

Restructuring food markets in Zambia: Dynamics in the beef and chicken sub-sectors

Context

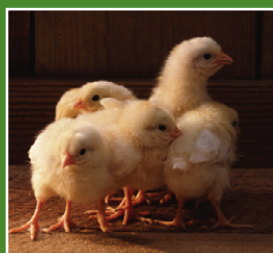
This policy brief forms part of the Recovering Markets study in Southern Africa. It has endeavoured to analyse market concentration in the food processing and retail sectors, as well as to predict future dynamics in the sectors which have emerged as a result of the restructuring of the food market and the rapid changes taking place in the structure and governance of local, national and regional agri-food markets and the implications of the changes for small/medium producers in the restructuring of the food industry, together with the implications for policies and programmes within the context of the agri-food market.

Key findings

- Livestock markets in Zambia have evolved from state control to the free market system dominated by a few firms which are vertically integrated throughout the supply chains.
- Private firms such as Zambeef are expanding throughout the country mainly through buy-outs, thereby replacing the informal meat supply chains.
- Market liberalisation presents both opportunities and challenges for small scale livestock producers - private abattoirs offers lucrative prices but stringent quality and food safety standards are major hurdles.
- Contract farming through out-growers schemes presents an effective opportunity for linking smallholder farmers to formal agribusiness.



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Brief country profile

Livestock plays an important role in Zambia's social-economic wellbeing. If meaningfully exploited, Zambia's livestock sector has tremendous capacity to contribute to poverty alleviation and socio-economic development as the sector attracts significant small scale farmers' participation (Chilonda et al, 2000). All major livestock types (i.e. cattle, goats, sheep, pigs and poultry) are produced by both small scale/traditional and commercial producers. Of the current estimated 3.49 million cattle in Zambia, 83 percent of the national herd is husbanded by the traditional sector, while 17 percent is reared under the commercial sector (Tembo, 2002). While traditional cattle and chicken production is widespread over the country, commercial beef production is mainly concentrated in areas along in the line of railway, i.e. parts of Central province (Chisamba, Kabwe and Mkushi districts), and Southern (Kalomo, Choma, Monze and Mazabuka districts) Province.

There are also a significant number of small scale broiler chicken producers in the country. The Poultry Association of Zambia (PAZ) estimates indicate a regime of about 50% small to medium scale broiler producers of the current 24.4 million of Zambia's annual broiler production (Ndiyoi et al, 2007). Broiler production is also tightly concentrated around the capital Lusaka, the Copperbelt province and other main towns, providing an opportunity for producers to take advantage of the major cities and towns' high table chicken consumption rates driven by these areas' high population densities and high disposable incomes.

Besides significant small scale beef cattle and broiler chicken production, recent research has observed

marginal small scale farmers participation and access of the evolving beef and broiler marketing channels. The share of the traditional sector in the beef market is for instance deemed to be relatively smaller as commercial sector accounts for 54 percent of the urban beef sales (Tembo 2002). Out of the total 24.4 million broilers produced annually, 65% of the broilers are sold dressed, while the live bird market (one dominated by small scale producers) only takes up 35% (Ndiyoi et al 2007).

The above illuminated that market access imbalances between small scale and commercial beef and broiler producers are mainly as a result of the emerging new beef and broiler market channels. As a result of new market demands, major constraints affecting small scale livestock producers are increasingly becoming entry barriers for small scale producers into these evolving market channels and options. For instance, rampant cattle disease outbreaks among small scale cattle herds results not only in high mortality rates, but also in inferior small scale beef quality which renders small scale beef cattle unattractive to restructured market channels commercial buyers.

Other small scale beef production constraints e.g. affecting their access to restructured market channels, include: (i) inadequate livestock nutrition and water supply, (ii) poor animal husbandry practices, (iii) inadequate marketing infrastructure and, (iv) lack of appropriate livestock research, inadequate livestock extension and health services as well as lack of linkages between livestock research and livestock extension. These further diminish the small scale beef producers' prospects of entering these new and gainfully rewarding market channels. The market demand for high quality standards and consistency in production volumes remain the two primary constraints affecting small scale



broiler producers' entry and gainful participation in the restructured table chicken marketing channels.

In order to help resolve the above market deficiencies, there is a need to have in place deliberate measures capable of inducing improved small scale beef and broiler productivity and improved and/or equitable beef and broiler market access and profitability. The latter expected outcome brings with it the need for measures capable of improving beef and broiler market transparency, especially for the small scale producers. Before coming up with requisite measures for improved small scale producers' market access profitability, it is imperative that an analysis of major developments and dynamics of the Zambian beef and broiler markets be done.

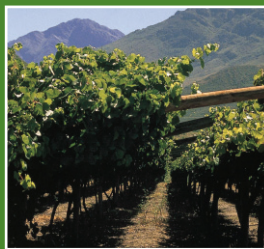
Beef and broiler markets dynamics

Following the country's market liberalisation in 1993, the Zambian beef and broiler sectors have rapidly changed. Privatisation of the once mundane beef buying and processing monopoly - the Cold Storage Board of Zambia (CSBZ) - led to the establishment of private beef buying and processing outfits. Privatisation also led to the entry into Zambia of foreign supermarkets, chief of which was Shoprite Holdings Limited from South Africa in 1996 (Neven 2006). There were also competitive investments by local supermarket chains and beef processors.

As the result of the above developments, the Zambian beef market now consists of a number of marketing channels which range from the farm-gate through to the open markets, butcheries and supermarkets. There are five beef supply channels which currently operate in the beef sub-sector and they include (see figure 1):

- 1. Channel 1:** Private buyers who purchase first stage processed beef and prepare it for marketing to supermarkets and traditional butcheries
- 2. Channel 2:** Local butcheries who sell directly to households especially in the rural and peri urban areas
- 3. Channel 3:** Large feedlots system who are usually integrated from production to wholesaling , eg Dar Farms
- 4. Channel 4:** Independent abattoirs such as Zamzam model which concentrates on first and second processing only, before selling on to retailers
- 5. Channel 5:** Integrated production, slaughtering and processing system supplying Supermarkets, this model is used by Zambeef The integration of operations encompassing production to wholesaling of first stage processed meat as in the model used by Zamchick.

There are three distinct stages which exist along the processing chain. The first stage comprises the slaughtering of cattle and dressing to sides or quarters for wholesales. The second processing stage involves the cutting of meat to consumer manageable sizes, and the third stage is the processing of beef into ready to eat product. There are only seven (7) large beef processing companies in Zambia, with Zambeef being the leader. Zambeef commands 48 percent of urban beef sales and 24 percent share of the national beef market. Other notable processors include, Keembe Cold Storage, Pama meat and Zamzam.



In a similar manner, the broiler market has not been spared by the ongoing market restructuring. The aftermath of liberalisation and privatisation has led to increased private sector investments in hatching, production and processing, and marketing. Increased investment in the poultry industry has seen an increase in a number of hatcheries from a traditional scenario of two hatcheries to four major breeding and hatching facilities¹. This has seen a significant increase in chick production, which has since increased to an annual production of 26 million day-old broiler chicks. There has been, a number of private investments meant to increase broiler production and processing. As a means to improve production, large producers of broiler chickens are now promoting broiler contract farming. The contracts are of short duration - one to three years, with the distance to the processing plant not more than 50 km to avoid weight loss during transportation.

Consequently broilers production has also increased to 24.4 million birds, between 16 and 20.6 million tons of table chicken meat products. Private investments in processing facilities have resulted into four major broiler processors namely: Crest Chicken, Eureka Chicken, Verino Country, Choice Chickens and Zamchick. Since processing plants are located in Lusaka, with only one in Central province, most producers are situated close to these locations. The current broiler chicken market is characterised by younger chickens of six to eight weeks. This is due to consumers' preference, and resultantly a fast food chains requirement, for tender chickens. 24.4 million Broilers are sold as either dressed or live at wet markets. 65% of the broilers are sold dressed while the live bird market takes up 35%. The preferred market dressed average weight of the broiler

ranges between 1.1 to 1.3kg and 17 to 20.6 million tons of poultry meat.

Supermarkets as a market channel seem to be increasing in importance in comparison to private markets and other outlets as consumers have become aware of food safety issues. The increase in demand for quality and safety standards have however, led to the low or non-participation by small scale producers in the restructured markets due to lack of success in agricultural productivity (quantity and quality-wise). For instance, small scale broiler producers' participation in both outgrower schemes and dressed market channel is hampered by high market quality demands and the requirement for consistent production cycles and meaningful volumes. Further, as already alluded to, small scale beef production, access and gainful participation in restructured markets is hampered by two primary constraints - disease and a lack of small scale beef market transparency.

The foregoing underscores the need for measures requisite for; improving small scale beef and broiler productivity; equitable access to profitably and rewarding beef and broiler market channels and establishment in Zambia; of transparent and competitive small scale livestock marketing channels. The adoption of new and innovative producers' organisational forms could be one of such measures which could increase market access for the small scale producers as such a measure could help reduce risk and increase their access to production and marketing information. More crystallised proposals of similar requisite interventions and/or measures are outlined below.

¹ Major hatcheries now include Hybrid Poultry Farm (Cobb broiler, Bovan Nera); Ross Breeders (Z) Ltd (Ross broiler); BOKOMO (Z) Ltd (Ross broiler and Lonhman brown layer); and Panda Hill Hatchery (Hubbard broiler)

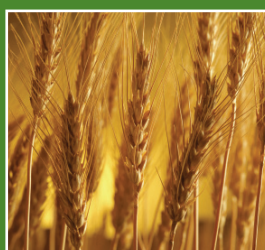
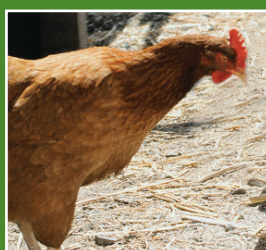
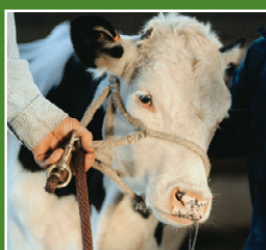
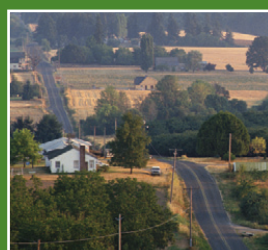
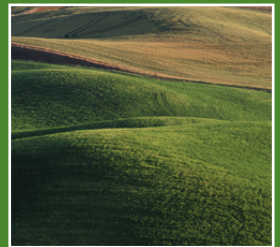
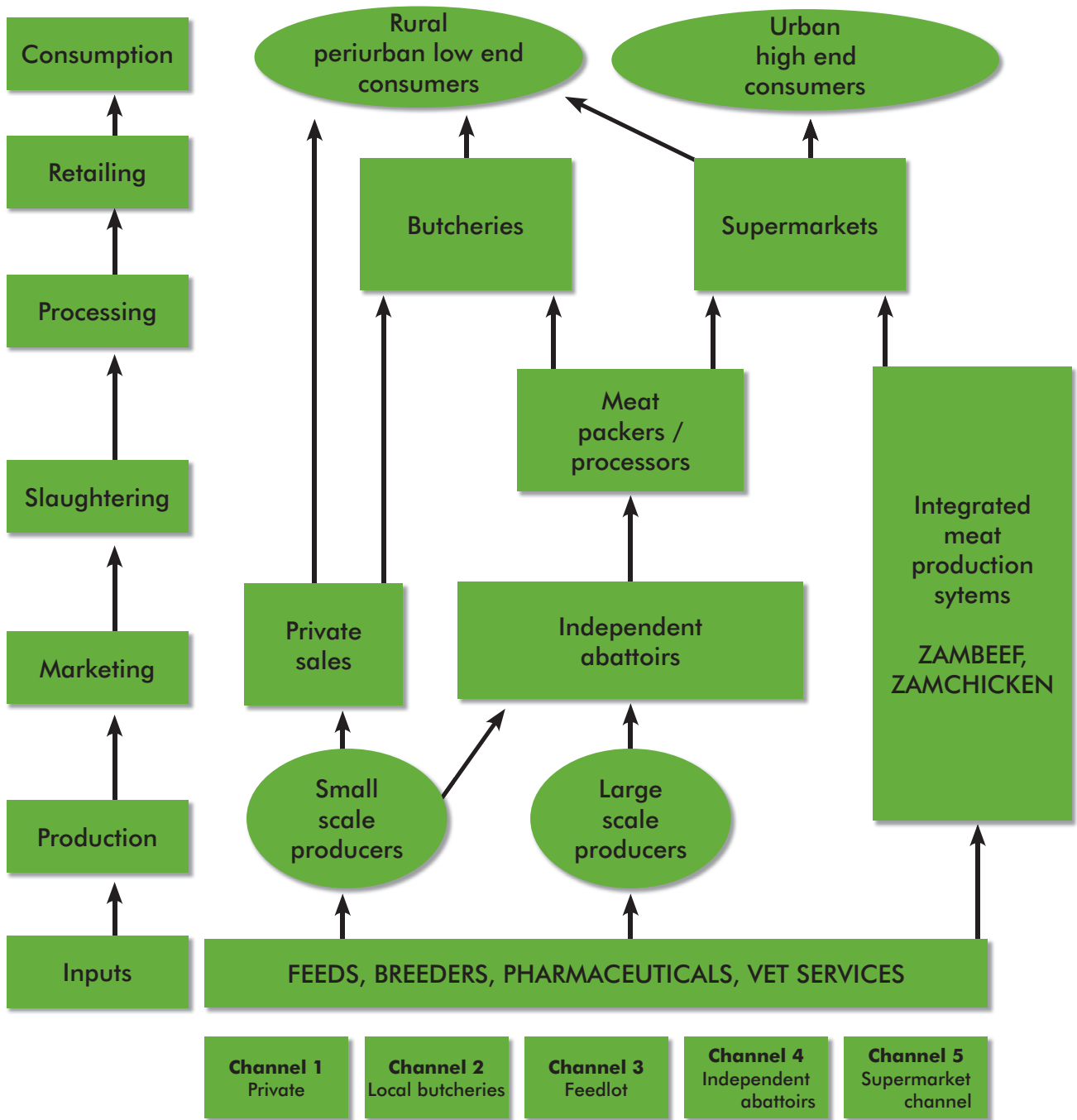


Figure 1: Beef Supply Chains in Zambia



Insights and recommendations

The supply response should be strengthened by the increasing participation of small-scale producers in the restructured marketing channels. The traditional marketing sector has continued to dominate and yet these markets have continued to suffer structural problems due to lack of public investment and little, if any, collaboration between public officials and traders in the market. This calls for public and private sector investment, including donor support in market infrastructure.

1. There is a need to build vertical linkages in all market chains. Supermarket chains require programmes to facilitate direct marketing by small scale producers. These chains should be supported but not in improving urban wholesale and retail markets.
2. Input markets and service providers should be strengthened. This includes improving delivery of veterinary services and drugs, low cost of borrowing finances and access to breeding stock.
3. The livestock sector, especially the traditional sector, should try to meet the need of the consumers for quality and safe meat through improved management and control of livestock diseases.
4. The transaction cost of doing business with the small scale producers should be reduced in order to reduce the transaction costs of retailers and processors. The high cost of doing business with small scale producers has forced retailers and processors to favour procurement from large scale producers, which lowers their transaction costs and improves efficiency and profits. Without any intervention, small scale

producers may be left out of the supply chain with disastrous effects on the rural and urban livelihoods.

5. There should be support of formation of collective and meso organisations. Some farmers who are organised in groups have been able to acquire the inputs and skills necessary to produce the high quality produce required by supermarkets and processors. The formation of collective and meso organisations have shown that if small-scale farmers are organised in groups, they can be linked to agribusinesses and forms of partnerships.

It is recognised that supermarket chains may be in Zambia for a long time and that they provide opportunities for both large and small scale producers in the country. The major issue of concern is that many small-scale producers will be excluded from the mainstream of the economy.

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