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Population Growth and Higher Disposable Incomes to Drive Global Meat Demand

GIRA have forecast continued growth in global demand for meat due to demographic growth and higher disposable incomes. Most of the increase in demand is expected to come from the developing markets where meat consumption levels are currently very low. Increases in meat demand will be driven by both an increase in per capita meat consumption but also by further growth in population numbers in these developing regions. Price will continue to favour demand increases for poultry and pork in particular between now and 2027 in these developing regions.

Developed markets are expected to see a slowing in meat consumption growth, or even a slight decline, over the next ten years however per capita meat consumption is expected to remain high. This is despite a rising prevalence of flexitarianism (reducing meat intake but not removing meat from your diet) and a continued shift in focus towards the quality of meat products consumed rather than the quantity.

GIRA outlines that concerns for animal welfare has been a key reason why people have made alterations to their diets in developed regions. There are however other environmental and health arguments that are also expected to contribute to lower per capita meat consumption. These societal issues have most impact on meat demand in the EU however similar concerns are developing in smaller market segments in other areas like the US and in upper class segments of developing countries such as China.

Major gains in the efficiency of meat production are expected to be achieved in South America, Russia and Asia over the next ten years while North America already benefits from scale advantages. However GIRA have indicated that growth in the scale of production will be hindered by environmental legislation, animal welfare legislation and/or market specifications in some regions, particularly in the EU and Japan.

The animal production chain is more and more targeted as a major polluter and contributor to climate change. Ruminants in particular are targeted however there continues to be disputes about how this is calculated and the fact that Carbon Sequestration is not yet included in national GHG emissions inventories. While control measures exist or are being developed to limit environmental impact of meat production many are currently impractical for ruminants.

Governments are likely to pressure production systems for improvements in environmental impact, even at the cost of production. To help keep legislation proportionate in Northern Ireland there has been a strong focus on driving environmental improvement through knowledge transfer and technology adoption.

GIRA expect the concentration of the meat industry at every level of the supply chain at a national scale to continue over the next ten years in an effort to improve efficiency and gain economies of scale. The vertical integration of all stages of the supply chain is currently much better developed in the poultry industry when compared to ruminant production where producers and processors remain separate. There is however a move towards more vertical communication in all sectors.

The power in the supply chain for beef and lamb production is dominated by large scale retailers and foodservice companies, more so than in the other meat sectors. As these companies are closest to the consumer they interpret changing consumer demands and then respond to this to win market share. These retailers then impose these demands on their supply chains.
**GLOBAL BEEF OUTLOOK UNTIL 2027**

**SLIGHT INCREASE IN PER CAPITA BEEF CONSUMPTION EXPECTED**

Image 2: Per capita beef consumption will continue to grow until 2027

**GLOBAL BEEF HERD TO CONTINUE TO GROW THROUGH TO 2027**

The global beef herd has increased by 0.6 per cent each year since 2007 and this increase has been driven primarily by herd increases in Sub-Saharan Africa (SSA) and Asia. Meanwhile herd growth in more traditional beef producing countries has been much more limited.

There was a minimal growth rate in S. America where herd increases in Brazil and Paraguay have been offset by herd declines in Argentina and Venezuela. There were marginal changes in the EU beef herd between 2007 and 2017 with a shift towards more dairy cattle. A similar trend has been recorded in Russia. Meanwhile there were herd declines in Mexico, Canada and in the US as a long term consequence of the 2010 drought and a period of high feed prices.

GIRA have predicted stronger growth in the global beef herd through to 2027. Improvements in productivity in the vast cattle herd SSA will contribute to a herd increase while in S. Asia a growing demand for beef will drive production growth. Small growth levels are expected in South America, the US and Mexico up to 2027 while any recovery in Australian beef production will be dependent on climatic conditions. The EU beef herd is expected to decline by 3.3 per cent (2.9 million head) between 2017 and 2027.

Image 3: Global beef production is forecast to increase strongly in the next decade

**WORLD** beef production increased by 0.6 per cent per annum between 2007 and 2017 to total 67.7 million tonnes. Production declined in South America, the North America Free Trade Agreement area (NAFTA) and the EU over this period. However declines in production in these areas were offset by increases everywhere else.

Total beef production increased marginally in Oceania between 2007 and 2017 where slaughterings were still depressed after a major downscalesing of the beef herd due to drought. Meanwhile beef production increased significantly in the developing areas of the Middle East and North Africa (MENA), Sub-Saharan Africa (SSA) and Asia over the same period.

Global beef production is forecast to reach 77 million tonnes by 2027. The EU is the only region with a negative beef production forecast with production expected to decline by 0.5 million tonnes. The strongest increase is expected in S. America where beef production is expected to increase by 2.7 million tonnes by 2027. Production is expected to increase in all countries in the region to cater for a growth in domestic and export demand.

A limited increase in production is expected in NAFTA (+0.5 million tonnes) however there is some variation across the trading area. Production growth is expected in Mexico while declines are expected in the US and Canada. In N. Asia beef production is expected to increase by 1.9 million tonnes by 2027, primarily in China where domestic beef output will increase as a result of increasing professionalism in the value chain.

In S. Asia beef production is expected to increase by 1.5 million tonnes by 2027 with strong increases forecast in India and Pakistan.
RISING GLOBAL SHEEPMEAT CONSUMPTION

Further declines in consumption are expected in the EU and Oceania over the next decade while the largest growth in terms of volume are expected in N. Asia, particularly in China but marginal increases are also expected in Japan, Taiwan and Korea. Strong growth in consumption is also expected in S. Asia. Significant volume increases in consumption have also been forecast for MENA with both live and meat imports playing an important role. Strong increases are also expected in SSA.

A slight improvement in consumption is expected in the North America Free Trade Area (NAFTA) and S. America up to 2027 however consumption levels remain low with both areas together accounting for less than two per cent of global sheepmeat consumption.

Since 2007 world sheepmeat consumption has increased by 1.9 per cent per annum to reach 15.3 million tonnes during 2017. While consumption has been falling in key markets such as the EU and Oceania this decline has been offset by growth in other markets.

GIRA expects similar developments in the global sheepmeat market through to 2027 with total consumption rising by approx. 1.7 per cent per annum to reach 18.2 million tonnes in 2027.

Figure 3: Global sheepmeat consumption 2017-2027(1) Source: GIRA

PRODUCTIVITY GAINS EXPECTED TO CONTINUE

The productivity of the global sheep/goat flock is difficult to analyse given the uncertainties over flock, production and slaughtering data in many countries which account for the largest share of total output.

However despite these problems there has been an improvement identified in both flock sizes and offtake/slaughtering rates globally. Between 2007 and 2017 the offtake rate increased from 49 per cent to 53 per cent. When you combine this with a larger flock total global slaughtering have increased by 16 per cent. There has however been a slight decline in average carcase weights which has offset some of this increase.

There is significant variation in average carcase weights across the globe dependent on the type of sheep/goat being used and also the type of finishing system. Average carcase weights range from approximately 12kg in Sub Saharan Africa (SSA) where goats make up a large proportion of the kill to 30kg in the US where the market is dominated by small numbers of large intensive finishing operations. The average carcase weight in Australia is 22.5kg while in New Zealand it is 19.6kg.

The productivity of the global sheep flock is expected to increase further through to 2027. GIRA have indicated the key drivers behind this continued improvement is the firm global demand for sheepmeat. This will help to underpin prices and profitability which will enable investment in pasture and gradual genetic improvement.

Figure 4: Global sheep/goat flock 2017-2027(1) Source: GIRA

MAJOR PLAYERS IN GLOBAL SHEEPMEAT TRADE

Shipments are expected to continue to increase through to 2027 but the level of import will be limited by supplies and prices.

Trade also increased to the US over the last decade where sheepmeat consumption is a niche market (high end and ethnic). Demand however remains firm with limited interest in expanding the domestic sheep sector. Oceania remains a large importing market and volumes are forecast to continue to increase over the next decade.

Oceania dominates the export market for sheepmeat and accounted for 92 per cent of all global exports in 2007. This declined to 85 per cent in 2017 and is expected to fall further to 82 per cent in 2027. While the region will remain by far the major source of world exports supplies are expected to remain fairly steady which will reduce the regions share of the export market.
ACCORDING to the United Nations (UN) the global population reached 7.6 billion during June 2018 and is expected to reach 8.6 billion by 2030. While the rate of increase has slowed down from the high rates of increase recorded in the 1960’s and 1970’s the population will continue to grow at one per cent each year.

Developing markets such as Bangladesh, Pakistan, Philippines and Vietnam are expected to show some of the highest growth rates in the world. Emerging markets in Sub-Saharan Africa (SSA) have also been a major growth area despite high population mortality rates.

In 2015 China accounted for 18.7 per cent of the global population with India accounting for a further 17.8 per cent. However by 2030 India will displace China as the world’s largest population when it reaches a population of 1.5 billion people. There is however a forecast for negative population growth in 32 countries worldwide including Russia, Japan and 15 EU countries as indicated in Figure 5.

With populations tending to show strong growth in developing regions while developed regions show stagnation, and in some cases a decline, much of the growth in global meat demand is expected to come from developing regions. GIRA figures have indicated that 53 per cent of global population growth between 2015 and 2030 will be in lower middle income regions. A further 24 per cent of global population growth is expected in low income countries.

While meat consumption is currently relatively low in these developing areas the latest GIRA reports have indicated an increase in per capita consumption as incomes increase. This will be particularly favourable for the pork and poultry markets due to the lower unit costs attracting a higher market share. Pork consumption growth may be limited in some regions however due to religious beliefs. Fish is also expected to be a serious competitor in these markets due to lower prices.

INCREASES IN INTERNATIONAL TRADING

GIRA’s research has indicated that international trade in meat and meat products will continue to grow and develop through to 2027, although at a slower rate than we have seen in the last decade. Figure 6 displays the major global beef trade flows in 2017 and highlights the growing globalisation of the overall meat market.

There are however some signs of protectionism emerging in the world meat market and although many free trade agreements are being negotiated there is often a significant time lag and/or complexity in their implementation.

Access to imports to meet domestic demand for meat will become increasingly important to developing regions of the world including all parts of Asia, Middle East and North Africa (MENA) and Sub Saharan Africa (SSA). Access to these markets will become increasingly important for exporters in the rest of the world. Demand for imports will also become important for the EU and to some extent the US.

As a percentage of world meat production international trade now accounts for 9.8 per cent of total production. This is up from 8.3 per cent in 2007 and is forecast to rise to 10.6 per cent in 2027.

As trade develops operators will face a number of challenges. China currently accounts for 25 per cent of global beef and sheep meat imports, 20 per cent of pork imports and 15 per cent of poultry imports. In some cases exporters are putting ‘all their eggs in one basket’ and exposing themselves to volatility in the Chinese import market. China currently relies very little on imports for its total supplies but the sheer size of its population makes it a huge global player. Many of the major exporting countries such as the US, Brazil and to some extent the EU, among others, have the desire and capability to expand export volumes further. This has the potential to sharpen competition in key global import markets.

Figure 6: Major beef trade flows 2017 as an indicator of the complexities now involved in global meat trading.