

Chapter 5

Agriculture

5.1 Introduction

Agriculture in Zambia has the potential to enhance economic growth and reduce poverty. Good performance in the sector translates into overall improvement of the country's GDP, creates jobs, and expands the tax base. This is mainly because the majority of Zambians depend on agricultural-related activities for livelihood. Thus, the PRSP sees the sector as one of the driving engines for the anticipated economic growth that is required to reduce poverty. In view of the potential multiplier effects that the agricultural sector has on the economy, the PRSP sees the restoration of its high and sustained growth as constituting a critical step for reducing poverty in Zambia.

The failure of agriculture to provide for secure livelihoods is considered as a major factor contributing to rural poverty. In addition, rural areas suffer from deficiencies in access to basic amenities such as health services, safe water, quality education, and infrastructure that worsen the poverty situation. Significantly and related to the foregoing, rural areas have attracted very little investment except in isolated pockets. It is, therefore, not surprising that few rural households are contributing to the full utilisation and generation of the resources required to finance their access to basic amenities.

Agricultural production and productivity is very low in Zambia because most farmers lack markets and support services and incur high production costs. Attracting investment, expanding markets, providing adequate support services, and making agriculture competitive should be a means to improve rural livelihoods. Zambia needs to improve agricultural production, productivity, and market competitiveness in order to come out of the poverty trap. The strategy should be to exploit forward and backward linkages in the production chain within a rural development context. Poverty is multi-faceted and needs multi-pronged approaches to its eradication.

5.2 Situation Analysis

5.2.1 Resource Base

Zambia is abundantly endowed with resources that are required to stimulate agricultural and rural development, in general, and poverty reduction in particular. The country has a landmass area of approximately 752,000 square kilometres of which 12 percent is suitable for arable use. However, only about 14 percent of the arable land is presently cultivated. The country has a good climate, abundant arable land, labour, and plenty of water resources. The rainfall pattern defines the country's three agro-ecological regions⁴. Each region has defined characteristics and is suited for the production of a diversity of crops, livestock, and fish enterprises. Moreover, Zambia's ground water resources are abundant, estimated at 1,740,380 million cubic metres with the ground water recharge estimated at 160,080 million cubic meters per annum. Irrigable land is estimated at 423,000 hectares but less than 40,000 hectares (or 9 percent) is currently irrigated, mostly by commercial farmers cultivating sugar, wheat, and plantation crops (Table 5.1).

⁴ Region I is low rainfall region (less than 800mm annually) in the valley areas. Region II has moderate rainfall (800-1200mm annually) on the central and eastern plateau, while Region III covers the northern areas with annual rainfall above 1200 mm.

There are three main categories of farmers in Zambian agriculture: small-scale, medium-, and large-scale. Their main features are summarised in Table 5.2. Small-scale farmers are mostly subsistence producers of staple foods with an occasional surplus for sale on local markets. Medium-scale farmers produce surplus maize and other cash crops mainly for the local market, while large-scale farmers produce for both the domestic and international markets.

Table 5.1: Summary of irrigation potential in Zambia

Catchments/basin area	Existing Scheme (ha)	Additional Irrigation Potential	Total Potential (ha)	Percent of Total Potential
Upper Zambezi Basin	2,000	110,000	112,000	26
Kafue Basin	13,000	152,000	165,000	39
Luangwa Basin	-	14,000	14,000	-
Luapula and Tanganyika Basin	2,000	62,000	64,000	15
Commercial farms in different basins	8,000	-	8,000	-
Ground water irrigation	N/a	60,000	60,000	14
Total	25,000	398,000	423,000	100

Source: World Bank: *Agricultural Sector Strategy: Issues and Options* (Quoted by Zambia Investment Centre, undated.)

Table 5.2: Characteristics of Zambian agriculture

Characteristics	Small-Scale	Emergent	Medium-Scale	Large-Scale
Number (1999)	459,000	119,200	25,230	>40
Total Ha ⁵	0.5 – 9.0	10 - 20	20 - 60	>60
Crops Grown	Food Crops	Food/Cash Crops	Food/Cash Crops	Cash Crops
Production Focus	Subsistence	Commercial/Subsistence	Commercial/ Subsistence	Commercial

Source: Ministry of Agriculture and Cooperatives: *Agriculture Bulletin 2000*

5.2.2 Land Tenure

Zambia's land tenure is categorised into two main systems: customary and leasehold; 94 percent of the total land in Zambia falls under the customary land tenure system that is controlled and allocated by traditional authorities. The leasehold tenure, accounting for 6 percent of the total landmass, provides for title deeds for a renewable period of 99 years. This tenure system provides a sense of security and places value on land for commercial transactions. The government has made efforts to mainstream gender in land policies and has, in this regard, reserved 30 percent of all allocations of land for women applicants.

5.2.3 Current Agricultural Policy

There is little disagreement within Zambia presently that the policy of liberalisation is correct for revitalising agriculture. There is consensus that the government's pricing and marketing policies in the agricultural sector during the pre-reforms period failed to provide sufficient incentives for increased output by farmers, and also discouraged private sector-led agricultural development especially in the input and output markets. Moreover, because of the policy bias in favour of maize, infrastructure and service support to the agricultural sector discriminated against other equally rewarding activities in this sector targeted at both the

⁵ Classification on the basis of farm size may be misleading because some farm lots are operated as intensive high technology enterprises on relatively small lots of land. This is common in peri-urban areas where intensive livestock and high value irrigated crops are grown.

domestic and external markets. Consequently, a badly distorted and lop-sided agricultural sector emerged that was dominated by a single crop, maize, which was encouraged even in areas that were not suited for its production.

Increasingly from 1983, the government decided to eliminate subsidies on maize and fertiliser, partly for the purpose of fiscal consolidation and partly to remove the distortions caused by the maize sub-sector. By 1994, all consumer subsidies on maize and maize products were completely eliminated and the prices were totally freed. Exports of all agricultural commodities, as long as they adhered to health regulations, became free and permissible and in order to expose Zambia to the competitive external market, imports of agricultural commodities and inputs (e.g. fertiliser and seed) were allowed and opened up to the private sector as well. At the same time tariffs were cut. Additionally, all parastatals that were involved in marketing activities have been either abolished (e.g., the National Agricultural Marketing Board) or are earmarked for privatisation.

The government has attempted to create a positive policy environment within which agricultural market liberalisation could be consolidated. The policy and institutional improvements have focused in the last five years on outstanding reforms in the key areas of (a) consolidating the liberalisation of agricultural marketing (primarily the elimination of subsidies to marketing parastatals and, subsequently, their privatisation); (b) strengthening the liberalisation of trade and pricing policy; and (c) streamlining the land tenure system to make it receptive to the policy of liberalisation. Against these goals and principally in response to the past poor performance of the agricultural sector, the Agricultural Sector Investment Programme (ASIP) was launched in January 1996 in the context of the following five broad objectives for agricultural sector development:

- To ensure national and regional food security through dependable annual production of adequate supplies of basic foodstuffs at competitive costs.
- To generate income and employment to maximum feasible levels in all regions through full utilisation of local resources and realisation of both domestic and export market potential.
- To ensure that the existing agricultural resource base (land, water, and air) is maintained and improved upon.
- To contribute to sustainable industrial development.
- To significantly expand the sector's contribution to the national balance of payments by, among other things, expanding agricultural exports in line with international comparative advantage.

In order to operationalise the objectives stated above, ten strategies were adopted for ASIP, namely, liberalisation of agricultural markets; diversification of crop production; development of the livestock sector; emphasising services to smallholders; expanding economic opportunities for outlying areas; improving the economic status of women; improving the use of the available water resources; full utilisation of land suitable for agriculture; helping farmers deal with natural disasters; and emphasising sustainable agriculture.

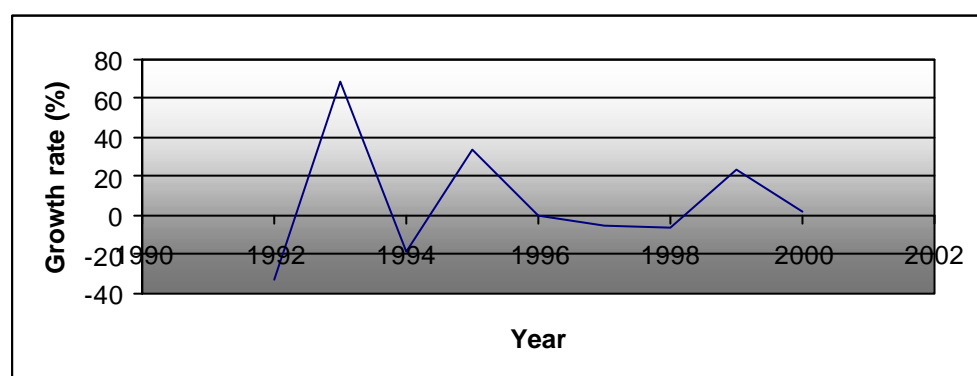
In spite of the achievements discussed above and progress made so far, the process of policy and institutional reform is far from complete. Lack of clarity in agricultural policy has weakened private/public sector partnership and created uncertainty in agricultural production and marketing. Specifically, agricultural input and output marketing, rural/micro-finance, and agribusiness development policy framework (processing, agro-service provision such as mechanisation, etc.) need to be improved. Weak capacity of public sector institutions to respond to the challenges of the agricultural sector and the ability to guide the sector's transformation into a competitive and productive sector has been a major drawback, thus requiring the development of effective institutions that are transparent, accountable, and responsive to the needs of the agricultural sector and agribusiness clients. Moreover, the legal

and regulatory environment has to be improved to attract and encourage private sector participation, to ensure safety, and meet standards acceptable to local and international markets, to define contract sanctity (including loan repayment) and establish capacity to adjudicate contract disputes.

5.2.4 Agricultural Performance

The real growth rate in the agricultural sector has fluctuated significantly (Figure 5.1), mainly due to the sector's high dependence on seasonal rainfall, reduced investments and the failure to strategically position the sector according to its comparative advantage. Because agriculture is predominately rain-fed, its performance has been highly variable and inadequate. The sector's contribution to GDP averaged 18 percent over the past decade. Non-traditional, mainly agriculture-based exports increased from \$46.5 million in 1995 to \$133.9 million in 1999, thus demonstrating the enormous export potential the sector possesses. The contribution of agriculture to non-traditional exports did increase from 23 percent in 1990 to 47 percent in 1999. However, this growth is seriously threatened by the lowered competitiveness of the sector due to high production costs arising from the high prices of inputs, especially energy and fertilizer.

Figure 5.1: Agriculture Real Growth Rates, 1992-2001



Trends over the years indicate that the agricultural sector has somewhat accelerated its diversification mainly due to the increasing number of outgrower schemes in the country. The value and variety of export commodities have also increased, thanks to improving stakeholder consultations and partnerships. However, the ability of the sector to tap the resource endowment to improve the livelihoods of the poor has been constrained by both micro and macro factors. Private sector activities have been limited to a few areas, thus exposing the long-standing duality of agriculture. High interest rates, escalating inflation, decreasing purchasing power, volatile exchange rates, liquidity constraints, and limited credit facilities have combined to limit the impact of the liberalisation policies.

The most significant recent developments that have constrained growth in agriculture include unfair trade practices with the country's regional neighbours; low competitiveness; and an overall reduction in investment inflows to the sector. In particular, the signing of the COMESA FTA implies that products entering Zambia from other member states will not attract customs duty, thus making such products cheaper on the domestic markets and heightening competition from cheap imports. The sector has also over the years suffered from a reduced level of investment and resource allocation inflows from the state budget and donor contributions. While the four-year budget for ASIP was \$350 million, the actual total disbursement over the period was only 53 percent at \$184 million. Meanwhile, the average government budgetary allocation to the sector was 4 percent of the total national budget.

Unfavourable weather conditions (flooding and dry spells); increasing outbreaks of livestock diseases; and overall decline in access to agro-services have all contributed to the slow progress of the sector. Furthermore, inconsistency between policy pronouncements and implementation; poor infrastructure; gender inequality; and HIV/AIDS have also depressed the sector's growth. Low utilisation of land because of cumbersome procedures in obtaining title deeds and lack of incentives for utilisation of idle land and unsustainable agricultural practices also continue to inhibit the sector's growth potential.

While Zambia is said to enjoy comparative advantage in the production and export of various commodities, inherent constraints such as high energy and transport costs, driven by high internal taxes and charges, continue to hinder agricultural producers' competitiveness. Other factors reducing competitiveness are the high crime rate that has increased the cost of farm security.

It is against this background of a stagnating agricultural sector growth rate, reduced inflow of investment resources, and reduced competitiveness due to policy constraints that a paradigm change is being advocated for the agricultural sector to become one of the key components driving economic growth and poverty reduction in Zambia. This entails increasing the efficiency, competitiveness, and sustainability of production while ensuring food security and increased income. Notwithstanding the uniqueness of the requirements of different farmer interest groups, sustainable and broad-based agricultural growth with forward and backward linkages to other sectors relevant to sustainable rural development will form the thrust of the new approach to agricultural development as one of the key components leading poverty reduction

5.3 PRSP Interventions in Agriculture

Zambia recognises that future growth potential will be based on increased market competitiveness and that the liberalisation process embarked on earlier is virtually irreversible if market players have to respond to the emerging structure and requirements of the global economy. In this regard, agricultural producers, processors, and merchandisers will be enabled to rapidly reposition themselves in the face of increasing competition, changing customer preferences, and new distribution channel designs. Both agricultural producers and agri-business players will be encouraged to produce competitively and reach out to emerging markets more proactively.

In this regard, one of the priorities will be to complete the policy reform agenda set at the beginning of the 1990s, and to ensure that institutions in the agricultural sector attain a capacity level that makes them responsive to their clients. To provide policy clarity that appears to have been lacking in the last few years and avoid confusion regarding some aspects of the sector, government will issue within a year after the adoption of the PRSP clear policies and guidelines regarding agricultural input and output markets, mainly fertilizer and maize, as these appear to be areas where policy inconsistencies have been observed.

Another priority area is legal reform pertaining to contract enforcement and adjudication. An enabling legal and policy environment that is conducive to investment is necessary, including a commercial code that defines contract sanctity, capacity to adjudicate contract disputes, and a clear definition of property rights, together with the ability to pledge them as collateral against loans. The legal and policy environment will be set within a framework that operates effectively at both the local and national level.

Zambia will also review the Land Act of 1995 and assess the implementation progress. The Land Act of 1995 was aimed at attaching value to land and enhancing security of tenure,

thereby creating land markets and initiating major economic activities. It removed two obstacles to land markets: it allowed state land to be sold and customary land to be leased, with the consent of the chiefs. However, very little progress has been made in market development for land, titling both customary as well as state lands, and setting up a land administration system and procedure to meet the demands of such a complex task. It is, therefore, important to find out what the real issues are and start addressing them. The starting point will be a review of the situation to identify appropriate interventions and instruments, and this task will be launched immediately after the adoption of the PRSP and will be completed within six months. Some key objectives in this process include finding more effective measures against unproductive holding of state land and, for rural areas, discussing with traditional communities incentives for opening unutilised land for investment.

A major objective in agriculture will be to build its capacity to expand production, productivity, and competitiveness in the agricultural sector to meet both the challenges of local and international demands. This requires the mitigation of constraints that currently play to directly or indirectly inhibit agricultural sector players to meet their full productive potential. This will be achieved through interventions such as identification and promotion of products with competitive advantage, provision of affordable credit, development of export infrastructure, and identification of viable markets. In addition, lowering costs of production that constrain agricultural expansion will do this.

Zambia will need to build on her recent successes in agricultural exports by investing more resources to build extra capacity and incentives among all the categories of farmers and increase export more. The expanded export base will earn more foreign exchange, which will further expand the economy, create jobs, and subsequently reduce poverty.

In addition, the country will encourage the expansion of output at competitive prices, which is expected to increase through expansion of population and increased incomes. Higher demand for domestic foodstuffs creates markets for rural farmers and reduces poverty. Further, the vulnerable groups of farmers will be assisted to grow more food to meet the household food security needs as well as surpluses for the domestic markets. This will involve specific interventions designed to enhance production and productivity on a sustainable basis. In particular, government will take advantage of the emerging markets created by the expanding tourist and supermarket enterprises (for example, the Livingstone area) to assist farmers to access them. Cross-sector linkages between farmers and processors of farm produce (e.g. cotton ginneries) will be strongly encouraged.

Agriculture is a sector where the large-scale/small-scale mix will be strongly encouraged with synergies between them, where applicable, exploited. Credible large-scale producers generally respond quickly in raising output and this contributes to a rising GDP, industrial expansion through greater raw material provision, enhanced employment, and higher tax revenues. However, it may be capital intensive and thereby falter on maximising employment creation. Successful smallholder agriculture, on the other hand, impacts on a higher number of people but the risk it carries is that it may be slow to expand at a time when threatened by the adverse developments in the mining industry, Zambia needs to quickly find a new economic base.

Synergy between large- and small-scale producers will be encouraged primarily through outgrower schemes (essentially for export crops) since this directly promotes private sector provision of input and output marketing arrangements as well as agricultural credit. In this connection, large farm blocks will be encouraged in all parts of the country, more especially the most poverty stricken as a way of targeting encouragement of investments and job creation in those areas. Small-scale farmers will thereby have the additional option of working on large farms as seasonal labour during their off-peak season.

The PRSP recognises that the initial impact of liberalisation on Zambia's smallholder farmers has been negative due to limited opportunities to access both agricultural inputs and credit. Under such conditions, a major national challenge under the PRSP is to work out how best to help smallholders, particularly those in the outlying areas, to benefit from inputs and credit under uncertain conditions regarding how market forces alone could correct this imbalance in delivery. While the outgrower schemes mentioned above will generally assist, mechanisms going beyond and targeting certain farmers will be required. This is particularly so with respect to the facilitation of rural finance. In this respect, the PRSP will invest effort in understanding how best to bring in the private sector and community-based organisations/associations in the provision of the needed financial services that are so strategic to empowering the poor's productivity.

The integration into the market of outlying areas is considered by the PRSP as an important step towards enhancing the productivity of the poor. For the PRSP initiatives in the agricultural sector to succeed in integrating smallholders into the market, an additional effort will be made in the facilitation of timely, reliable, and relevant information flowing to all the main stakeholders as well as from the stakeholder to the major implementation/coordinating agencies. Generally, the agricultural delivery systems will provide the outlying areas with, *inter alia*, appropriate and affordable yield-enhancing technologies; key inputs, particularly improved seed and fertiliser; efficient systems of disposing of outputs; and affordable finance. In this regard, the government will continue to encourage the development of an effective farm input supply system by promoting public-private-partnership (PPP) in the input supply sectors.

Zambia also maintains that the creation of a market economy does not necessarily entail that the state must have no interest or involvement in commodity, input, or resource markets. However, such involvement is being perceived under the PRSP to be indirect and supportive rather than direct and competitive. This implies government's preparedness under the PRSP to be involved in some transitional functions such as those related to the provision of support services and guaranteeing of national food security.

In the light of the above, the following will constitute the principal interventions in the three years of PRSP implementation.

Output 1: Finance and Investment Climate Improved

- Establish an Agriculture Development Fund (ADF) with innovative management.
- Improve access to credit and insurance services.
- Increase volume of credit at affordable rates.
- Increase private sector investment.
- Establish financial infrastructure for rural credit, especially for outgrower schemes.
- Enact and enforce legislation and regulations for sustainable management of financial systems.

Output 2: Marketing, Trade, and Agricultural-business Climate Improved

- Identify and promote products with comparative advantage.
- Develop Agriculture Export Zones.
- Identify and develop Export-oriented Livestock Disease-Free Zones.
- Orient extension staff and public support services towards market-based agriculture.
- Develop entrepreneurship skills and capacity among extension workers.
- Maintain sustainable non-market-distorting strategic food reserves.
- Promote production of a diversity of food crops among smallholder farmers.
- Promote production of a diversity of high value crops.
- Improve agro-processing and in-situ value-adding activities.
- Strengthen rural business groups.
- Strengthen efficient private sector input supply and output marketing agencies.

- Strengthen public-private sector partnerships.
- Strengthen market information systems.
- Improve the enactment and enforcement of legislation and regulations.

Output 3: Land and Infrastructure Development Improved

- Establish a Land Information Centre.
- Establish functioning stakeholder task forces.
- Identify and demarcate suitable land by stakeholder task forces.
- Identify and develop resettlement and farm blocks.
- Develop trunk and feeder roads in high potential areas.
- Rehabilitate and maintain new trunk and feeder roads in high potential areas.
- Develop telecommunications in high potential areas.
- Provide electricity in high potential areas.
- Construct and rehabilitate rural dams and irrigation facilities.
- Establish an incentive and monitoring system to encourage utilisation of land.

Output 4: Technology Development and Dissemination Improved

- Establish a Technology Development and Transfer Fund.
- Adapt demand-driven technology for increased production of products with competitive advantage.
- Package and disseminate improved technology.
- Introduce sustainable measures to control outbreaks of major diseases.
- Improve livestock disease monitoring and eradication.
- Improve the enactment and enforcement of legislation and regulations.
- Disseminate messages on improved irrigation technology.
- Promote labour-saving techniques in farming and other rural livelihoods.
- Improve technical skills for farmers, farmer groups, extension staff, and NGOs.

Output 5: Targeted Support System for Food Security Established

- Promote the use of low-input and conservation farming technologies.
- Select target farmers who meet criteria.
- Distribute required enterprise inputs on time.
- Provide extension messages to support the enterprises.