

Agriculture: Future Scenarios for Southern Africa

A Case Study of Zimbabwe's Food Security

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Abstract

This case study examines the agricultural policies that Zimbabwe uses to ensure food security and how national efforts affect the future scenarios of regional food security in Southern Africa. The Zimbabwean agricultural system is the most publicly assisted sector of the economy. Its output does not, however, match the extent of the support it receives, as the country's food security situation is worsening. The case study critically analyses field data in the hyperinflationary economic environment that currently pertains in Zimbabwe. The results of the case study indicate that Zimbabwe's food security is on a steep decline, implying a negative contribution to Southern Africa's food security. The case study recommends additional domestic and trade policy measures to improve investment and development in agriculture for the benefit of Zimbabweans and the region as a whole.

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Acronyms and Abbreviations

AoA	Agreement on Agriculture
ASPEF	Agricultural Sector Productivity Enhancement Facility
BACOSI	Basic Commodity Supply Side Intervention
CFSAM	Crop and Food Supply Assessment Mission
COMESA	Common Market for Eastern and Southern Africa
EU	European Union
FTA	free trade area
GDP	gross domestic product
GMB	Grain Marketing Board
GMO	genetically modified organism
SADC	Southern Africa Development Cooperation
WTO	World Trade Organization

Executive Summary

The world is currently experiencing a food crisis because of increasing food prices, shortages and reduced access to food for many people, particularly in developing countries. This crisis has resulted in political, socioeconomic, developmental and humanitarian challenges affecting all countries. The crisis is, however, creating an opportunity for agriculture policy reform, particularly in Africa, making agricultural sector policies critical in all economies.

Zimbabwe has not been spared in this global food crisis, although agriculture is at the heart of the country's economy. Generally, the country is experiencing its worst economic crisis in history, characterised by food shortages and record inflation of 231 million per cent in September 2008. Food production in Zimbabwe, previously the breadbasket of Southern African, has remained below subsistence levels since 2000, contributing to an economy-wide adverse effect. The agricultural sector has for many years suffered neglect that has resulted in decreased agricultural productivity. Decreased production in this sector has also been affected by the government's land reform program. Crumbling irrigation systems and infrastructure in general and the disincentivizing effect of the government's price controls have also reduced agricultural production, resulting in widespread shortages of goods and services, high unemployment levels and declining living standards. The biggest challenge for the government currently is to ensure that farmers get the necessary support services to allow them to be more productive.

The government of Zimbabwe views access to land by the majority as the basis for eradicating poverty and increasing food security. Food availability has, however, declined over the last decade. Current agricultural policy in Zimbabwe has adversely affected production of maize (the staple food) and wheat, due to market distortions. There seems to be little incentive for farmers to produce beyond their subsistence needs, given the lack of alternative marketing channels and the presence of price controls with static procurement prices in an environment of hyperinflation. The decline in national food production has necessitated national food imports and aid. The government's capacity to import food has, however, been affected by the declining economy and particularly the foreign exchange shortage coupled with soaring world food prices.

In addressing the critical national food crisis, the government of Zimbabwe has employed both short term and long term measures that include both domestic and trade policies.

On the domestic front, policy has been directed at encouraging production of food. Government has embarked on several short to medium term and long term support programs for equitable production, acquisition and distribution of food. Farmers get a variety of subsidies in the form of seed, fertilizer and equipment.

Regarding trade policy, trade liberalization was the most significant policy reform implemented under economic structural adjustment programs. Under these programs, Zimbabwe simplified its tariff structure and significantly reduced the average applied rate, allowing the country to import food directly from producing countries.

The case study recommends that Zimbabwe use various policy options for future food security:

- food import policies;
- policies that balance the inherent tension between urgent and sustainable access to food;
- trade policies;
- technology and agricultural development investment policies;
- regional cooperation policies; and
- biofuel and food security policies.

The case study concludes that Zimbabwe has the potential to be food self-sufficient, but this needs to be buttressed by addressing supply side constraints and introducing domestic and external policies that support agricultural development. The current food crisis is a wake-up call for Zimbabwe, and the country can embrace it as an opportunity to resolve its long standing economic crisis. Short term and long term solutions are thus required in order to deal with the crisis, the main causes of which are the deeply seated structural problems. The country needs to strengthen food procurement systems and mechanisms, including those related to importing food and financing purchases from abroad. The country also needs to ensure that food aid is provided in a way that positively resolves the food crisis without undermining local food production. It also needs to deal with competition policies and integrate smallholder farmers into the global food production chain in order to avoid their marginalization, and strengthen food security and poverty reduction.

1 Introduction: The Global Food Crisis

The world is going through a food crisis that has emerged from increased food prices coupled with food shortages stocks, which have reduced access to food for many, especially the poor in developing countries. This has been evidenced by food riots in at least 70 countries throughout the world in 2008 alone. The underlying causes are a failed system that resulted in imbalances between demand and supply, compounded by rising oil prices, adverse climatic conditions, increased biofuel production, changing demographics and consumer factors.

World food prices have roughly doubled over the past three years, but between April 2007 and April 2008 they increased by 85 per cent.¹ In the lead was rice, which increased by 160 per cent between January and April 2008; followed by maize, which increased by 67 per cent since July 2007; and then wheat, which doubled in the same period.

The reality is that supply of agricultural land is diminishing and the blending targets on the biofuels markets are exerting more pressure on the demand for food. For example, in its 2007 Energy Bill, the United States is set to utilize nine billion gallons of biofuels in 2008, increasing to 36 billion gallons in 2022.²

The food crisis has consequently resulted in political, socioeconomic, development and humanitarian challenges affecting all countries. The crisis is, however, creating an opportunity for a reform of agricultural policy, particularly in Africa, in the form of increased agricultural investment.

The food crisis should not be seen as a short-term phenomenon, and it is likely to continue for some time, notwithstanding the deployment of short-term measures, unless the underlying structural factors are adequately and comprehensively addressed and policy attention is also focused on the more complex and more challenging interlinked series of problems. Policies dealing with the agriculture sector hence become critical in all economies.

2 The Significance of the Agricultural Sector to the Economy of Zimbabwe

2.1 The Zimbabwean economy

According to the International Monetary Fund, Zimbabwe's gross domestic product (GDP) stood at US\$1,437 billion in 2007, while the real GDP growth was -6.1 per cent. The country has deposits of more than 40 minerals, including ferrochrome, gold, silver, platinum, copper and asbestos. Its economy comprises manufacturing, public administration, commerce, mining, transport and communication. The country's main trading partners include South Africa, the European Union (EU) and China.

1 UNCTAD (UN Conference on Trade and Development), *Tackling the global food crisis*, UNCTAD policy briefs no. 2 (Geneva: UNCTAD, 2008a).

2 UNCTAD (UN Conference on Trade and Development), *Addressing the global food crisis: Key trade, investment and commodity policies in ensuring sustainable food security and alleviating poverty* (forthcoming, 2008b).

Zimbabwe is a landlocked country with a population of about 14 million people on a total land area of 39,600 million hectares. Eighty-five per cent of the country is agricultural land, and the balance is occupied by national parks, forests and urban settlements. The country has a dual agrarian structure comprising large-scale commercial farming and smallholder farming (which includes small-scale commercial farmers, communal area farmers and resettlement area farmers). Over one-third of the population lives in urban areas, while the rest resides in rural areas engaged in small-scale and commercial agricultural activities. Urban farming is a significant economic activity in Zimbabwe. The country experiences a sub-tropical climate with a rainy season between November and March.

Agriculture is at the heart of the Zimbabwean economy and is critical for food self-sufficiency. The agricultural sector generates 18.5 per cent of GDP and, at best, 40 per cent of total export earnings through the export of tobacco, cotton and horticultural produce, among others; employs 66 per cent of the country's labour force (the majority being women); and accounts for about 60 per cent of all raw materials for industry. The main agricultural products are maize, cotton, tobacco, wheat, coffee, sugarcane, peanuts, millet, soybeans, sheep, pigs and goats.

2.2 Trends in agricultural production and their underlying causes

Food production in Zimbabwe, previously the breadbasket of the Southern African region, has remained below subsistence levels since 2000. The poor performance of the agricultural sector had economy-wide effects due to the forward and backward linkages between agriculture and other sectors of the economy.

Output has been limited, due to the adverse effects of a variety of issues, which include structural factors. The agricultural sector has suffered neglect that has resulted in decreased productivity. A lack of investment in the agricultural sector, including in research and development, has also contributed to low output. Added to this is a lack of public-private partnership investment in the rural and agricultural commodity sector—a prerequisite and important catalyst for agricultural development and food production in developing countries. Foreign direct investment has also been limited to date, as less than three per cent in 2005 was invested in agriculture and food industries worldwide.

Supply-side constraints have also led to a decline in the sector. These include power outages, lack of credit facilities, high fuel prices and shortages that made agriculture production expensive and delayed timeous land preparation, shortages of foreign currency to meet farmers' requirements of inputs, persistent droughts due to climate change, and the deteriorating land quality (through soil erosion, salination, acidification and nutrient depletion). The incessant rains and intra-season dry spells due to climate change have adversely affected the agricultural seasons. Crumbling irrigation systems and the disincentive effect of the government's price controls have also reduced agriculture production, resulting in widespread shortages of goods and services, high unemployment levels and declining living standards. Delays in the processing of payments to farmers who would have delivered their crops to the Grain Marketing Board (GMB) and limited coordination on the procurement and distribution of key inputs, such as seeds, fertilizers and chemicals, are some of the challenges faced in the agricultural sector

Decreased production in the sector has also been affected by the land reform program. After independence in 1980, most of the productive farmland remained in the hands of whites, and through the 1990s the government worked to shift the ownership by seizing and redistributing land without compensation. As hundreds of farms were taken over, production and exports of grains collapsed. The biggest challenge currently is to ensure that farmers get the necessary support services to be more

productive. Zimbabwe has slowly become a vulnerable country as far as food security is concerned, as it now relies on food aid and food imports to augment local production.

The economic structural adjustment program that the country embarked on during the 1990s contributed to a lack of investment in the agricultural sector. It weakened the role of marketing boards and stabilization funds for both agricultural commodities and food staples without viable alternatives being put in place. Many of the government's fiscal targets were not met and continuing budget deficits may have contributed to the slowdown in growth in late 1997 and 1998. The non-realization of structural adjustment objectives resulted in the decline of economic growth, coupled with increasing unemployment, food insecurity, deepening poverty and reduced access to social services.

HIV and AIDS is also undermining agricultural systems and affecting the nutritional situation and food security of rural families. As adults fall ill and die, families face declining productivity, as well as loss of knowledge about indigenous farming methods and loss of assets.

There has been reduced donor funding for agriculture in developing countries in recent years. For example, between 1980 and 2002, multilateral institutions slashed official development assistance on agriculture from US\$3.4 billion to US\$500 million, an 85 per cent decline.³ In Zimbabwe, the situation was made even worse by the withdrawal of donor support, bad publicity about the country internationally and the international isolation of the country.

Years of systemic failures of development strategies both at the national and multilateral levels also help to explain the situation in Zimbabwe. At the multilateral level, for example, agriculture development in developing countries, including Zimbabwe, has been affected by the long-standing agricultural export subsidies and domestic support policies in developed countries. The agreement on agriculture under the World Trade Organization permits subsidies for agriculture and also allows for indirect export subsidies through export credits, state trading enterprises and food aid. This has undermined production for domestic markets and exports in developing countries, and now has the consequence of having retarded farmers' capacities to generate the supply response that the current food crisis calls for.

Mergers and strategic alliances in the agro-food sector have contributed to the higher prices for agricultural inputs, as well as to the fact that developing country farmers receive a relatively small fraction of retail prices for their products—thus, profit incentives that would have enhanced food production by developing countries have been dampened. Monopolistic tendencies in food production and the genetic engineering of seed are also major culprits that have led to food insecurity in Zimbabwe.

Due to all the above, Zimbabwe is experiencing the worst economic crisis in its history, characterized by food shortages and record inflation. The annual inflation rate averaged 12 per cent in the 1980s, but has skyrocketed to a record high of 11.3 million per cent as of June 2008.⁴ The exponential growth in headline inflation is attributed to price increases in both food and non-food categories in the country's consumer price index basket, and 32 per cent of the inflation is in food and food items alone.

The economic downturn has seen over three million Zimbabweans now living in the diaspora, one-third of the population malnourished and 2.5 million people receiving food aid. It has further reduced saleable assets for smallholder farmers, leaving them vulnerable and food insecure.

³ *Ibid.*

⁴ Reserve Bank of Zimbabwe, *Reserve Bank of Zimbabwe end June 2008: Half year monetary policy statement 2008* (Harare: 2008).

3 Zimbabwe's Food Security

The International Fund for Agricultural Development describes national food security as “the capacity of the nation to procure a stable and sustainable basket of adequate food.”⁵ In assessing Zimbabwe's food security, this country report will evaluate the country's food availability, access to food, stability of food supplies and impartiality of food distribution.

Maize is Zimbabwe's staple food, with a 2008 annual national requirement of about 1.8 million tonnes: 1.5 million tonnes for human consumption and 0.3 million tonnes for livestock.

The Zimbabwean government views access to land by the majority as the basis for eradicating poverty and increasing food security. In terms of production capacity, the 2008 maize yield ranges from 600 kilograms per hectare for communal farmers to seven tonnes per hectare for large-scale commercial farmers. The “fast track” land reform exercise has, however, been slow to achieve its stated results, and related economic difficulties have further exacerbated the reversal in food production. The government is also implementing a wheat production program under contract schemes to promote food security by setting aside 150,000 hectares of land to produce the 2008 national requirement of 350,000–400,000 tonnes of wheat for national requirements.

3.1 Food availability

Food availability has been on the decline over the last decade. The 2006 maize harvest, for example, was at 1.1 million tonnes,⁶ against a human consumption requirement of 1.4 million tonnes. Maize grain, while sold at subsidized prices, remained out of reach for very many vulnerable households.

The overall production of maize in 2008 is estimated at 575,000 metric tons—28 per cent lower than 2007's already low levels.⁷ The Food and Agriculture Organization/World Food Programme Crop and Food Supply Assessment Mission (CFSAM) estimates total domestic cereal availability for the April 2008–March 2009 marketing year at 840,000 tonnes—leaving a shortfall of around 1.2 million tonnes, including one million tonnes of maize, which needs to be imported.

3.2 Access to food

Current agricultural policy in Zimbabwe has adversely affected the production of maize and wheat due to market distortions. There seems to be little incentive for farmers to produce beyond their subsistence needs, given the lack of alternative marketing channels and price controls with static procurement prices in an environment of hyperinflation. The GMB, a government monopoly agency, buys and sells major cereals at controlled prices. The set prices discourage production, hence the negative effect on availability. The maize purchase price during 2006/07 marketing season was pegged at Z\$52,000 per tonne (equivalent to about US\$5 per tonne at the parallel market exchange rate at the time), which was below the prices in the parallel markets. The parallel prices are often not affordable to the majority of the population. Purchase prices were announced at or after harvest, not at planting time.

5 IFAD (International Fund for Agricultural Development), *Strategic framework 2007–2010* (Rome: IFAD, 2006).

6 Food and Agriculture Organization (FAO) mid-range estimate, taken from A. Abbassian, “Food security with biofuels? An FAO perspective,” paper presented at the seminar Impact of Bio-fuel Crops on the Poor and the Agriculture Sector, Kuala Lumpur, 26 November 2007.

7 According to the FAO/World Food Programme Crop and Food Supply Assessment Mission.

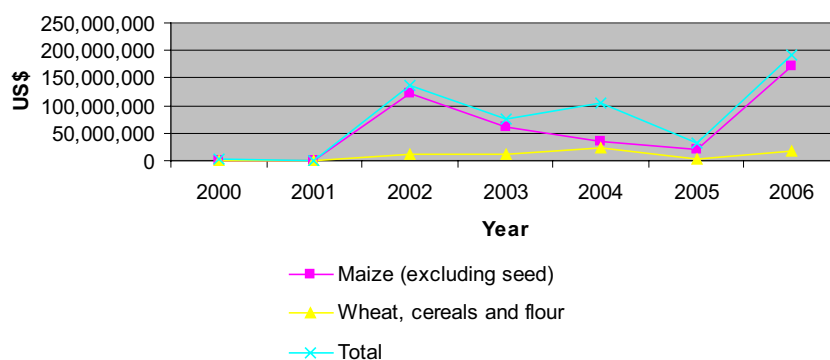
The CFSAM estimates food assistance requirements up until the next main harvest in April 2009 at around 395,000 tons—with the number of people requiring food assistance possibly rising to a peak of 5.1 million in the first quarter of 2009.

3.3 Stability of food supplies

The decline in national food production has necessitated national food imports and aid. The Zimbabwean government’s capacity to import food has, however, been adversely affected by the declining economy and particularly the foreign exchange shortages. Zimbabwe has been importing a variety of food to supplement local production, but the country is challenged by soaring world food prices.

Food imports have taken an upward trend since 2005, and maize constitutes the bulk of the food imports from the Southern African region, particularly South Africa. Figure 1 illustrates maize, wheat and flour imports over the period 2000–06.

Figure 1: Maize, wheat and flour imports, 2000–06 (US\$)



Source: CSO (Central Statistical Office), CSO quarterly digest, first quarter (Harare: CSO, 2007)

3.4 Lack of impartiality in food distribution

Operation Maguta, a food distribution program, is being spearheaded by the Zimbabwe Defence Forces in line with their constitutional obligation to provide assistance to civil ministries and departments in times of crisis and need. The program is not a replacement for, but an augmentation of ongoing national agricultural activities. The Maguta program progressed very well during its initial phases, when all the relevant ministries and government departments were involved. Later on, however, the Zimbabwe National Army started running the program without consulting other ministries and government departments, resulting in a lack of impartiality in food distribution. The selection of the recipients is done firstly at the village level by the kraal heads. The list of the beneficiaries from the village is taken to the ward level, where it is finalized by the village heads together with the ward councillors. The list is then passed on to members of the army, who then approve the release of the inputs, which are usually kept at GMB depots. There are allegations that access to the distributed food is dependent on the political party supported by the recipient.

4 Addressing Critical Policy Issues

In addressing the critical national food crisis, the Government of Zimbabwe has employed both short term and long term measures that include domestic and trade policies.

4.1 Domestic policy response to food insecurity

On the domestic front, Zimbabwean policy has been directed at encouraging the production of food. Government has embarked on several short to medium term and long term support programs for the equitable production, acquisition and distribution of food.

4.1.1 Domestic subsidies for farmers

Farmers get a variety of subsidies from the government in the form of seeds, fertilizers, herbicides, fuel, electricity, equipment, agricultural loans, etc. There are different programs being run under which farmers can access subsidized inputs in Zimbabwe. These programs include Operation Maguta and the GMB input scheme.

Operation Maguta, launched in November 2005, aimed to boost food security and consolidate national strategic grain reserves. Under this scheme, farmers are given inputs such as fertilizers, seeds and herbicides in order for them to grow targeted crops such as maize and wheat. The program is mainly targeting model A1 and communal farmers.⁸ The farmers are required to pay back after harvesting their crops at an interest rate 50 per cent, but have the option of paying in the form of produce (through the GMB) or cash. The program provides 300 kilograms of compound D fertilizer, 200 kilograms of ammonium nitrate fertilizer and 25 kilograms of maize seed to each household. These inputs are supposed to be enough for one hectare. The scheme has also started rehabilitating the irrigation infrastructure of A1 and A2 farmers, which was damaged at the height of the fast track land reform program.

The GMB input scheme facilitates access to inputs (seeds, fertilizers, chemicals, herbicides, etc.) by farmers; the inputs are dispatched to GMB depots countrywide. The Ministries of Finance, and Industry and International Trade set prices for the different inputs that GMB has to sell to the farmers. Table 1 gives a breakdown of the prices for selected inputs for the agricultural season 2006/07 and their actual price on the open market. The prices of inputs are heavily subsidized, as shown in Table 1.

Table 1: GMB subsidies

Item	Quantity	Subsidized prices (Z\$)	Price on the open market (Z\$)
Top dressing fertilizer	50 kg	750,000	6,000,000
Paraquat herbicide	10 litres	870,000	10,000,000
Fuel (petrol and diesel)	200 litres	90,000	10,000,000

Source: Figures supplied verbally by Agricultural Research and Extension Services, Harare

Water charges for farmers are pegged at 50 per cent of the actual price.

⁸ The resettlement scheme's model A was elaborated into two categories, model A1, for accelerated intensive resettlement, and model A2, for normal intensive resettlement. The A1 model is aimed at the decongestion of communal areas. It provides for farms that are relatively small, but capable of sustaining a family and producing a surplus. They can be either villagized or self-contained. For the former, the settlers are provided with three hectares of arable land and communal grazing. The self-contained farm is one contiguous area that could be used for crops and livestock. A settlement scheme may be composed of several such units, but without a village structure. The A2 model is aimed at providing small-scale commercial farms to applicants with experience in agriculture, preferably those trained to be master farmers. Of the more than 71,000 families resettled up to late 1996, 93 per cent were settled in model A schemes.

4.1.2 Mechanization Programme

The Mechanization Programme was conceived as part of the broader and swifter measures to revitalize and recapitalize the agricultural sector of the country in the long term and consolidate the gains of the land reform program. It was launched in 2007. As a strategic national developmental program, the intervention has significantly transformed the equipment and productive landscape of the sector by mechanizing both communal and commercial farmers. Under the program, thousands of pieces of equipment (tractor drawn and animal drawn implements) have been distributed to thousands of beneficiaries across the country to enable them to produce at optimal levels and achieve food security and sustenance. This has resulted in a critical mass of farmers being empowered to achieve the program's strategic long term vision of food security. This empowerment is intended to translate into accelerated economic growth by way of increased productivity and greater returns from the empowered farmers. The Mechanization Programme is part of the ongoing efforts to anchor lasting productivity in agriculture in order to promote food security.

4.1.3 Agricultural Sector Productivity Enhancement Facility (ASPEF)

In 2007 the government launched ASPEF in order to support facilities, through the Reserve Bank of Zimbabwe, such as livestock production, with a particular emphasis on rebuilding the national herd; the winter wheat program; and food crop production to enhance food security. The government is purchasing cattle as one of the methods of rebuilding the national herd. The main objective of ASPEF is to increase the national cattle herd by 2.1 million animals within the next three to five years.

This intervention strategy has seen most Zimbabwean farmers being able to sustain production under conditions of economic hardship, whereas without this support, many farmers would have gone under. The productivity enhancement facility requires the farmers to support their loan applications with evidence of actual past performance and commitment to reinvesting their own incomes into farming programs that enhance food security. ASPEF has since been extended to the end of the 2009 summer cropping season.

4.1.4 Grain Mobilization Programme

The 2007/08 agricultural seasons saw very poor yields throughout Zimbabwe because of a bad rainy season. Consequently, there is a shortage of grain to meet the national requirements. The government is paying the following producer prices:

Maize per tonne Z\$4,582

Maize seed per tonne Z\$13,000

The program commenced in May 2008, and a grain mobilizing committee was set up comprising officers from the Reserve Bank of Zimbabwe, GMB and Agritex. The government is mobilizing grain from all farming sectors to a centralized GMB facility in order to build strategic stocks in addition to ongoing imports. The main objectives of the intervention were as follows:⁹

- to urgently procure excess maize and small grains from farmers in order to boost the national strategic grain reserve;

⁹ Reserve Bank of Zimbabwe (2008).

- to ensure timely payments to farmers for their grain;
- to mitigate inflationary pressures by paying farmers for their produce even before they supply the crop to enable them purchase inputs for subsequent seasons; and
- to save scarce foreign currency resources and channel them for other critical supplementary food imports.

4.1.5 Basic Commodities Supply Side Intervention (BACOSSI) Facility

In October 2007, the Zimbabwean government established the BACOSSI facility aimed at boosting production through providing targeted financial support to manufacturers of basic goods, as well as selected wholesalers and retailers. Since its inception, BACOSSI has directly benefitted both manufacturers and retailers through the provision of concessionary local financing and foreign currency to procure imports. Under this fund, which has been set at an initial Z\$300 trillion (US\$4,286), producers of strategic and basic commodities are being given financial support to make up for and recover from the genuine adverse effects of retail price controls. BACOSSI has remained a multipronged approach designed to enhance capacity utilization of manufacturers and retail distribution of goods. As a result, beneficiaries of the facility managed to increase capacity and the availability of basic commodities. However, the current inflationary environment continues to cause serious challenges regarding securing basic commodities for all.

As of July 2008, a total of US\$13.5 million and Z\$2,704 quadrillion (US\$39,188) had been disbursed to 95 manufacturers. In addition, a total of Z\$160 trillion (US\$2,319) was disbursed to support 15 major grocery wholesalers and retailers.

The BACOSSI facility is the major contributor to the rise in capacity utilization to 40 per cent in the food sector, from as low as 10 per cent.

4.1.6 Biofuels policy

Due to the country's dire need to provide food security for the population, Zimbabwe does not use food crops like maize, palm oil, soya and sugarcane for the production of fuel, on the principle that fuels should not compete for food. For fuel, a program was launched to grow *Jatropha* plants in regions 4 and 5, which are not allocated to food production.

4.1.7 Food aid policy

Zimbabwe is open to managed food aid programs to improve food security. The country receives food aid in the form of programs, budgets and emergency aid, or under nutritional support projects. However, food aid should not:

- postpone the reforms needed to achieve food security;
- depress commodity prices and erode long term agricultural developments;
- cause recipient dependency;
- act as a disincentive for producers and traders;

- destabilize the local market; and
- be diverted to unintended beneficiaries.

4.1.8 Zimbabwe's GMO policy

Zimbabwe's policy on genetically modified organisms (GMOs) is that there will be no importation of GM seed. GM food can be imported for consumption, but not for planting purposes. Food aid can then be controversial as it introduces GMOs that Zimbabwe, although food insecure, does not produce.

4.2 Zimbabwe's food security response through trade policy

Trade liberalization was the most significant policy reform implemented under economic structural adjustment programs. The foreign trade regime in 1991 was characterized by direct controls, import and foreign exchange controls, import tariffs at varying rates across commodities and a 20 per cent import tax. Trade liberalization simplified the tariff structure and significantly reduced the average applied rate to 17 per cent by 1994.

Zimbabwe is a founder member of the World Trade Organization (WTO) and bound its tariffs in the Uruguay Round for most agricultural products at a ceiling rate of 150 per cent. Agriculture is the most tariff protected sector with the applied most favoured nation tariff varying from 0 to 100 per cent. However, applied tariffs are substantially below the bound rates. Zimbabwean producers are also protected by trade defence instruments such as anti-dumping, countervailing and safeguard disciplines similar to those of the WTO. The failure of the Doha Round in July 2008 is contributing to higher prices and more hungry people in developing countries, as developed countries refuse to remove subsidies that are distorting prices mainly of agricultural produce.

Zimbabwe was a beneficiary of the Lomé Convention under African, Caribbean and Pacific–EU Economic Partnership Agreements, enjoying duty-free or preferential duties and export quotas for agricultural products into the EU market. The European Commission initialled an interim Economic Partnership Agreement with Zimbabwe under the East and Southern Africa region in November 2007. The deal includes a WTO compatible market access schedule, and provisions on development cooperation, fisheries and other issues.

At the regional level, Zimbabwe is a member of the Common Market for Eastern and Southern Africa (COMESA), which implemented a free trade area (FTA) in 2000 and is scheduled to implement a common external tariff in December 2008. Zimbabwe is also a member of the Southern African Development Community (SADC), implementing the tariff phase down from 2000 to 2008 under the SADC Trade Protocol. A SADC FTA was launched in August 2008. Regional integration provides greater access to regional products to alleviate poverty by providing better access to food. Zimbabwe's complicated and protective tariff structure poses huge challenges when it comes to harmonizing with the proposed COMESA common external tariff, as its compliance rate is very low. A similar challenge is anticipated when negotiating common external tariff rates for SADC, whereas Zimbabwe can only be party to one regional economic community. However, the high tariffs, designed mainly to protect local production in the agricultural sector, act as a barrier at a time when the country is challenged by the looming food crisis.

4.3 Other policy options available for future food security

4.3.1 Import policies for food

Zimbabwe can import directly from food exporting countries in order to reduce the transaction costs of importing food. The country can also tap into the United Nations Conference on Trade and Development's net project that seeks to provide assistance to developing countries in the formulation and implementation of import(s) policies for food commodities. The aim of the project is two-fold: firstly, to strengthen developing countries' capacity for commercial food purchases, and secondly, to help develop improved procedures for directly reducing transaction costs, including those related to import financing.

The country can also work towards strengthening food procurement arrangements, which are weak, as in many other developing countries, where some capacity was actually lost when the Marketing and Agriculture Board was dismantled during the structural adjustment programs period.

Zimbabwe can also consider negotiating long term food procurement agreements and arrangements with net food exporters or food exporting enterprises so as to secure favourable prices (to assure affordability) and quantities.

4.3.2 Balancing the inherent tension between urgent and sustainable access to food

Although food aid is critical as an emergency intervention to feed starving people, it should not disrupt or disturb the country's long term food security measures. Specifically, it should not harm domestic production or distort trade by jeopardizing export from competing suppliers; it should not be used to capture new markets; and it should not lead to dumping, but respond positively to demand for food.

Zimbabwe can design commodity policies to boost agriculture production, including food crops. Players in food aid need to advise on emergency food aid management practices that respond to emergency food shortages without acting as a disincentive to domestic food production and broader agricultural and commodity sector development.

4.3.3 Agricultural development and trade policies

As there is separation of functions between the Ministry of Agriculture, which focuses on domestic agriculture development, and the Ministry of Industry and International Trade, which deals with trade in agriculture produce, there is need to strengthen the interlinkages between agricultural development and trade at the national level in the current process of globalization in order to deal more effectively with the food security of the country.

The country also needs to come up with ways to overcome the constraints mentioned above in order to increase food security. Government needs to provide seed, build irrigation projects and extend credit. It also needs to involve small scale producers in the value chain, building backward and forward linkages, as well as developing legal and regulatory frameworks.

4.3.4 Trade rules and trade-related policy issues

WTO members in the Doha negotiations have acknowledged the need for and importance of policy flexibility with regard to agricultural tariffs for food security, livelihood security and rural development

in developing countries. This is manifested in the proposed special product provision to allow developing countries not to reduce bound tariffs or to reduce them to a lesser extent on products important for food security, livelihood security and rural development. At the same time, this gives them flexibility to reduce applied tariffs on food, as required, to manage food supply and the price situation in their countries. It is also manifested in the proposed special agricultural safeguard mechanism for developing countries that would allow them to temporarily increase tariffs beyond bound rates in the case of an import surge or unusually low prices.

The tariff regime, which has the effect of raising tariff revenue for fiscal purposes, remains a policy tool for Zimbabwe, even though the country's tariffs have been declining on both the regional and international fronts. In view of the food crisis, tariff policy and associated export taxes could be reviewed and rationalized in affected developing countries to ensure availability of imported food staples at affordable prices.

The country needs to join hands with other developing countries to address intellectual property rights over seed and other farming inputs. It also needs to resolve competition issues in the food supply chain.

4.3.5 Investing in agricultural development

The country needs to invest in agriculture production as higher food prices make investment in this sector more profitable. Enabling policies need to be put in place in order to mobilize both domestic and foreign investment to boost food grains. However, Zimbabwe should ensure that in the case of foreign direct investment, investors use land more sustainably, technology is transferred to benefit local farmers and the country's labour regulations are enforced to prevent labour exploitation.

4.3.6 Technology policies and agricultural development

Farmers face challenges of depleting soil fertility and water scarcity, and they continue to use traditional farming methods. This can be addressed partly through adapting modern farming technologies while installing large scale water irrigation projects to solve the problem of water scarcity.

In Zimbabwe, there is limited access to new technologies, but the country has strong knowledge of local crop varieties and the concerned agricultural institutions are aware of smallholder' needs. There is also the need to link expatriate scientists from Zimbabwe with local institutions and to reduce the brain drain.

4.3.7 Regional cooperation

Zimbabwe needs to join hands with other regional countries to build food security in the form of early warning systems on food shortages and possible sources of food supplies; regional marketing and trading of food between food surplus and food deficit neighbouring countries; and the exchange of best practices, technologies and human resources on agriculture production.

Zimbabwe and other East and Southern African countries should also push for the strengthening of agriculture and food production being negotiated under Economic Partnership Agreements and provided under the Tokyo International Conference on African Development and other cooperation agreements.

4.3.8 Financial support policies for agricultural development

Zimbabwe can explore avenues for accessing available financial mechanisms for agricultural development under the WTO's Agreement on Agriculture (AoA) through certain support measures like the green box provided under Annex II of AoA. This could include investment in infrastructure (roads or food storage systems in rural areas), the training of farmers to improve productivity, agriculture research, domestic food aid and the building up of food reserves.

Zimbabwe can also take advantage of Article 6.2 of AoA to pay for agricultural inputs (fertilizers, quality seeds, fuel and irrigation equipment) with financial support from donor countries, which may be a solution to the problems of increased food production and access to food to fight poverty. Government support to farmers for purchasing agricultural inputs have helped to promote food production, e.g. Operation Maguta.

4.3.9 Biofuels policies and food security

Zimbabwe needs to team up with other developing countries to push the United States and the EU to introduce flexibility in their biofuels blending targets. The use of biofuels in Zimbabwe will ease pressure on the use of public funds and leave more foreign currency to be allocated to food security.

5 Conclusion: The Food Crisis as a Wake-up Call

Zimbabwe has a potential to be food self-sufficient, but this needs to be buttressed by addressing supply side constraints and domestic and external policies that support agricultural development. The recent food crisis is a wake-up call for Zimbabwe and the country can embrace it as an opportunity to resolve its long standing economic crisis.

While agriculture is the mainstay of the Zimbabwean economy, production required to ensure food security has been affected negatively by many factors that range from supply side constraints to domestic and external policies and the HIV/AIDS pandemic. This has resulted in food deficits. Local production thus has to be complemented by food imports and food aid to meet the national requirements. The country has also responded through various measures to ensure food security by addressing the supply side constraints.

Thus, short term and long term solutions are required in order to deal with the crisis, the main causes of which are the deep seated structural factors. Short term measures could include emergency interventions through United Nations food programs and assistance to smallholder farmers with farm implements; however, more long term, sustainable interventions are needed.

The country needs to strengthen food procurement system and mechanisms, including those related to importing food and financing purchases from abroad. The country also needs to ensure that food aid is provided in a way that positively solves food crises without undermining local food production.

The country should also strengthen production and post-harvest capacity through improvements to infrastructure and food storage facilities. It also needs to continue negotiating for a positive outcome of the Doha Development Agenda on agriculture that will facilitate development of agriculture.

There is great need to help landowners to be better farmers in terms of education and timely provision of farm inputs. The country needs to invest in research and development, seek official development assistance and strengthen public–private partnership in agricultural development. It also needs to adopt modern technologies, particularly in rural areas, and its farmers should desist from using traditional farming methods.

It also needs to deal with competition policies and integrate smallholder farmers into the global food production chain, in order to avoid their marginalization and to strengthen food security and poverty reduction.

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