



Implications of Implementation of the VAT Act, 2013 on Animal Feeds

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SUMMARY

The Value Added Tax (VAT) Act, 2013 changed the categorization of animal feeds from the zero-rated category to the taxable category. In this brief, we use the case study of poultry farmers to demonstrate the implications of implementing the VAT Act, 2013 on livestock production. Imposing a 16 per cent VAT on animal feeds has not only increased the price of animal feeds by a similar margin, but has also led to a decline of profits by between 70 and 100 per cent in the case of poultry farmers. The increase in input prices coupled with lower output prices has forced some small scale farmers to withdraw from the enterprise in the face of declining profits. As a result of non-competitiveness of farmers in the subsector, the country risks adverse long run effects on poverty, nutrition and unemployment as well as infiltration of cheap imports in the long run. To reverse this adverse effect, we recommend zero-rating VAT on animal feeds.

BACKGROUND

The government faces an important dual task of maintaining affordable food prices for consumers while at the same time ensuring that these prices are high enough for farmers so as not to erode their profitability. The latter task is more than just maintaining favourable prices but also ensuring that farmers are competitive. This is in line with the country's long term goal in the Kenya Vision 2030. The country is a member of free trade regional blocks such as the East African Community (EAC) and Common Markets for Central and Eastern Africa (COMESA). The government must ensure that farmers are competitive to enable them penetrate the regional market as well as compete with imports from the region. A number of interventions aimed at achieving competitiveness and favourable food prices have been put in place. Among them are the subsidies provided for agricultural inputs such as fertilizers, and exemption and zero-rating of agricultural inputs and outputs from the Value Added Tax (VAT).

In September 2013, a new VAT regime came into force with the implementation of the VAT Act, 2013. A departure from the previous tax regime led to the shift of some items such as agricultural pesticides and pharmaceuticals from the zero-rated category to the exempt category, and inclusion of animal feeds, which were previously zero-rated, into the taxable category.

This brief highlights the effects on the agricultural sector after the implementation of the VAT Act, 2013. We specifically focus on the implications on farmer's profitability in the livestock subsector using a case study on poultry farming. The livestock subsector plays an important role in the economy, contributing 40 per cent to agricultural gross domestic product and 12 per cent to the national gross domestic product (Ministry of Agriculture, Livestock and Fisheries, 2013). The poultry industry is a major component of the livestock subsector. Commercial poultry farming is relatively easy to start compared to other livestock enterprises as it requires minimal technical know-how, and relatively little capital. It is one of the fastest growing industries in the sub sector, with a growth rate of nine per cent per annum.

A large share of government funds aimed at empowering the youth, women and minority groups start small businesses in the livestock subsector, has supported poultry farming. These funds include Njaa Marufuku Kenya, Women Enterprise Fund, and Youth Enterprise and Development Funds. It is estimated that there are over 10 million commercial layers and 4.5 million broilers in the country. The layers are estimated to produce over 2.1 billion eggs each year. A large number of rural and peri-urban farmers rely on this enterprise for their livelihoods.

Given the importance of poultry farming on the livelihoods of rural and peri-urban households, we analyse the profitability of poultry farming under the new tax regime within the VAT Act, 2013.

We carried out interviews with poultry farmers, feeds manufacturers, wholesalers and stockists. Additionally, we held two focus group discussions with farmers (other than those interviewed) on poultry farming.

The purpose of our analysis is to inform the debate on the proposed amendments to the VAT Act, 2013 and propose changes that will alleviate the adverse effects on the livestock subsector.

Effects of implementation of the VAT Act, 2013 on the agricultural sector

VAT can be imposed on both inputs and outputs in a production process. Conversely, goods are categorized as zero-rated, exempt or taxable. When

a good is classified as zero-rated for VAT, the producer is able to recover any VAT paid on the inputs used by claiming for a refund from the government. Thus, the price of the good is maintained at the pre-VAT level. This was the scenario in the old VAT regime (prior to implementation of the VAT Act, 2013) where most agricultural inputs such as fertilizer, seed and animal feed were zero-rated, and agricultural output was exempt from VAT.

On the contrary, for goods classified as exempt from VAT, producers cannot be compensated for VAT paid on inputs. In this case, the producer is expected to absorb the increased cost of production or pass it on to final consumers by raising the price of the product.

For goods that are taxable, producers are able to offset VAT paid on inputs from that charged for output. In this instance, commodity prices are expected to rise with the last user bearing the burden as a result of taxation.

In addition, for a producer to charge VAT, they must meet certain thresholds e.g. their annual turnover must be above Ksh.5 million and must be registered with the Kenya Revenue Authority (KRA).

Farm level effects on the crops subsector

Cost of Inputs

Inputs such as fertilizer and seed have been exempted from VAT. Table 1 shows prices of fertilizer

and maize seed in Kiambu County for the months of August and September 2013.

As expected, prices for these inputs were not affected by implementation of the VAT Act, 2013. As a direct implication, we do not expect the cost of production for crop farmers to increase as a result of VAT Act, 2013.

Farm level effects on the livestock subsector

Cost of Inputs

Raw materials required to manufacture animal feeds include maize germ, wheat germ and pollard, which now attract VAT since they are by-products of a milling process. Milling is considered as value addition for grains such as maize and wheat, although the main products i.e. maize flour and wheat flour are exempt from VAT. Animal feed attracts VAT. Since animal feed manufacturers are likely to meet the thresholds to charge VAT (i.e. an annual turnover of Ksh.5 million and are registered with KRA), they are able to offset the VAT they pay on inputs from VAT charged on outputs. As a result, their profit margins are not likely to be affected. Nevertheless, prices of animal feeds are expected to increase as a result of imposing VAT. If animal feeds were zero-rated, the manufacturers would claim the VAT paid on inputs from the government.

Table 1: Retail prices of seed and fertilizer in Kiambu County, before and after implementation of the VAT Act, 2013

| Input | Company | Type | Unit | Price August (Ksh) | Price September (Ksh) |
|-------------|--------------------|---------|-------|--------------------|-----------------------|
| Seeds | Kenya Seed | | 2 Kg | 300 | 300 |
| | AGRI-SEED | SC DUMA | 2 Kg | 390 | 390 |
| Fertilizers | MEA | DAP | 50 Kg | 4000 | 3600 |
| | MEA | CAN | 50 Kg | 3000 | 2600 |
| Chemicals | (No Change At All) | | | | |

Source: Survey data, 2013

Table 2: Retail prices of selected feed in Kiambu County, before and after implementation of the VAT Act, 2013

| Feed Type (70 kg bag) | Feed Manufacturer A | | Percentage increase in price (%) | Feed Manufacturer B | | Percentage increase in prices (%) |
|-----------------------|--|--|----------------------------------|--|--|-----------------------------------|
| | Avg price in August - Before VAT (Ksh) | Avg price in September - After VAT (Ksh) | | Avg price in August - Before VAT (Ksh) | Avg price in September - After VAT (Ksh) | |
| Chick Mash | 2550 | 2960 | 16 | 2600 | 3020 | 16 |
| Broiler Starter | 2850 | 3000 | 5 | 3100 | 3650 | 18 |
| Broiler Finisher | 2750 | 3190 | 16 | 3000 | 3550 | 18 |
| Growers Mash | 2150 | 2495 | 16 | 2200 | 2560 | 16 |
| Layers Mash | 2380 | 2760 | 16 | 2400 | 2800 | 17 |
| Sow Weaner | 1850 | 2145 | 16 | 1850 | 2150 | 16 |
| Sow Finisher | 1750 | 2030 | 16 | 1750 | 2050 | 17 |
| Dairy Meal | 1650 | 1915 | 16 | 1450 | 1690 | 17 |

Source: Survey data, 2013

Table 2 shows prices for selected animal feeds in Kiambu County in August and September, 2013. Retail prices for animal feed manufacturer A increased by a uniform 16 percent, while retail prices for manufacturer B increased by between 16 and 18 percent. From our interviews, we learnt that manufacturer A got his raw materials from Uganda and Tanzania, while manufacturer B sourced most of his raw materials locally. Intuitively, both manufacturers added 16 percent to their pre-VAT prices but manufacturer B's price rose by a higher percentage as a result of increased cost of locally procured raw materials (VAT charged on wheat germ, maize germ, pollard). Consequently, both manufacturers

reported a drop in sales due to these price increases. Manufacturer A reported a drop of 50 percent, while manufacturer B reported a 20 percent drop.

We also observed that the costs incurred on electricity and fuel had risen marginally, but these manufacturers were unable to pass on the increased costs since prices had already risen substantially as a result of the new VAT regime. As a result, both manufacturers decided to shoulder the indirect cost i.e. increase in energy prices, to avoid further drop in sales.

Implication of price changes for poultry farmers

Eggs and live animals are classified as exempt from VAT. Even if they attracted VAT, majority of the

farmers involved in poultry farming are small scale farmers and do not meet the thresholds required to charge VAT.

To demonstrate the effect of feed price increase, we present two cases, one for commercial layers and another for broilers. In the case of commercial layers, Farmer A had a flock size of 100, while Farmer B had 1100 layers but at different growth stages. The layers for farmer A were 12 months old, while the oldest flock for farmer B was 10 months. We calculated the costs and returns for each of these farmers; for 100 birds for farmer A and 500 birds for farmer B.

Generally, layers have a productive cycle of between 18 and 24 months.

The price of feeds had been stable until September when VAT was imposed on animal feeds. In the months of August and September,

the price of eggs started to fall. We simulate three scenarios in our calculations for cost and returns: old prices for inputs and output; old prices for inputs and new prices for output; and new prices for both input and output. Table 3 shows

the expenditures and returns for each of the farmers. The largest expenditure item was the cost of feeds, which accounted for 81 and 88 percent of production costs for farmer A and B, respectively.

Table 3: Summary of expenditures and returns for poultry farmers for three scenarios

| | Farmer A | | | Farmer B | | |
|---------------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|
| | 100 Birds | | | 500 Birds | | |
| | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 1 | Scenario 2 | Scenario 3 |
| Expenditure | | | | | | |
| Brooding | 4,540 | 4,540 | 4,540 | 10,350 | 10,350 | 10,350 |
| Day old chicks | 10,050 | 10,050 | 10,050 | 20,000 | 20,000 | 20,000 |
| Feeds | 236,600 | 236,600 | 268,100 | 1,148,400 | 1,148,400 | 1,336,800 |
| Equipment | - | - | - | 5,000 | 5,000 | 5,000 |
| Veterinary | 2,150 | 2,150 | 2,150 | 11,280 | 11,280 | 11,280 |
| Labour | 14,250 | 14,250 | 14,250 | 36,000 | 36,000 | 36,000 |
| Supplements | 2,150 | 2,150 | 2,150 | 2,640 | 2,640 | 2,640 |
| Transport to market | 15,600 | 15,600 | 15,600 | 30,600 | 30,600 | 30,600 |
| Sub-Total | 285,340 | 285,340 | 316,840 | 1,264,270 | 1,264,270 | 1,452,670 |
| Returns | | | | | | |
| Eggs | 230,550 | 211,073 | 211,073 | 1,476,680 | 1,374,840 | 1,374,840 |
| Culls | 34,650 | 34,650 | 29,700 | 175,000 | 175,000 | 150,000 |
| Gunny bags | 2,550 | 2,550 | 2,550 | 14,400 | 14,400 | 14,400 |
| Sub-Total | 267,750 | 248,273 | 243,323 | 1,666,080 | 1,564,240 | 1,539,240 |
| Profit/Loss | (17,590) | (37,068) | (73,517) | 401,810 | 299,970 | 86,570 |

Note: Scenario 1: We use old prices for inputs and output i.e. before the price of eggs declined and price of animal feeds increased. Scenario 2: we use old prices for inputs and new prices for output i.e. after the price of eggs declined and before the price of animal feeds increased. Scenario 3: we use new prices for inputs and output i.e. after the price of eggs declined and the price of animal feeds increased. Source: own calculations

In the first scenario, we observe that farmer B (large farmer) was more profitable as expected due to lower per unit costs, while farmer A (smallholder farmer) made losses. Small-holder farmers use a lot of own inputs which are usually not factored in as production costs. The loss was higher after taking into account the cost of labour which most smallholders do not take into account because they rely on family labour.

From the beginning of the year, the price of a tray of eggs was between Ksh.280 and 300. However, during the months of August and September, the price fell to a low of Ksh.240 but averaged between Ksh 250 and 260. Farmers attributed this fall in prices to egg imports from Uganda. However, we could not establish whether the volume of imports from Uganda was significant enough to lower the price.

The fall in prices could also be attributed to an oversupply in the market. This is based on the observation that Kenchic Ltd, which accounts for an estimated 65 percent of the market for day old chicks, reported an increased demand for layers during the year. The firm has been selling an estimated 400,000 chicks per month prior to the enforcement of the VAT Act.

This would translate to an additional 15 million eggs per month once the layers started laying, assuming a success rate of 80 percent. Therefore, farmers had to contend with increased costs of inputs after the VAT came into effect and falling prices of output.

The small scale farmers were likely to be the worst affected as a result of increase in the price of feeds. Their losses more than doubled as a result of fall in the prices of eggs, and the combined effect of increase in animal feed and fall in egg prices was threefold increase in their losses. Farmer B (large farmer) experienced a 25 percent drop in profits after the egg prices fell. Profits further fell by 70 percent as a result of increase in the price of animal feeds due to VAT. Their combined effect was an 80 percent reduction in profits. It is worth noting that we did not observe any price differential on feeds for farmers based on their demand i.e. farmers with larger stocks reported buying feeds at similar prices as small farmers. This is because although large farmers' demand was higher, it was not delivered at once but as they demanded. For instance, farmer B had animal feeds delivered each week. Secondly, they did not have to pay their suppliers on delivery.

We also established that small holder farmers started to withdraw from the enterprise while large scale farmers were reducing their flock as a result of the combined effect of increase in the price of animal feeds and declining output prices. The farmers started experiencing the burden of reduced price of eggs , and so an increase in price of inputs

meant that the enterprise was no longer viable. Based on the profit analysis, it is rational for smallholder farmers to exit the market. Larger farmers could not exit altogether because of their fixed costs. Instead, these farmers reduced their expenditures by disposing some of the birds;

Consequently, due to the large number of farmers who were disposing their stock, the price of ex-layers fell from Ksh.350 to Ksh.250. The management of Kenchic Ltd also reported a 25 percent drop in sales for day old chick after implementation of the VAT Act, 2013. This, together with reduced sales by feed manufacturers is consistent with the premise that farmers were exiting from the enterprise because it was no longer profitable.

To illustrate the effect on broilers, we borrowed the formula for calculating the returns for broilers from the Broiler Association of Kenya to estimate returns for farmers. We find that profits would fall by 10 percentage points as a result of increase in feed prices (Table 4). The Association had estimated a similar decline in profits from an average profit of four percent to a loss of seven percent.

Conclusion

Before implementation of the VAT Act, 2013, animal feeds were zero-rated. This meant that the manufacturers could recover the VAT paid on inputs by claiming for reimbursement from the government. Currently, since the animal feeds attract VAT,

manufacturers deduct the VAT paid on input from that charged on output. Therefore, their profit margins are not likely to be affected. The situation is, however, different for farmers. First, agricultural produce is exempt from VAT. This implies farmers cannot recover the VAT paid on inputs. Second, even if they were to charge VAT on output, majority of farmers in the country do not meet the thresholds required to charge VAT i.e. a turnover of Ksh.5 million per annum and registration with KRA. They cannot therefore charge VAT.

Any price arising from taxation always results in reduced welfare for the society. An effect of imposing a 16 percent VAT on animal feeds was an increase in prices of feeds by a similar margin. This is because the VAT was applied much like a sales tax, with the government collecting a fixed percentage of the full pre-VAT selling price of a good rather than of the true value added.

In our example, loss in welfare is demonstrated by the exit by farmers from the enterprise, idle capacity for animal feed manufacturers as a result of depressed demand, and the lost opportunities in the value chain and their multiplier effects.

Using a case study of poultry farmers, we show that as a result of increase in animal feeds, which account for at least 80 percent of production costs for small scale farmers, profits fell by as much as 70 to 100 percent.

Table 4: Cost and Returns for Broilers

| Item name | Pre-VAT Price | Post-VAT Price |
|---|---------------|----------------|
| Cost of day old broiler chick | 60 | 60 |
| Broiler starter mash @900 gm per bird @ksh 3650 per bag | 39.86 | 46.93 |
| Broiler finisher @2.5kg per bird @ksh 3550 per bag | 107.14 | 126.76 |
| Subtotal | 207 | 233.69 |
| Drugs, brooding, labour, water and lighting -est @ 10%of the subtotal | 20.7 | 23.37 |
| Mortality –est. 10% of the above costs | 18.63 | 20.03 |
| Incidental costs- est. 5% of the above cost | 8.38 | 9.01 |
| GRAND TOTAL | 254.71 | 286.1 |
| Av. Yield /broiler @ 39 days in kgs | 1.30 | 1.30 |
| Cost per kg of chicken meat | 195.93 | 220.1 |
| Current market price | 240 | 240 |
| Profit | 19.15% | 9% |

Table and calculations adopted from the broiler association of Kenya

Increase in animal feeds, coupled by fall in prices of eggs has forced many small scale poultry farmers out of the enterprise. It is logical for these small scale farmers to exit now, because they are likely to incur larger losses if they continue with the enterprise.

Policy Implications

The objective of the government is to ensure that prices are favourable for farmers (to encourage their continued production activities), and affordable for consumers. In addition, the government has to ensure that farmers are competitive to enable them compete with imports. While the government must collect taxes to raise funding for its programs, there is need to strike a balance especially in ensuring that one objective is not achieved at the expense of another. Continued exit by small scale farmers not only affects their livelihoods, but it has ramifications on nutrition and poverty for these households in the long run. Non-competitiveness of farmers is also likely to result in infiltration of cheaper imports as

consumers balance out their household expenditures. This is also counter-productive on the efforts to improve livelihoods for rural and peri-urban households, alleviate poverty and generate more employment opportunities for youth, women and minority groups.

We recommend that the national assembly zero-rates or waives the VAT on animal feeds. In addition, the Kenya Revenue Authority should enforce the VAT Act, 2013 as specified to ensure that it is correctly applied. Further studies on the costs and benefits of imposing VAT on the subsector should be carried out establishing the amounts collected from the sector compared to the loss generated as a result. In addition, KRA should conduct public awareness on the Act to ensure that the general public has the correct information over its application, and the goods and services that attract VAT.

References

Ministry of Agriculture, Livestock and Fisheries. (2009). Sector Plan for Agrciulture. Nairobi: Government of Kenya.