

2.0 AGRICULTURE

Agriculture remains the key priority sector in the growth and poverty reduction agenda of Zambia. Over 60 percent of the population derives its livelihood from agriculture. Despite Zambia experiencing strong economic growth in the recent past, agriculture has not performed well. In order to fully exploit agriculture, Zambia has developed well articulated agricultural policies and strategies which emphasize objectives such as attainment of food security, maximizing farmers' incomes, promoting sustainable agriculture, and enhancing private sector roles in input and output markets.

2.1 Concrete actions taken and specific progress made in implementation

Zambia has put in place policies that provide public support and investment in agriculture with a view to creating an enabling environment to attract private sector and smallholder interest in farm production, processing and trade. The main thrusts of the National Agricultural Policy (NAP) are liberalization, commercialization, promotion of public and private partnerships, and provision of effective agricultural services that will ensure sustainable agricultural growth.

Programmes that Zambia has been implementing to achieve sustainable food production and enhancing agricultural productivity, farmers' incomes and as a response to climatic change include:

1. crop seed multiplication and distribution,
2. conservation farming,
3. Promoting "traditional" food crops such as cassava, sweet potatoes, sorghum and millet.
4. Research into high yielding drought/pests tolerant food crops such as sorghum, cassava and sweet potatoes;
5. Soil fertility initiatives to combat soil degradation through agro forestry and organic fertilizer
6. Promotion of small-scale irrigation technologies and post-harvest technologies;
7. Livestock disease control measures such as massive vaccinations, cordon line construction, livestock movement ban;
8. Provision of extension services to farmers on crops, livestock, and fisheries;
9. Provision of other services such as phyto-sanitary services.
10. As part of the strategy to improve food securities, Zambia is implementing the Fertilizer Support programme, which was designed to improve access of smallholder farmers to inputs.
11. Rural seed supply through smallholder seed multiplication
12. The government has established the Out grower programme earmarked to assist smallholder farmers improve their productivity and farm income. Crops supported under the programme include Tobacco, Cotton, and Coffee, Pineapples, Cashew nut, Fresh vegetables and paprika.
13. irrigation development targeting both smallholder and commercial farmers particularly in the drought prone areas,
14. Livestock development and disease control,
15. Land and infrastructure development,
16. Research and technological development,
17. Development of Fisheries and aquaculture sub sectors
18. Winter cropping in plains is on going as part of the flood recovery programme

19. Commercialization of Agricultural Lands (Farm Blocks Development) aimed at rationalizing the use of the limited resources to develop the selected parts of up to 100,000 ha in each of the 9 provinces of the Country. Government is providing necessary infrastructure such as feeder roads, bridges, storage sheds, electrification, dams and canals to attract investments in agriculture. Electrification of Nansanga Farm Block is in progress and surveys are complete.
20. In the farmer selection criteria for the beneficiaries, provision to cater for affirmative action in consideration of the gender has been made by insuring that 30percent of available small-scale farm plots shall be set-aside for women and other vulnerable groups.
21. Integrated and diversified farming at community level is one way of achieving sustainable agriculture. A number of strategies to realize sustainable food productions at community level are being implemented such as; the utilization of organic materials. In addition the promotion of suitable cultural practices such as crop rotation, improved tillage, erosion control, utilization of manure from livestock enterprises, use of homemade natural pesticides from agro forestry tree, as well as utilization of crop residues for compost manure and fodders is being undertaken.
22. Farmer field schools in rural communities have provided an effective approach to disseminating information on appropriate technologies.
23. The control of agricultural pests is critical to sustainable agricultural development. With the current challenges Zambia is facing regarding climate change, it is imperative that environmentally sound agricultural pest control programmes are implemented. In view of this, Zambia's past research has concentrated more on cultural practices such as crop rotation, intercropping, destruction of crop residues, date of planting and harvesting, deep ploughing and the use of traps and planting barrier than the other control practices. These cultural practices have led to the reduction in the amounts of pesticides used.
24. Development of resistant varieties is another area that researchers have used as a control practice to reduce the use of pesticides. Several varieties have been and are being screened for resistance against both insects and diseases. Examples of these include the screening of tomato varieties against red spider mite a major pest of tomatoes in Zambia during the dry season.
25. In order to improve water management in agriculture, the Government through the Ministry of Agriculture and Co-operatives is facilitating construction and rehabilitation of multi-purpose dams, weirs, wells and boreholes; promoting sustainable river diversion for irrigation; and is developing and promoting rainwater harvesting technologies.
26. Water saving irrigation technologies such as drip (trickle) irrigation, micro sprinklers, common sprinklers and centre pivot systems are being promoted. In recent years, there has been a marked increase in the use of centre pivot systems especially among large-scale farmers. The emerging farmers tend to use drag hose, semi fixed and fixed sprinklers systems. Smallholder farmers in rural areas tend to use treadle pumps or petrol/diesel powered systems combined with furrow systems for water application.
27. Government recognizes the poor state of infrastructure especially in some of the potentially productive agricultural areas. Measures that have been undertaken include rehabilitation of feeder roads, bridges, storage sheds, dams, canals, dip tanks, on-farm storage to help farmers market their produce and access inputs.

28. The Government is also developing strategies to educate small-scale farmers on the importance of constructing on farm storage facilities.
29. Zambia's local agro-industries have raised concerns with regard to unfair trade practices with some of the trading partners in the region. However, through dialogue within the regional bodies such as COMESA, efforts are underway to level the playing field in trade and investments.
30. It should be noted that the Doha round of negotiations and the ESA-EU-EPA negotiations relating to the liberalization of agricultural commodities are still yet to be concluded. However, efforts are being made to liberalize trade in agricultural commodities within the region.
31. Zambia is encouraging farmers to diversify into production of high value cash crops such as cotton, tobacco, coffee, herbs and spices, floriculture and horticulture products. The formation of the Zambia Export Growers Association (ZEGA) is one positive effort that promotes the production and export of vegetables, horticulture and floriculture. These products have managed to enter the European market. Some small-scale farmers around Lusaka have been certified for Euro GAP and are able to export their vegetables to Europe.
32. The National Early Warning Unit was established in the Ministry of Agriculture and Cooperatives. The Unit provides early warning information using monthly food security updates, alerts, Crop and Livestock Monitoring reports as well as briefings and support to contingency and response planning efforts.
33. Government continues to provide funds for the Food Security Pack Programme executed through Programme Against Malnutrition (PAM) under the Ministry of Community Development and Social Services targeting vulnerable but viable farmers.
34. Nutritional (Food mix) insecurity stems from the lack of access to an adequate diet due to the unavailability of food variety, ineffective distribution mechanisms or inadequate utilization of food at household level. Zambia is promoting diversified production and consumption of nutritious food crops.
35. Zambia is implementing the Private Sector Development Programme with the aim of improving the investment climate within the country. Within the programme, is a component on trade expansion that is looking at enhancing the capacity of the Zambia Bureau of Standards in quality testing to international best practices, strengthening the capacity of the Ministry to provide SPS services for export horticultural and livestock products.

2.2 Lessons learnt

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There has been an increase in food insecurity in rural areas due to factors such as the collapse of some of the institutions which used to provide services in rural areas leaving farmers with no guaranteed access to markets and credit. Though the Food Reserve Agency is present in the crop marketing, the impact is minimal because of inadequate financial resources.

The private sector has failed to fill some of the vacuum created by the withdrawal of government services and the collapse of government-supported institutions.

Access to key services such as credit, marketing and information has been problematic especially to small-scale farmers in outlying areas. Some of the services such as veterinary services that previously used to be offered to farmers have now to be cost

shared with farmers. Given the high poverty levels and low incomes, most small-scale farmers have been unable to pay for some of the services.

The earlier focus in the early warning systems was on food, there is realization of the omissions of markets, trade and impact on livelihood which are being addressed through data collection and working in collaboration with stakeholders to improve the early warning system.

During the 1970 - 1980s Zambian agriculture was growing rapidly in comparison to other economic activities, because then the population was small, vigilant and willing to work on land. Availability of agricultural inputs was well coordinated, well distributed to bona fide farmers countrywide. Markets were operative through rural cooperatives, and the infrastructure was being maintained through a functional Ministry of Works and Supply. Over the years Zambia's population has been increasing at the rate of 3.5percent per annum whereas the agricultural growth has been varying at the estimated rate of 2 to 3percent annually. The lessons learnt are that if prudent measures are put in place the situation can be reversed. As the national economy grows it is anticipated that more resources will be unlocked to cater for agricultural and rural development.

2.3 Recent trends and emerging issues

1. Due to trade liberalization, Zambia has exposed local producers to tough competition from imports.
2. The power outages being experienced in the country have put a lot of uncertainty in irrigated agriculture and in production of high value agricultural products.
3. The introduction of bio fuel crops such as Jatropha is likely to undermine the food security situation in Zambia as more farmers may diversify into production of bio fuel crops at the expense of food crops.
4. Transboundary partnerships on livestock disease control are in place

2.4 Major Constraints

1. Low spending on agriculture-related developments resulted in dilapidated agricultural support infrastructure and inadequate delivery of extension service.
2. The poor rural infrastructure in many parts of the country is still constraining the development of agriculture as it increases operational costs and cuts off certain areas from many agricultural services. Poor infrastructure in rural areas causes high distribution costs leading to higher prices of food.
3. Natural disasters such as drought and floods due to climate change
4. Low food production among the small-scale farmers.
5. lack of information on appropriate technologies
6. Poor land husbandry practices.
7. High energy prices leading to higher production costs
8. Stringent product standards,
9. HIV/AIDS has emerged as a serious constraint to the development of the agricultural sector.
10. Inadequate value addition due to lack of fully developed agro-industries resulting in export of raw materials.
11. Inadequate mechanization of the agricultural sector.
12. Dependence on imported agricultural inputs
13. High dependency on rain-fed agriculture

14. Non-availability or poor access to inputs
15. High dependency on maize –
16. Underutilization of land resources
17. High incidences of pests and disease for livestock and crops
18. Inadequate agricultural finance and credit,
19. Unfavourable world and regional markets
20. Weak market linkages to local and international markets

2.5 Challenges

1. meeting the millennium development goals of reducing hunger and poverty by 50 percent by 2015
2. The promotion of value addition closer to the production centres to reduce the cost of wastage e.g. abattoirs, refrigerated trucks for transportation
3. Provision of adequate infrastructure in the rural areas to promote agricultural development
4. Producing agricultural inputs, (vaccines, fertilizer, equipment) locally
5. Production of bio fuel crops may compromise the production of food and may lead to hunger in Zambia. A balanced approach is required.
6. There is need to promote the formation of strong farmer based marketing organizations.
7. Increased investment in the agricultural sector
8. Promoting job creation in off-farm activities
9. Mitigate against impact of HIV and AIDS on agriculture
10. Strong early warning mechanism
11. Promotion of good nutritional practices
12. Promotion of research in crops and livestock

The majority of the poor people live in rural areas and depend on agriculture for their livelihood. In this regard, agricultural development has the potential to impact on extreme poverty and hunger, which affects most rural population. Zambia is focusing on the development of rural infrastructure where the majority of the poor live. Key growth strategies being followed support stronger linkages between the resource-base sectors of agriculture and manufacturing. This will be achieved through upstream linkages to agro related processing and supporting the expansion of a strong and diversified export base.

Agriculture and rural development is often interlinked. The development of any stimulates the other. Efforts have been made to increase agricultural production but the number of the poor and malnourished people has been increasing over the years. The reason for this is that the government has not increased investments in agriculture and rural development.

Despite Zambia being endowed with vast land, fertile soils, plenty of water and a favourable weather pattern that can support agricultural production and hence stimulate rural development this potential is never realised. For instance, market reforms have been made in Zambia to stimulate private sector participation without addressing major constraints that hinder agricultural and rural development. These constraints include poor service delivery particularly for small scale farmers, marketing constraints especially in outlying areas as a result of poor infrastructure such as feeder roads, a void

in agricultural finance and credit, unfavourable world and regional markets and poor accessibility and administration of land.

Often times, Zambia has tried to develop rural areas by attempting to promote agriculture at the exclusion of the development of other sectors such as health, education. However, in rural areas these social amenities such as access to education, health and extension services are inadequate.

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The lessons to be learnt are that if prudent measures are put in place the situation can be reversed and such that agricultural growth can be more promising than before. As the national economy grows it is anticipated that more resources will be unlocked to cater not only for the development of agriculture but the rural areas as well.