FINDINGS 1

Zimbabwe: Growth prospects for commercial agriculture (2932 words)

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The Agricultural Sector Assessment Study for Zimbabwe was prepared in December 2010 (the word “current” in this note should therefore be tied to that year) under the Zimbabwe Multi Donor Trust Fund initiative. This note focuses on that part of the study which deals with growth prospects for commercial agriculture in five priority sub-sectors, tobacco, cotton, soya beans, poultry and maize. At a Roundtable Discussion with key stakeholder representatives, the study’s authors indicated that resource constraints had led them to focus on these five areas as compared to the others suggested by the representatives such as livestock, and wheat and horticultural crops.

Agriculture is the mainstay of the Zimbabwean economy, and though it accounts for only 16-20% of the country’s Gross Domestic Product (GDP), it provides a livelihood for some three-quarters of the country’s population, including farmers traders and agro-processors. This includes most of the 70% of the rural population. It contributes in excess of 60% of manufacturing value added either through agro-industry or the provision of inputs to the agricultural sector and accounts for one-third of export earnings.

Over the past decade, the agricultural sector has struggled, more than most sectors in the economy, to cope with the combined effects of the Fast Track Land Reform Programme (FTLRP), hyper-inflation, capital constraints and government controls on markets. However, the sector has also shown its resilience in the face of difficult market conditions.

Tobacco

Tobacco is Zimbabwe’s most valuable agricultural commodity accounting for about 26% of agricultural GDP and 61% of agricultural exports. Over 99% of this production is flue-cured leaf and historically, the source was the large-scale commercial farm sector. Between 2002-2008, deliveries slumped from about 165.6 million kg worth about US$ 400 million to 49 million kg before rising to 123,4
million kg in 2010. Over these years, production volume fell by 56%. The reasons: a combination of the Fast Track Land Reform Programme (FTLRP), capital constraints, foreign exchange constraints, and pricing uncertainties. Now, the smallholder sector accounts for 60% of crop area and 30% of production.

Zimbabwe needs to return to the 2000 production levels, though with most of the crop grown by smallholder (including a significant proportion of resettled farmers), who would be expected to deliver upwards of 50% of the crop.

Liberalization of the currency markets has started to bear fruit as areas under tobacco are on the rise. At the close of the selling season in 2010, some 123.4 million kg had been sold representing a 110% increase over the previous season. This is directly attributed to the improved availability of market inputs resulting from the contract farming arrangement as well as the improved output from the local fertilizer manufacturers. The Tobacco Industry Marketing Board (TIMB) has reported that the number of tobacco growers has increased significantly over the last decade from 8,500 (average 10 ha each) to over 51,000 growers (average 1.3 ha each) of whom 42,000 (80%) are in the small-scale sector.

While the Tobacco Research Board (TRB) has successfully released T66, a disease-resistant variety with a potential yield of over 4,000 kg/ha, limitations such as poor management skills, especially among smallholder farmers and under-investment in irrigation and curing facilities, especially in the medium to large-scale farms, have constrained potential. Farmers have been forced to shorten their no-tobacco period as downsized farms have constrained tobacco rotation.

**Recommendations**

- Speedier adoption of higher input and more sustainable marketing practices. Early-planted tobacco under irrigation is key to attaining optimal quality and yields in excess of 2,500 kg/ha. While the majority of tobacco-growing farms in the Large Scale Commercial Farms (LSCF) and A2 areas have irrigation infrastructure, these need rehabilitation. Smallholder production, in contrast, is predominantly under dryland conditions. A possible strategy is investment in small-scale well- or borehole-based irrigation to cover some portion of the crop.
• Rehabilitation of the present curing and handling facilities can help to handle a crop of more than 250 million kg – the present infrastructure that still works can handle only 150 million kg. Experience suggests that investments should be channeled through the existing banking system with individual farmers submitting project proposals for funding.

• Together with concerns about child labour and tobacco-curing related deforestation, among other issues, Good Agricultural Practices need to be developed and implemented to make the industry environmentally sustainable.

• There is need to incentivize the scale-up of innovative approaches in order to increase productivity linked to the biological potential of the new tobacco varieties. There are viable examples of technology transfer reflected in the partnerships between contractors such as Chidziva and TRIBASC with the Zimbabwe Tobacco Association; extension systems with in-built incentives such as those implemented by Northern Tobacco.

• The recovery of tobacco production on larger-scale farms depends on: the finalization and closure of the FTLRP, the restoration of confidence in the banking sector, and the recovery and strengthening of capital markets necessary to fund agricultural input supply and the revitalization of irrigation systems and other infrastructure recapitalization projects. The industry will also need to examine the merits and demerits of the two main marketing channels, contract production vis-à-vis the auction system.

Cotton

Cotton is the country’s third-most important crop, contributing 12.5% of agricultural GDP and 22% of the value of agricultural exports. Most cotton lint is exported (70-80%), and is the second-largest agricultural export after tobacco, but cotton seed is an essential input for the domestic vegetable and oil and stockfeed industries. Cotton production peaked at 311,000 tonnes in 2000 before declining to 210,000 tonnes in 2009. Cotton is almost exclusively grown by smallholder farmers. It is also a significant source of employment – approximately 99.2% of the cotton crop is produced by about 300,000 small-scale growers, mainly from the drier agro-ecological regions of Zimbabwe. In addition to the $105 million in lint exports, the textile industry generated at least $ 20 million in extra exports in 2008.
Of all the summer crops, cotton is the only crop that has maintained reasonably steady volumes of production after FTLRP. The main reason is that the crop is grown predominantly by small-scale farmers whose activities were not disrupted by the land reform programme. However, there has been a pronounced downward trend after the 2004-05 season. There was a 22% decrease in area planted between the 2007/8 and 2008/9 seasons. This decrease can be attributed to: limited availability and high cost of fertilizers, unattractive local prices, reduction in contracting activities due to side-marketing risks and lack of capital. The cotton industry lost about $14 million to side-marketing in the 2008/9 season. As a result, the larger ginning companies reduced their level of support thereby negatively impacting the crop area. The constraints to contracting activities due to side-marketing as well as poor access by farmers and contracting firms to capital has led to a reduction in numbers of farmers in the high-yielding (top 20%) categories.

Surplus production in India and China has also resulted in weak international prices, and this surplus production has been directly attributed to increased productivity from adoption of Bt-cotton varieties.

A recent positive development related to curbing side-marketing has been the promulgation of Statutory Instrument 142/2009 Regulations in August 2009 under the Agricultural Marketing Act. Under the statutory instrument registered contractors are expected to provide all the necessary inputs to farmers and fully finance the crop produced by farmers that they contract. In return, the contracted farmers are required to deliver their crop to the contractors who would have funded them. Those in breach of the contract would appear before the Cotton Marketing Technical Committee (CMTC) that was set up under the same statutory instrument. The committee, which has prosecuting powers, is charged with ensuring both merchants and farmers honour their contracts.

To implement the provisions of the Instrument, the Cotton Ginners Association, prior to the 2009-10 season entered into a legally binding common input funding arrangement under which all contract seed cotton inputs were collectively warehoused and distributed to farmers through fifty common warehouses managed by the Association.
**Recommendations**

- The institutional arrangements under the Statutory Instruments Regulation have largely been influenced by the interests of the ginners and the buyers, to the possible detriment of the buyers. For stability going forward, farmers’ representatives must be included in a tripartite arrangement.
- Investment is needed to strengthen market intelligence, particularly to improve farmers’ understanding about the relationship between domestic and international prices.
- Government and development partners could avail loan guarantees to facilitate the entry of more private players in the market and encourage competition. This could finance the expansion of input supply (chemicals and fertilizers), and the introduction of higher-yielding varieties (Bt cotton).

**Soya beans**

The key raw materials in both meat production and vegetable oil production are maize and soya beans. Consequently, despite its low contribution to agricultural GDP (approximately 2%), it is an important import substitution crop. There has been a dramatic increase in the import of meat products and cooking oil – boosting the local production of soya beans will save on import costs and make the raw materials for stockfeed manufacturing cheaper and more readily available. In Zimbabwe, soya beans contribute 30% of all the cooking oil production while cottonseed contributes 50%, with 20% being from imported crude vegetable oil. Approximately 95% of all soya bean seed produced in Zimbabwe is for the production of soya bean oil.

Most soya beans in Zimbabwe are grown by A2 farmers and the remaining by large-scale commercial farmers in Natural Regions I and II. However, smallholder production is increasing. Since 2004, the Zimbabwe National Soyabean Association has assisted the Soyabean Promotion Taskforce in promoting soya bean production, offering agronomic and value-addition training, organization of farmers’ groups, input brokerage services and promoting linkages with buyers and
processors. As a result, some 50,000 smallholder farmers are currently growing soya beans – but they account for only 2% of current national production. Also, market risks associated with thin markets and high price volatility and high transaction costs have discouraged both producers and buyers.

The main constraint is limited production skills, especially among A2 farmers. Technical backstopping and farmer-to-farmer extension have largely ceased. The second major constraint has been the rhizobium inoculant and the third low fertilizer use.

Soya bean has been on an upward trend since the 2004/5 season and total production increased from 48,320 tonnes to 115,817 tonnes in the 2008/9 season. However, with an estimate national demand of more than 300,000 tonnes per year, current production satisfies only a third of local needs.

Recommendations

- Increased funding of the Grasslands Research Station would lead to increased availability of the Rhizobium inoculant for producers. This could be run as public-private partnership.
- Market stability can be achieved through the more efficient enforcement of production contracts as in the cotton sector. If buyers are assured access to the contracted produce, they will be more likely to provide financing for inputs and extension support.
- Improved market intelligence, information dissemination and an effective arbitration system to address disagreements when negotiating producer prices.

Poultry

Poultry is currently the most vibrant of the livestock sector accounting for approximately 5% of agricultural GDP. In addition, broiler production generates value addition in the commercial retail chain. Zimbabwe had been, up to 2007, a surplus producer of poultry products generating close to $10 million per year. Hyperinflation, foreign currency shortages, electricity outages, shortage of feed and price controls led in 2008 to the near collapse of the industry. Though there was recovery in 2009, production was two-thirds of what it was in 2007 and the
country has been importing at least 1,000 tonnes per month costing $25 million per year.

There are three categories of chicken producers in the country – the formal vertically-integrated large-scale commercial producer; small-scale commercial producers who raise improved breeds day-old-chicks (DOCs); and then traditional free range chicken production mostly for home consumption. Based on normal sales of DOCs, small-scale (and mostly peri-urban) producers control 60% of the broiler market, while the large-scale producers account for the other 40%. Overall marketed chicken demand (through formal and informal channels) is 8,750 tonnes per month.

Acute shortage of feed led to heavy destocking of the national breeding flock between 2007 and 2008. Given that it takes 14 months to build capacity from grandparent stock, the recovery process was underway in 2009. The supply of broiler DOCs grew from about 700,000 in January 2009 to close to 2.6 million DOCs per month by the end of the year. Large-scale commercial table egg supply increased almost fourfold from 276,000 dozen per month to 1.1 million dozen per month during the same period, while dressed broiler chickens grew from 390 tonnes to close to 1,500 tonnes. This implies a shortfall of 2,000 tonnes in the formal retail markets. The 1,500 tonnes monthly retail sales need to be supported by about 1 million DOCs leaving 1.6 million for the small-scale producers able to sustain a broiler production level of 2,400 tonnes per month. Given an estimated informal demand of 5,250 tonnes per month30 this implies a demand shortfall in the informal markets of about 2,850 per month. Thus overall shortfall in broiler supply is about 4,850 tonnes per month that needs to be supported by a monthly day-old-chicks production capacity of 3.2 million per month.

The cost of feed represents about 70% of production costs – of this, 60-65% goes to maize while 15-20% is taken up by soya bean meal procurement. Reliance on imported raw materials has resulted from low local production of maize and soya beans. Policy uncertainty with regard to grain trade has exacerbated the problem. Electricity supply problems, high cost of feed, limited hatchery capacity and reduced breeding birds have slowed growth in DOC production. While in the erst of the ergion, DOCs cost between $0.30-0.50, the price in Zimbabwe is $0.80
rising to 41.00 in the outlying areas. This makes it difficult, especially for small-scale producers, to compete with imported products.

Recommendations

Three major investments are required.

- More stability in electricity supply will facilitate expanded production and reduced cost of DOCs.
- More investment by the government and development partners in enhancing the capacity of the veterinary service to carry out disease surveillance and vaccination
- Finally, investments to enhance the productivity of maize and soya beans so as to produce low-cost feed and thus enhance competitiveness of the industry.

Maize

Maize accounts for 14% of agricultural GDP, and remains essentially an industrial input, and the primary source of food security. As a staple food for the majority of the population, it is grown by over 90% of farmers although productivity varies widely. National maize production peaked at about 2.8 million tonnes in 1985 with average crop yields peaking at about 2.2 tonnes/ha that same year. Maize yields in the smallholder sector peaked at 1.4 tonnes/ha. In 2010, national maize production is estimated to be 1.3 million tonnes/ha with an average yield of 0.7 tonnes/ha. Maize productivity declined mainly due to poor seed and fertilizer availability as well as the negative effects of hyperinflation, price controls and the reduced private agro-dealer activities in the rural areas.

A key constraint to raising maize yields has been the lack of fertilizer. Though the country has an installed capacity to satisfy most of its key fertilizer needs and enough phosphate deposits to meet potential production capacity for over 65 years, its electrolysis-based nitrogen fertilizer manufacturing process at current regional parity electricity tariffs is uneconomical.

Current maize policy is based on free markets with the Grain Marketing Board (GMB) defending a floor price. The continuation of the policy of announcing a floor price only serves to confuse the various players on the market given that
GMB can only buy the maize if supported by a government subsidy, something that has proven to be unsustainable in the past and unachievable now given the resource constraints faced by government.

**Recommendations**

- Recapitalize the fertilizer industry. Estimates show that by-passing the electrolysis process by utilizing imported ammonia for processing into ammonium nitrate would result in a very favourable cost per tonne compared to the government’s Season Government Input Scheme.
- Invest in rail tankers to cater for expanded import needs.
- Promote contract farming to improve demand as well as forward/early purchasing of fertilizer to improve fertilizer company cash flows and reduce the debt interest burden due to less spread-out sales.
- Encourage the broader adoption of improved seed and judicious use of fertilizer,
- Develop efficient agro-dealerships in the growing areas.
- Develop the marketing of grain toi facilitate grain flows from surplus to deficit regions, or rural to urban markets through investments in improved market information and government support for collection points.
- More clarity on pricing policy or do away altogether with the floor price policy. If government reintroduces the Zimbabwe Agricultural Commodity Exchange as indicated in its Medium Term Economic Strategy, it will help restore confidence in the maize market.

**Sectoral high-growth strategies**

If the various interventions of the Assessment are followed, the study indicates that the current contribution of the key crops to non-agricultural GDP which is $ 400 million, will rise to about $1,152 million by the fifth year of the high growth strategy. The projections indicate that the high growth strategy increases agricultural GDP by 65%, non-agricultural GDP by 30% and overall GDP by 39% over five years.
This Findings Note is excerpted from “Zimbabwe: Agricultural Sector Assessment Study, Final Report,” Zimbabwe Multi Donor Trust Fund, December 2010. The report was prepared by a team of eight specialists assembled by PricewaterhouseCoopers. Queries to Samuel Taffesse, staffesse@worldbank.org.