the benefits are not excessively captured by more privileged farmers. This was also found to be true for the state subsidy programme implemented by the Government in 2010/11.

Lessons from the implementation of the 2010/11 agricultural relief programmes clearly demonstrated that political and economic factors matter in the delivery of agricultural inputs to small holder farmers. The lack of trust and power relations between agro-dealers and wholesaler highlighted the most significant gap that needs to be addressed if rural agro-dealers are to be key players in the new African Green Revolution.

End notes

- ¹ Data was collected by Agritex as part of the first Round Crop Assessment 2011.
- ⁱⁱ The working group is composed of the key Donors, World Bank, European Union, DFID, AUSAID, GTZ, CIDA, SIDA, NORAD, USAID and DENMARK.
- According to a seed situation report by the Zimbabwe Seed Traders Association as of 8 December 2010.
- $^{\mbox{\scriptsize iv}}$ Area planted from MOAMID and seeding rates of 25kg per Ha.
- ^v GOZ, Fiscal Policy Statement July 2010.
- According the EU Council Decision of 16 February 2010, the European Commission provides direct aid to the Zimbabwean population (EU press briefing dated 16 November 2010, http://www.delzwe.ec.europa.eu/en/whatsnew/ Smallholder%20farmers%20press%20release.pdf).
- vii The cost of delivering an 88 USD voucher was estimated at 30 USD.
- viii Assuming there were 30,654 households in Chivi, a projection from the 2002 National Census.
- ^{1x} This was enough for an agro-dealer to stock about 400kgs of hybrid seed at the going rates of 22 USD per kg.

References

Adesina, A. (2010) Feeding Africa: Evaluating the Past and Achieving the African Green Revolution. Keynote address delivered at the World Bank's Conference of Agriculture, Gaborone, Botswana.

Alumira, J. D. (2002) The Role of Technology in Agricultural Transformation in Africa: Adoption and Impacts of Improved Cereal Varieties in Zimbabwe. Paper presented at the Workshop on the Green Revolution in Asia and its Transferability to Africa, Tokyo, Japan. http://www.ciat.cgair.org/africa/seeds.htm [accessed....]. [accessed June 4, 2011].

Alumira, J. and Rusike, J. (2005) *The Green Revolution* in Zimbabwe. Journal of Agricultural and Development Economics 2(1): 50-66.

Amanor, K.S. (2011) From Farmer Participation to Pro-poor Seed Markets: The Political Economy of Commercial Cereal Seed Networks in Ghana. IDS Bulletin 42(4): 48-58.

Chatiza, K. and Borrel, A. (2011) Evaluation of the Agricultural Coordination Working Group (ACWG) and Sub-Working Groups in Zimbabwe. FAO, Zimbabwe.

Concern World Wide (2010) Open Agri-Vouchers Programme in Gokwe Spring 2010. Paper presented at the Agricultural Coordination Working Group, 25 November 2010, Harare, Zimbabwe.

De Groote, H., Owuor, G., Doss, C., Ouma, J., Muhammad, L., and Danga, K. (2005) *The Maize Green Revolution in Kenya Revisited*, Journal of Agricultural and Development Economics 2(1): 32-49.

FAO. (1996) Lessons from the Green Revolution: Towards a New Green Revolution.

FAO. (2005) Special Event on Green Revolution, Background Papers.

FAO and WFP. (2009) Special Report: Crop and Food Supply Assessment Mission, FAO/WFP, ROME.

FAO and WFP. (2010) Special Report: *Crop and Food Supply Assessment Mission*, FAO/WFP, ROME.

Gambetta, D. (1988). `Can we trust trust?'. In Gambetta, D. (ed.) Trust: Making and Breaking Cooperative Relations. Oxford: Blackwell, pp. 213±237.

Gandure, S. and Marongwe, N. (2006) Knowledge Review and Gap Analysis: Hunger and Vulnerability in Zimbabwe, Regional Hunger and Vulnerability Programme.

Govere, J., Foti, R., Mutandwa, E., Mashingaidze, A.B. and Bhebhe, E. (2009) *Policy Perspectives on the Role of Government in the Distribution of Agricultural Inputs to Farmers*: Lessons from Zimbabwe. International NGO Journal, 4(10), 470-479.

GOZ. (2010a) Mid Term Fiscal Policy Review. Presented by the Finance Minister, Hon. T. Biti, 14 July, 2010.

GOZ. (2010b) National Small Holder Farmer Input Support Programme for Food Security: 2010/11 Summer Season.

Hanyani-Mlambo, B.T. and Hobane, A.P. (2010) Market- Based Input Assistance Programmes: Desk Study Report.

Harvey, P. (2005) *HPG Discussion Paper: Cash and Vouchers in Emergencies*. The Humanitarian Policy Group at ODI. http://www.odi.org.uk/resources/download/310.pdf [accessed June 4, 2011].

Kelly, V. (2004) Expanding Access to Agricultural Inputs. Presentation at Rockefeller Foundation Workshop on Markets, April 5-8, 2004 in Nairobi, Kenya.

Lyon, F. (1999) Micro- Enterprises and Privatized Agricultural Services: Information Flow, Credit and Trust in Small Seed Enterprises in Ghana. Journal of International DevelopmentJournal of International Development, J. Int. Dev. 11, 673±685 (1999)

Mhinde, I., Jayne, T.S., Crawford, E., Ariga, J. and Govere, J. 2008. Promoting Fertiliser Use in Africa: Current Issues and Empirical Evidence from Malawi, Zambia and Kenya. Presentation at the Southern Africa Regional Conference on Agriculture "Theme: Agriculture-led Development for Southern Africa: Strategic Investment Priorities for Halving Hunger and Poverty by 2015". Gaborone, Botswana. http://www.aec.msu.edu/fs2/zambia/ Jones_SARCA_fert_Gaborone_Dec-8-2008.pdf [accessed June 10, 2011].

MOAMID. (2011) First Round Crop and Livestock Assessment Report. Harare, Zimbabwe.

Murendo, C., Mazvimavi, K. and Kunze, M. (2010) Agricultural Input Market Study, Bulawayo, Zimbabwe. The International Centre for Research in the Semi-Arid Tropics.

Mutonodzo-Davies, C.. (2010) The Political Economy of Cereal Seed Systems in Zimbabwe: Rebuilding the Seed System in a Post-Crisis Economy.Working Paper 015, Brighton:Future Agricultures Consortium

Mutonodzo-Davies, C. and Magunda, D. (2011) The Politics of Seed Relief in Zimbabwe. *IDS Bulletin* 42(4): 90-101.

Odame, H. and Muange, E. (2011) *Can Agro-dealers Deliver the Green Revolution In Kenya*? Working Paper 014, Brighton: Future Agricultures Consortium.

Otsuka, K. and Kalirajan, K. (2005) An Exploration of Green Revolution in Sub-Saharan Africa. Journal of Agricultural and Development Economics 2(1): 1-6.

PricewaterhouseCoopers. (2010) Zimbabwe Multi Donor Trust Funds: Zimbabwe Agricultural Sector Assessment Study.

Rohrbach, D., Charters, R., and Nyagweta, J. (2004) Guidelines for Emergency Relief Projects in Zimbabwe: Seed and Fertiliser Relief. ICRISAT Bulawayo, Zimbabwe and Rome, Italy: FAO: 68.

Sayce, C. (2004) Hard Truths and Soft Solutions: The Aid Industry Approach to the Emergency in Zimbabwe. http://reliefweb.int/ node/410953 [accessed June 7, 2011].

UN. (2009) Zimbabwe 2009: Consolidated Appeal. Office for the Coordination of Humanitarian Affairs (OCHA), Switzerland.

UNDP. (2001) Zimbabwe United Nations Common Country Assessment. UNDP, Harare, Zimbabwe.

UNDP. (2008) Comprehensive Recovery Economic Recovery In Zimbabwe: A Discussion Document. UNDP, Harare, Zimbabwe.

USAID. (2009) Seed System Security Assessment: Zimbabwe, Office of Foreign Disaster Assistance, Washington DC.

USAID. (2010) Zimbabwe Agricultural Sector Market Study. Working Paper 014, Future Agricultures Consortium, Washington, DC.

World Bank. (2008) World Development Report 2008: Agriculture for Development Policy Brief. Washington DC, USA: The World Bank.

ZimVAC. (2006) Zimbabwe Urban Areas Food Security and Vulnerability November 2006 Assessment Report, Urban Report No. 2. Zimbabwe Vulnerability Assessment Committee, Harare.

ZimVAC. (2010) Rural Livelihood Assessment May 2010 Assessment Report. Zimbabwe Vulnerability Assessment Committee, Harare, Zimbabwe



This Working Paper was written by Douglas Magunda for the Future Agricultures Consortium. The series editor are Beatrice Ouma and Elaine Mercer. Further information about this series of Working Papers at: www. future-agricultures.org

The Future Agricultures Consortium aims to encourage critical debate and policy dialogue on the future of agriculture in Africa. The Consortium is a partnership between research-based organisations across Africa and in the UK. Future Agricultures Consortium Secretariat at the University of Sussex, Brighton BN1 9RE UK T+44 (0) 1273 915670 E info@future-agricultures.org

Readers are encouraged to quote or reproduce material from Future Agricultures Briefings in their own publications. In return, the Future Agricultures Consortium requests due acknowledgement and a copy of the publication.

FAC appreciates the support of the UK Department for International Development (DfID)

