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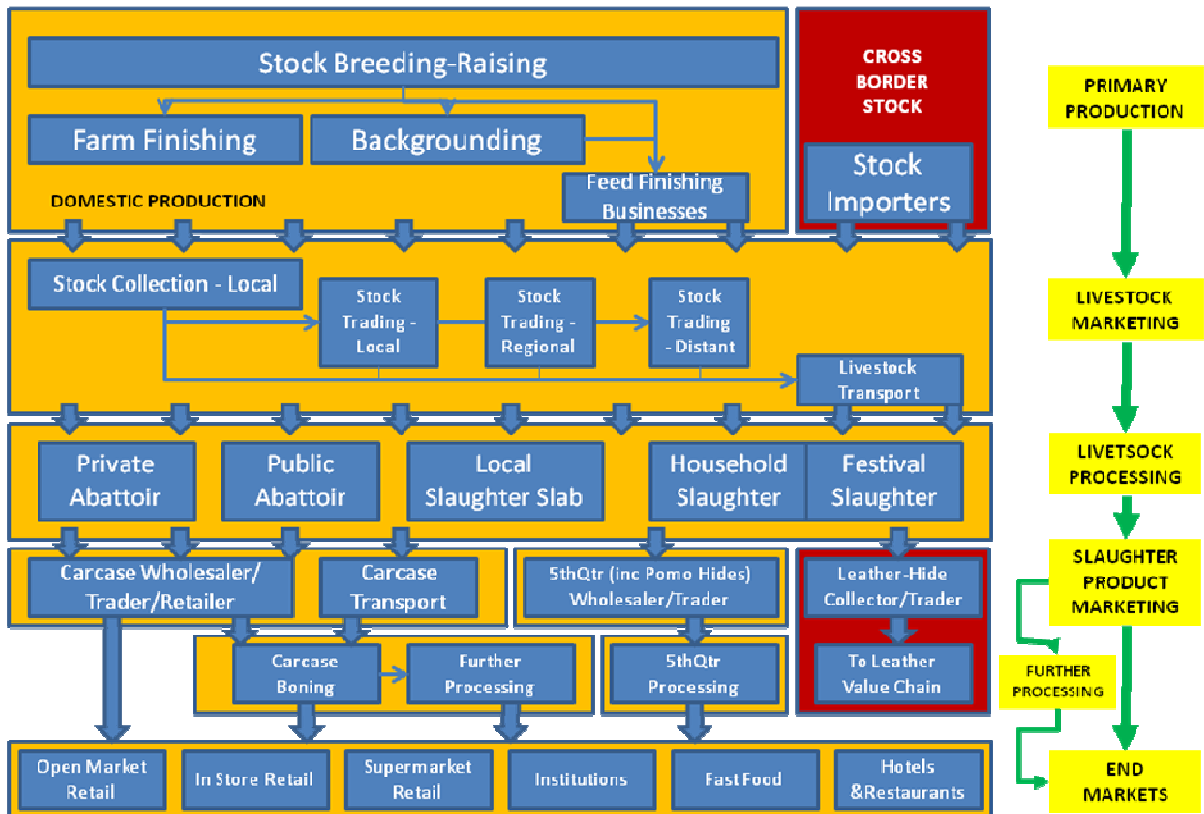
The Growth and Employment in States (GEMS) programme is a five-year programme jointly funded by the World Bank and DFID. Its aim is to increase growth and employment, especially for poor men and women, by improving competitiveness in strategically important Nigerian industry clusters in selected states and nationally, as well as through business environment reform. Wholly funded by DFID, the target market for the GEMS1 component is the meat and leather industry.

As in other target markets, GEMS1 uses the Making Markets Work Better for the Poor (M4P) approach targeting sustainable improvements in market outcomes by altering the incentives that the market as a system provides to participants. It addresses major government and market failures in the system thus bringing about systemic change. Improving the incomes of the poor, especially women and the young, is an explicit goal of M4P programmes.



## HOW the INDUSTRY WORKS...

### Red Meat Industry Structure Overview:



**Primary Production:** While millions of Nigerian households are engaged in the primary production of livestock, the large national herd of cattle, sheep and goat is unable to meet the domestic demand for red meat. As a consequence, and because of a ban and meat imports, Nigeria is the destination of a major informal regional trade in animals that stretches from Senegal to Sudan. There are no livestock or meat exports from Nigeria due to the growing domestic demand, a situation that is not expected to change within the next 10-20 years.

**Traditional Livestock Breeding and Raising:** Traditional production involves 3e main steps: (1) breeding of young animals and retention through to weaning; (2) backgrounding (i.e. raising of weaned animals to a weight suitable for fattening); and, (3) fattening (i.e. finishing of backgrounded animals usually with supplementary feed prior to sale for slaughter).

Traditional systems typically combine all three steps into one business activity whereas modern commercial livestock production systems are trending towards separate business activities for each. Meat produced from livestock developed in modern commercial production systems is of superior quality as it is derived from animals that are young and have been grown under a system that provides sound lifelong nutrition. As the vast majority of cattle produced for slaughter in Nigeria are raised in traditional livestock systems, meat quality is high variable.

**Fattening:** The purchase of calves or steers from pastoralists to be fattened for market by farmers is reportedly a profitable enterprise and was long promoted in the 1980s and 1990s but has been difficult to sustain. The major constraint is that the current livestock marketing system does not support the realization of any premium for the production of young, well-finished livestock that produce a superior meat product. The practice of fattening livestock has potential to increase.

**Marketing:** It is estimated that annual domestic and imported slaughtering is around 7.5 million cattle with a livestock value of N525-550 million. Many cattle are marketed leading into the rainy season (May-June) and prices are lowest during this period (as much as 20% below normal market prices. Cattle prices peak during October-January (as much as 25-30% above normal market prices). There is no structured market pricing system in Nigeria for live animals that addresses quality issues such as animal age, fatness, conformation and carcass weight. There is however a premium paid for larger, entire male livestock in good condition which is incorporated into a per head price as weigh scales are non-existent at livestock market, slaughter-slab or abattoir level. The annual ex-fifth quarter retail value of cattle is estimated at N850-900 million generating average margins of 38.5%. Livestock move through a number of markets and incur a number of trading transactions as they move from pastoralist through to the terminal market.

Livestock Traders buy and sell livestock from primary producers and at intermediate markets through until the livestock reach the terminal market. Animals are sold when the household needs money. Traders at local/village markets are generally small business people who only have access to sufficient capital to accumulate a single load of livestock for reasonably efficient transport to the nearest regional market. At regional markets larger traders are operating with access to adequate finance to purchase sufficient animals for efficient transport to terminal markets. There are no known dedicated livestock support vehicles have been observed at any of the livestock market or slaughter sites visited. Cattle and small stock are transported on general purpose transport vehicles including small open deck trucks, small to medium trucks and large trucks used for long distance travel to the south.

**Processing:** Red meat production in Nigeria is in the same order of magnitude as production in Mexico, France, Canada, Germany, and New Zealand which are the 8th to 12th biggest global red meat producers. Livestock processing occurs at the levels of public abattoir, local public slaughter slab, household, festival and private abattoir.

**Meat Wholesaling:** Meat Wholesalers buy livestock at terminal markets which is transformed in processing infrastructure into items to sell to the meat retail sector: they also sell fifth quarter products (i.e. hides, skins, heads, feet, and intestines) onto informal business for further processing. The Cost of Goods Sold (COGS) sold for cattle businesses is N75-150,000/unit. Revenues include carcass meat N65-155,000/ unit and fifth quarter N25-45,000/unit. Expenses are N3.5-5,000/unit. The wholesaler's margin on cattle is low at about 10-12%/unit of the COGS. Comprising 20-23% of live animal value, fifth quarter products revenue is highly important to the wholesale meat dealer as the COGS margins before deduction of the indirect costs incurred by the business operator are estimated to range from 6-14%. Processors therefore operate in a highly competitive environment similar to meat wholesalers with relatively low return. The fifth quarter industry size is about 20-25% that of the main meat wholesale industry.

**Further Processing:** In Nigeria boning of the carcass is often performed immediately after slaughter and the only impact on the wholesale meat dealer is that a piecemeal cost for boning is incurred. The three dimensions of further processing of meat products that occur in Nigeria: are cottage/small industries (production of popular local products), medium industries (House brand pastry products), and large industries (consumer brand products).

**End Markets:** Livestock moves to satisfy the major demand areas of the south, southeast and southwest, especially the Lagos-Ibadan Axis. The red meat end markets are part of the broader protein market which includes poultry pork and fish. Traditional open air market stalls dominate the red meat retail sector accounting for around 85% of all trade, and sell

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all items including meat and all fifth quarter products. The other small but growing end markets segments and their market share are in-store retail (3%), supermarket retail (1%), institutions (3%), fast food (5%), and hotels and restaurants (3%). The red meat trade is mainly based on same-day slaughter and retail sale in fresh (unrefrigerated) form while customers mostly consumed same day also. There is little product differentiation due to carcass or cut quality. Price is negotiable and weigh-scales extremely seldom in evidence or used.

**Regulatory Environment:** Various laws, regulations and codes of practice governing the meat sector are substantially ignored as there are no adequately-resourced, functional organizations providing monitoring and control. None of the slaughtering, transport and processing infrastructure in current operation complies with the regulatory environment.

### POPULAR MEAT INDUSTRY MYTHS and REALITIES...

**Myth:** *It would be advantageous to slaughter and process meat in Kano and Kaduna and transport the meat products to Lagos (the theory being that animal weight loss during livestock transport will be avoided)!*

**Reality:** Meat produced in Kano or Kaduna for Lagos will need to be processed in a sound hygienic environment and refrigerated in a robust cold chain. While carcass weight loss during transport (including bruising loss) is likely to be in the order of 2-3%, carcass and product weight loss due to evaporation and drip is likely to be of the same order of magnitude. The costs associated with processing meat and incorporating a cold chain are considerable and estimated to be in the order of N65-75/kg or about 10% of the wholesale value. The costs of transport of a kilogram of meat as livestock in a general transport vehicle compared to the cost of transporting a kilogram of meat in a refrigerated vehicle generally work out to be similar on a per kilometre basis.

**Myth:** *High north-south livestock transport costs undermine the competitiveness of the Nigerian meat industry!*

**Reality:** A recent GEMS1 study confirms that the transport of livestock from north to south in Nigeria is considerably more competitive than major producers such as Botswana, Australia and Uruguay; opportunities also exist to reduce costs.

**Myth:** *The critical issue for improving herd productivity is the introduction of new and improved and breeds/cross-breeds!*

**Reality:** Herd productivity will mainly improve through a combination of: (1) increasing the proportion of females in herds; (2) offtake of animals for slaughter at a younger age; (3) improved feed-finishing of younger animals; and, (4) access to information on productive livestock management (including pastoralists and farmers managing their herds as businesses rather than asset banks).

### INDUSTRY DYNAMICS...

**Growth, Drivers, Prospects and Risks:** There are in excess of 50,000 meat wholesale/retail businesses in Nigeria with average annual turnover estimated at N25 million (\$US 160,000 per annum). Red meat prices have increased sharply at a rate of 20% per annum for the last twenty years against an underlying inflation rate around 12%, representative of the demand-supply shortfall in an era of rapid population growth especially in the Lagos-Ibadan Axis (the economic powerhouse of West Africa): at current growth rates, Nigeria's population will double to around 340 million by 2030.

Market prices for beef are considerably higher than the cost of imported red meat from major international production countries if the import ban were lifted. The 7.5 million cattle slaughtered annually in Nigeria produce 1 million tonnes of carcass beef. The red meat sector is worth an estimated N1.1 trillion and at retail level about 1.3 trillion (excluding fifth quarter). Red meat consumption growth is also driven by consumers (in Nigeria and globally) being increasingly demanding on quality issues. Within the red meat end market segments, open market retail is already commencing to lose share to the other growth market segments.

The risks for red meat sector actors and the employment it creates are: (1) the open market retail segment will decline in the future with red meat clearly losing market share of the overall protein market (i.e. red meat, poultry, pork, fish, etc) unless it can produce products that satisfy the growing market segments including in-store retail, supermarket retail, institutions, hotels, fast food and restaurants; and, (2) a considerable drop in red meat prices arising from lifting the import ban.

**Employment Creation:** Formal employment in the meat sector is very low. Labour resource requirements are almost exclusively provided on a piecework basis. Estimates based on the approximate number of Full Time Equivalent (FTE) jobs in the red meat sector are thought to be 750,000 nationally and comprises those working directly in the both the slaughter and retail subsectors. In Northern Nigeria, there is poor representation of women in the labour force.

**Competitiveness:** The most critical factor bearing on the Nigerian meat industry is the presence of the import ban which creates a protected market for Nigerian producers, insulating them from foreign competition, driving up prices for Nigerian consumers, providing producers with higher prices than they could otherwise get outside of the country, and



providing an active disincentive to upgrade. The industry does not really face any foreign competition and effectively enjoys a captive market. Everything that the meat sector can produce is sold. The traditional value chain supplying same-day slaughtered fresh meat is highly cost-efficient due to large numbers of competing business operations at each horizontal level of the value chain.

**Systemic Value Chain Constraints and Opportunities:** The principal constraint to the development of the meat sector in Nigeria is product-related: there is insufficient product to meet market demand while the quality of the product (eatability, food safety and hygiene) is inadequate to take advantage of the growth sectors in the food industry. Opportunities to induce systemic change including sustainable business triggers that will address red meat industry constraints and enhance competitiveness include:

- **Production:** Displace imports through increased herd productivity by feed-finishing younger livestock combined with a strategy of encouraging higher numbers of female animals in the herd/flock structure.
- **Marketing:** Reducing the number of trading transactions preferably by developing fattening businesses to buy feeder livestock direct from the pastoralists and sell finished livestock direct to the meat sector.
- **Slaughter Operation:** The private abattoir sector can lead supply into the developing demand for improved meat products that needs to carry a 10% premium to cover associated extra costs while addressing other issues such as improved food safety and hygiene, environmental conditions and other.
- **Further Processing:** The major issue for the medium and larger further processing sectors of access to safe meat raw material can be addressed through undertaking activities with the private abattoirs to provide improved “quality” products.
- **Red Meat Market Opportunities:** The biggest opportunity at the customer end of the red meat market chain is the ability to service the growth sectors with an improved supply chain delivering an increased range of improved “quality” red meat products.
- **Business Enabling Environment:** The constraint of poor supervision by competent authorities can be improved if the meat sector addresses advocacy issues and speaks with a voice that represents the whole value chain.

### GEMS1 RESPONSIVE SUPPORT...

The **target impact** of GEMS 1 is “to increase growth, income and employment, especially for poor men and women, in meat and leather markets in selected states and nationally”. The **expected outcome** is to “improve the performance and inclusiveness of meat and leather sector market systems that are important for poor people”.

Complementing the strategies of the Nigerian Beef and Smallstock Transformation Agendas while ensuring high local ownership by the private sector, and responsive to resolving major industry competitiveness constraints while exploiting major growth and employment opportunities, the core red meat industry strategy for GEMS1 is strengthening chain efficiency and quality by supporting markets and linkages for the following interdependent areas:

- **Strengthening Chain Efficiency by Increasing the Adoption of Livestock Feed Finishing:** Working with partners involved in feed finishing livestock and those that supply inputs and services to develop and implement feed finishing techniques that are cost-effective, and to develop appropriate feed finishing business models.
- **Improving Red Meat Quality:** Working with partners involved in processing improved quality red meat products (edibility, food safety and hygiene) to develop and establish sustainable business models.

Other important areas of potential intervention under consideration include: (1) supporting access to information and training to increase herd productivity; (2) supporting markets and linkages for improved red meat marketing; and, (3) strengthening support functions to improve sector coordination and information management.



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