# THE AGRICULTURAL CONSULTATIVE FORUM

## Advisory Note on the Development of the Wheat Subsector in Zambia

## Background

The wheat subsector has achieved remarkable growth leading to the achievement of self sufficiency status since 2007. This performance has been due to a combination of the effects of a number of factors including favourable agro-ecological conditions, favourable policies and economic environment. Production has risen from just below 100,000 MT in the year 2000 to estimated levels of about 230,000 MT in 2010.

Wheat production in Zambia is concentrated in the four provinces of Central, Copperbelt, Lusaka and Southern. The Central province is the largest producing province with Mkushi contributing the largest and holding the largest potential for expansion.

On the demand side, wheat consumption has risen to reach current estimated levels of between 200,000 and 240,000 MT per year. However, neither comprehensive wheat consumption studies have been done in Zambia nor are there data records from CSO, NFNC or MACO to help establish actual wheat consumption requirements and patterns. Comparing current production and consumption figures, it can be safely stated that local production is able to meet local demand for wheat products.

It has been established that the quality of Zambian wheat on international and local markets, is of very good quality for manufacturing purposes into flour for all types of wheat based products for human consumption. As such there is no justification currently for importing wheat for blending purposes.

Despite the achievements attained, the subsector is still characterised by a high cost structure arising from high production input costs such as fertiliser (33-40% of variable costs), irrigation (7-23% of variable costs), finance (6-13% of variable costs), fuels and oils (5-7% of variable costs), seed (3-11% of variable costs) and transportation (7-8% of variable costs).

Erratic increases in input prices have a strong bearing on production. In this regard stability in prices and favourable price levels are essential in attaining sustainability and competitiveness in production through out the wheat value chain.

A mutually beneficial resolution of the Value Added Tax (VAT) issue, consistent with a sustainable development of entire wheat value chain will only

be possible if all stakeholders are ready and willing to undertake a comprehensive analysis of the impact of VAT on the value chain.

The degree of variability in gross margins across the three regions namely; Central, Lusaka, and Southern provinces was quite significant from about US\$500 to US\$600 per hectare, implying differences in production efficiencies as a result of location (ecological, remoteness from markets etc.) and to some extent knowledge factors.

On a regional basis, the cost of producing wheat is relatively lower in Zambia compared to Zimbabwe but higher in relation to South Africa. This has implications for competitiveness of the local crop as well as potential for tapping into regional and other international markets.

### Although all the wheat value chain players are served by various government ministries and departments in MACO, MCTI, MoFNP etc. the subsector suffers from a lack of an institutional framework for resolving common and cross cutting challenges and issues.

Although national average wheat yields in Zambia are relatively high at 6.5 tons/ha as compared to other wheat producing countries within the region, this is negated by the high cost of production structure. In order to get around the issue of costs, farmers need to enhance their productivity by improving both skills, technological and knowledge levels of wheat production to attain yields above 7 tons/ha. This can only be achieved by robust wheat research and extension service provision. Wheat research and extension programmes and activities in Zambia presently are at best too limited, and at worst almost non-existent to provide the required types and levels of support to the value chain in a sustainable manner especially at wheat production level.

The subsector is characterised by lack of a well developed and structured market, thus leading to a general lack of specialisation, which in turn affects value chain effectiveness and efficiencies. Until recently, the subsector had no grading and standards system commanding sector-wide acceptance and confidence. Since 2009, the subsector has increasingly relied on the ZAMACE standards and grading system.

The wheat subsector, has over the years installed large wheat production and processing capacity, which, however remains underutilised on account of low local demand as well as limited export opportunities. The wheat milling industry is currently operating at about 70% per cent. The number of millers stands at about 16 situated mainly in Lusaka, Copperbelt, Mkushi and Mazabuka.

The distribution of benefits along the Zambian wheat value chain is very unequitable. The benefits are currently more skewed towards the bakers and less to the farmers. A more equitable distribution of benefits is preferred in order to sustain the value chain.

Wheat is rapidly growing in status as one of the country's main food and security commodities. However, further growth in terms of consumption and therefore production, is to a significant degree, being hampered, by among other factors, Value Added Tax on the wheat value chain.

# Recommendations

On the basis of the foregoing conclusions and findings of this study, policy interventions both in the short and long term, should aim at further relaxation of constraints and bottle necks in wheat production, value chain manufacturing activities, and marketing of wheat and wheat based products with the objective of expanding the local market and tapping into promising regional markets. The study has made comprehensive recommendations on cost reduction measures in section 2.7. In terms of wheat production, the constraints farmers face that lead to high cost of production and uncompetitiveness need to be addressed are as follows:

#### Key Recommendations aimed at reducing cost of production

- 1. Facilitate the enhancement and expansion of existing local capacity and capability for efficient production and distribution of commercial fertilizers and promote new investments in manufacturing capacity to be strategically located in order to benefit producers by way of reducing transportations costs as well as reducing the foreign cost content in the cost of fertiliser.
- 2. Measures should be put in place to accelerate the program for bio-fuel production and commercialization in Zambia so as to reduce the cost of fuel through blending of fossil fuels and bio-fuels.
- 3. Government with the support of stakeholders should endeavour to engage financial institutions to develop new and innovative strategies for managing risks on their agricultural portfolios as opposed to increasing reliance on traditional approaches such as high interest rates.
- 4. In order to reduce on the cost of transportation of imported machinery and equipment measures should be put in place to boost investment programs in the two main railway systems as part of the strategy for lowering transportation costs which are a major cost element throughout

the value chain. Anecdotal evidence clearly points to the fact that unit transportation costs for bulk cargo by rail are far much lower than by road.

- 5. For high and efficient productivity in order to attain sustainable wheat yields, measures should be put in place to develop a comprehensive and sustainable blue print for a national program for the improvement of farming systems efficiencies through development and widespread adoption of appropriate technologies (precision farming technologies) to enhance achievement of higher yield levels to counter the effects of high production costs as well as breed for disease resistance and research for better water management in order to reduce to cost of pesticides and irrigation respectively. In addition financial resources and technical assistance required to underpin a robust and sustainable wheat research and extension development program to which all key stakeholder beneficiary groups contribute on a cost sharing basis should be mobilised.
- 6. With the increasing status of wheat as a food and nutrition security crop, key stakeholders facilitate a detailed study to assess and quantify the costs and net benefits to the economy, of the removal of VAT from the wheat value chain. Removal of VAT from the value chain has the potential of lowering prices for bread, buns and other wheat based products, thus increasing consumption and demand among consumers in other urban and rural areas of Zambia.
- 7. The wheat industry acting through all its interest groups, comprehensively deliberates on the need for, and reach consensus to set up a new independent standards and grading body which should provide a broad range of testing and standards facilities.

#### **Other Recommendations**

During the course of this study many issues arose pertaining to the future sustainability of the wheat value chain. In view of this, the following additional recommendations are made to address the issues as well as form a basis for future research or studies.

- 1. Maintaining macro economic stability so as to reduce the negative impact of unstable exchange rates and rising inflation.
- 2. Creating a formal and structured market which guarantees profitability and transparency in the supply and pricing of wheat.

- 3. In order to maximise the investment capacity both at primary production of wheat and milling, necessary steps should be taken immediately to secure sustainable permanent and regional markets for wheat and wheat based products especially into the DRC for the short term and other countries in the region for the long term. Also ensuring that trade protocols and agreements within SADC and COMESA trading blocks particularly on the rules of origin do not work to the detriment of the Zambian wheat industry.
- 4. Setting up and implementing a broad based institutional framework for coordinating, harmonizing, monitoring and guiding activities and long-term development of the sub-sector
- 5. Providing enabling resources to enhance capacity of MACO and CSO to collect all key value chain data on wheat production and consumption including wheat based products in a timely and sustainable manner. Statutory instruments and robust measures should be put in place to compel all stakeholders to comply with data collection activities by MACO and CSO. Measures should be put in place to adopt accurate and modern high technological methods for collecting wheat crop forecast data such as aerial remote sensing.