A proposal for a multiclient study of
Long term Strategic Trends in World Meat Demand
and its Market Segmentation, Supply and Trade
through 2025

Quantitative & qualitative analyses and forecasts of all aspects of the worldwide
Beef, Pork, Poultry & Sheepmeat supply chains, including offals

Drivers & brakes - operator strategies - trends & innovation - benchmarks & breakpoints

October 2015

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This will be the latest in Gira's series of long-term, world meat forecasting studies going back to 1987 – the last one was published in 2010.

In just the last 5 years (not to mention the last 30!) the world's meat industry has changed dramatically, often out of all recognition. Continuous – but modest increases in global consumption and trade hide enormous changes in the location, scale, integration and intensification ... and ownership of the supply chain. These changes are incomplete and the outcomes are still far from clear.

- Among the most important of these is the creation of new and rapidly growing forces in world meat supply – Brazilian, Russian, Chinese & Indian – while the "old" (EU, US) world stagnates or declines, and the US slaughter industry is increasingly foreign-owned.
- At the same time new, non-"market" factors are fast moving to the front of the stage: environment & welfare – health & obesity – vegetarianism & substitution – geopolitics & nationalism – genetics & feed etc., all with their impact on sourcing and profitability.

The meat supply chain is no longer a straight line, it has become a mosaic. An already complicated world supply structure is becoming even more complex, meaning real opportunities for the well-informed & well-resourced, but bigger, more expensive traps for the unwary.

The Economic Crisis of 2008/9, while already a reality in Gira's last Long Term Meat study, has only shown its full, game-changing effects in more recent years.

Without derailing any of the fundamental trends – new consumer markets, new demands on suppliers, the necessity of lowest cost production, , changing market access etc. – it has applied a severe reality check to many hitherto largely unchallenged premises, thus accelerating consolidation, internationalisation and volatility.

Among the many key issues that the Study will analyse in depth & project into the future, just a few of the most important are:

- The developing markets' – and particularly China's – appetite for meat; is it really insatiable? What if it's not?
  By volume: China is now the world's single largest poultry and sheepmeat importer, the equal first (with the USA) beef importer, and the second largest importer of pork. Altogether around 3.8 million tons cwe imported, not counting offals; nearly 12% of total world meat trade, and still growing ... But how will this develop further in the future?
  Painful recent experience with China (and Russia) in the dairy sector shows what happens when the top client stops buying. Assessing just how vulnerable world meat prices are – with their knock-on effect on domestic prices – will be just one of our tasks in the new Study, an important part of our "stress-test" comparison of medium-term supply & demand and of their effects on prices.
**Sector- and country-specific questions with worldwide impact.** We will analyse potential knock-on effects of elements as diverse as:

- **Disease:** while consumers appear to be increasingly inured, governments are ever more watchful – particularly as a tool against imports.
- **Newcomers:** some burst on the scene – India is suddenly up there with Brazil as the world's largest beef/buffalo exporter, from 0.6 to 1.9 million tons cwe in 6 years!; while others do it more gradually – China is now the world's largest exporter of processed meats (with perhaps 50% more than Germany). Both are still growing – what impact will they have on markets and prices?

**Sustainability in a two-speed world → schizophrenia?**

Responding to the environmental challenges:

How can increasingly controlled, sustainable & humane systems compete with unregulated and "grey" supply?

Answering this will be just one part of our analyses of the costs and relative competitiveness of the different production systems.

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**Marfrig reveals progress on sustainability**

A pledge to end slave labour in the supply chain and increased use of biomass energy production are among the areas covered in Marfrig Global Foods’ 2014 annual sustainability report.

*From: Global Meat News July 2015*

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**Welfare legislation in Egypt**

Egypt’s legislation prohibits cruelty to animals in specific cases; for example, it prohibits hitting animals on the head with a wooden or metal implement and cutting the tendons or removing the eyes prior to slaughter.

*Source: FAO*
The is-big-beautiful dilemma – chapter 2

In 2010 the question was: will the big EU slaughterers become the international giants of tomorrow? In 2015 we know the answer: most unlikely. VION has imploded and growth has stalled in leaders such as Danish Crown, Bigard and even Tönnies.

But others have arrived on the scene, in a much bigger way than we could even have dreamt of 5 years ago:

- **Brazil's JBS** – sales of $51 billion – has acquired vast beef, poultry and pork interests in Brazil & the USA, processed meat operations in Australia, and is now moving into the EU.

- **China's WH Group** (previously Shuanghui) bought US Smithfield for $7 billion and is now investing in further processing. It has sales of $22 billion.

- **Russian agroindustry** (e.g. Miratorg, Prioskolie) continues to invest at home ... with foreign ambitions?

Have they found the Eldorado of profitable international growth – with those group synergies that the others failed to find? Or are they just vast financial balloons waiting to burst?

**Socio-economic-political drivers:** volatile economic growth rates (especially in the developing world), dramatic changes in currency, and a raft of new FTAs are just some of the macro forces for change on the supply:demand balance and the relative competitiveness which underpins the growing world trade in meats.

**Technological progress** – a whole new world of adaptation still to come.

Tailoring genetics to local climatic and operating conditions – Big Data individualising feed & additive use, and boosting FCRs – the ongoing trend to vertically integrated and self-contained livestock systems – mechanical deboning and cutting – globalisation of best practice ... and far more widespread use of farm-gate-price hedging by farmers. Each one could alter the balance of power, and not only in developing markets.

This new study is a unique strategic tool for clients: covering all key issues in this dynamic market, with forecasts for the next 10 years.
2. Objectives & Methodology

Objectives:
Gira's medium- and long-term strategic trends in World Meat study aims, in the first instance, to situate the current state of world meat markets, country by country and globally, in the context of the growing number of forces that are currently acting on them. It will then project the results of this analysis, qualitatively and quantitatively, into the medium- and long-term future – into the new world to which producers, slaughterers and international traders must adapt if they are to prosper (or, indeed, to survive).

As meat markets and supply have become progressively more global, complex and interrelated, so the number of both independent and dependent variables has grown enormously. Our objective, therefore, requires us first to present clients of the study with all the key information and explanations – in the Country Reports – necessary for them then to judge the validity of our forecasts and to act upon the strategic conclusions and recommendations that we will draw in the Synthesis Report.

The resulting Study will be a unique strategic analysis and comprehensive databank covering all aspects of the meat supply chain in the main producing and consuming countries for the next 10 years – forecasting and prioritising all the variables, both locally and in the context of the global Big Picture.

Methodology:
Gira will use its tried and tested, multi-faceted approach to obtaining and evaluating the information required for this ambitious task:

- **Documentary research:**
  - An exhaustive analysis, in each country, of the trade press, published statistics & studies, corporate websites, etc.
  - Gira’s extensive, in-house experience and databases from its many meat studies – and in particular from the annual Gira Meat Club.

- **A major industrial interview programme.** Gira’s specialisation is our ability to undertake interviews with top industry managers and proactively discuss key drivers & brakes... and their strategic impact on the competitive environment of the meat supply chains.
  - We will therefore carry out an extensive series of interviews with operators and experts in each of the main countries to be analysed, as well as with marketing managers in internationally active groups and traders.
  - We will also interview meat sourcing managers in retailers and buyers of raw meat for further processing.

- **Strategic analysis** – including clear statement of key assumptions, and selective scenario analyses.

Gira’s vast experience and extensive contacts in the world meat supply chain ensure that we will obtain all the necessary information and opinions – from those very managers who are themselves "creating" the future – to give credibility to our forecasts & conclusions.
The scope of this Study is designed to allow us to cover all the aspects of meat production and consumption in all the main countries (in the Country Reports) and then to draw valid conclusions, in the Synthesis Report, regarding trends for the future at regional and world level.

**Products:**
We will cover the four main meat species – beef (& veal where significant), pork, poultry (broilers, & turkey where significant) and sheepmeat – wherever their production or consumption is significant. We will analyse all types of raw meat, including offals, whether sold fresh or frozen.

**Geographical:**
The Study will cover all the countries indicated in the table here. For the Synthesis Report, the global picture will be completed statistically by key figures for those countries not covered in a Country Report here. As well as covering the EU as an entity, we will also, given their importance, provide short individual summaries of the main EU producer countries:
- France: beef, pork, poultry
- Germany: beef, pork, poultry
- Ireland: beef
- Italy: beef, pork, poultry
- Poland: pork, poultry
- Spain: beef, pork, poultry
- UK: beef, poultry, sheepmeat.

**Time horizon:**
Where available and meaningful, data will commence in 2005, running to the present (2015/16) and through 2020. Where reasonable, forecasts will be given through 2025.
Each of the countries to be covered will be the object of a separate Country Report in PowerPoint which, depending on the country's size and importance, will generally of between 30 and 100 pages each.

The key results from the Country Reports will then be brought together in a succinct Synthesis Report which, besides presenting and consolidating the key results and forecasts, will summarise the strategic importance of the medium & long term trends observed.

THE COUNTRY REPORTS

The form and content of each Country Report will, to the extent possible, be standardised in order to ensure comparability.

Current structure with historical trends and quantitative & qualitative forecasts for 2020 and 2025 will be given and explained.

We show below a model Table of Contents for a large meat producing & consuming country:

MEAT BALANCES in tabular and graph form, for each of the meat species covered.
- Historical from 2005 (where available) to 2015(e), with forecasts to 2020 and 2025.
- Herds (breeding and rearing stock), offtake rates, production, import & export (with prices), consumption (raw & via further processing; total & per capita).

0. Executive Summary: a short résumé of the main points for the future.

1. Socio-economic parameters and outlook
   - Population (size, urbanisation - ethnic groups, religions)
   - Economics (GDP, income deciles, inflation, exchange rate - government intervention and food & agri-policy)
   - Household spending (overall, on food, on meats - regional).

2. Meat consumers and consumption
   - Quantitative (where available): types and quantities of centre-plate proteins consumed (including fish and further processed meats) – relative costs & stomach shares – meat penetration and consumer typologies.
   - Consumer trends & perceptions underlying meat consumption (by species, for raw and further processed) e.g. culinary traditions – vegetarianism – health – environmental.
The Reports (2)

[Draft Table of Contents for the Country Reports continued]

3. Main inputs to livestock farming
   - **Feed**: types of feed supply and usage – price formation – trends, drivers & brakes of commercial feed supply; GMOs, antibiotics & their substitutes, etc.; the main suppliers of commercial feed & additives (size, strategies, SWOT)
   - **Veterinary products**: main products used & by whom – pressures for change – the main suppliers (size, strategies, SWOT)
   - **Genetics**: presence and activities – results and challenges – the main suppliers (size, strategies, SWOT).

4. Sustainability issues in livestock farming
   - **Framework** (legislation) and underlying drivers of change – influence of other stakeholders, particularly from those further down the supply chain (slaughterers, retailers & caterers)
   - **Activity- & species-specific aspects**: legislation, current actions & future trends, costs etc.
     - Feed produced on-farm (including use of water & land; pesticides etc.)
     - Effluent treatment & biogas
     - Animal welfare (including transport, slaughtering)
     - Greenhouse gasses; antibiotics etc.

5. Livestock Farming
   - **General overview of all farming** (with particular attention to impact on livestock): farm structures – agro-industrialisation – the impact of intensification – potential vs. constraints – arbitrage between productions – state intervention
   - **For each meat species covered** – i.e. a maximum of 4 subchapters per country:
     - **Farm structures**: animal types; farm numbers – sizes – herds – other productions – management; breeding – fattening; government policy; SWOT
     - **Ownership structures**:
       - Types of farm ownership; private "vs." cooperative
       - Where important, a zoom on vertical integration: with feed – with slaughtering
     - **Price formation, cost structures, profitability & FCRs.**
6. **Slaughtering**
   - **General**: species – plant sizes – key success factors
   - For each meat species covered – i.e. a maximum of 4 subchapters per country:
     - **Structures** (including secondary cutting, further processing) – volumes
     - **Sourcing** & pricing of raw materials
     - **Efficiency** – modernisation – capacity and utilisation; financials where available
     - **Operators**: the main groups – product and corporate strategies – recent M&A – short profiles
   - **Sustainability & CSR**, where important.

7. **Raw meat trade** (and live animal trade where significant)
   - **General**: marketing – aids – duties – FTAs
   - For each significant meat species (including offals):
     - **Imports**: volumes & prices, by product type and origin – major importers & uses – drivers and brakes
     - **Exports**: volumes & prices, by product type and destination – major exporters – drivers and brakes.

8. **Further processing and processors**: a short overview, primarily looking at probable future raw meat usage and integration with slaughtering & cutting (where relevant).

9. **Raw meat distribution**: a short overview (by species where significantly different)
   - Independent cutting & packing
   - **Wholesalers**: main operators & services
   - **Retail & catering**: typology of main operators – volumes of raw meat sales – marketing & pricing – organic/halal (if significant) – upstream involvement.

10. **SWOTs of the domestic supply chains** (by species covered).
THE SYNTHESIS REPORT

The exact form and content of the Synthesis Report will depend on our findings from the Country Reports. However, we would expect the Synthesis to consolidate all main elements from the Country Reports and to cover at least the key issues below. While each element will be treated "horizontally" here, important differences between species and countries will be clearly distinguished and their importance analysed.

Executive Summary: résumé of the main learnings, forecasts, conclusions & recommendations for the future; breakpoints & "disaster" scenarios; risks & rewards

1. Socio-economic parameters of particular importance to the meat industry: currency & inflation – meat consumption drivers and brakes – farm and slaughtering investment climate

2. Disease: a key threat to trade (and production): strategic analysis of the impact of disease incidence – risk management, and changes to regulations

3. Meat Consumption
   - Future growth & declines in major markets; opportunities and risks for primary processing and trade
   - Consumer trends impacting future meat consumption: the meats' "images", substitution, organic, halal etc.

4. Livestock farming
   - Farm typologies, relative competitive advantage and comparative SWOTs for main countries: scale and intensification
   - Farm inputs: Feed; Veterinary; Genetics – expected changes in products and suppliers
   - Sustainability: significant trends and their likely impacts – welfare, gasses-biofuel, water & land availability, etc.

5. The largest slaughtering and exporting groups
   - Vertical and horizontal integration, internationalisation, and scale advantage: their strategic impact
   - League tables, typology, strategic models & key success factors, relative competitive advantages
The Synthesis and the Presentation

[The Synthesis Report draft contents continued]

6. **Trade in raw meat:**
   - Changes in the location of meat production and sources of trade; changes in export destinations & buying criteria; the impact of FTAs
   - Price formation of traded raw meat – a tentative, "Chartist" view
   - The medium-term impact of imbalances in supply and demand for internationally traded raw meat on prices – a "Stress Test"

7. **The impact of other significant Stakeholders**, i.e. the lobbies that can materially impact on livestock farming and slaughtering: retailers – government policy & legislation – WHO/FAO/WWF etc. -

8. **Q&A**: the key answers through 2020 & 2025 in probable order of importance

9. **Recommendations** for slaughterers and exporters.

**THE CLIENT PRESENTATION**

Clients purchasing the full Study will be entitled to a half-day presentation / workshop on their premises of the results and conclusions, tailored especially to their own circumstances and needs.

Only our presenter's travel costs (business class if outside Europe) will be charged to the client.

*If there is sufficient interest from subscribers, Gira will also organise a one-day Client Conference in Europe to discuss and debate the issues and forecasts underlying the Study's conclusions and recommendations. There will be a separate, reasonable charge for this.*
Gira's team of managers & consultants is probably the most experienced & knowledgeable in world meat markets today:

**Richard Brown**, Director of Gira, 20 years with Gira. He will supervise the Study. He has headed a very large number of strategic consultancy and research assignments throughout the meat chain worldwide. He supervises all of Gira's consulting and research activities in the meat sector. He is well-known throughout the meat industry and he has managed and presented the annual Gira Meat Club for the last 15 years.

**He will be assisted by:**

- **Rupert Claxton.** Manager. He will manage the Study.
  12 years with Gira, directing and managing a wide range of meat research and consultancy in both the developing world and in the EU.

- **Andrew Cookson.** MBA (Insead), Chartered Accountant. 25 years with Gira, Director. Adviser for the Study on strategy, retail & consumers – and responsible for the financial analyses.

- **Rémi Valençot.** Manager. He will handle all aspects of information collection, consolidation and analysis for the Synthesis Report 8 years with Gira. Wide knowledge of the worldwide meat chain; responsible for information management for the annual Gira Meat Club.

- **A large number of Gira's experienced meat-sector consultants, researchers and interviewers will be involved.** Each has detailed knowledge of the country for which he/she is responsible. As far as possible the same country consultants will be used for this Study as those who prepare the annual Gira Meat Club.
Gira is active in strategy consulting and market research in most food & drink sectors worldwide. More details of our activities and coverage are available on: www.girafood.com.

Over the last 40 years we have built up a major reputation and client base in the worldwide meat sector.

Gira is the only research and consulting firm that is a member of the International Meat Secretariat (IMS). A list of our more recent meat clients is given on the next page of this proposal.

Gira has carried out many consultancy assignments in recent years for international meat groups in the sectors to be covered in the present Study. These have included market segmentation & forecasting, comparative cost analyses, strategic analysis and interview programmes in all the countries covered here.

We regularly produce multiclient studies concerning several of the meat sectors and countries involved in this study. The most relevant of these is the annual Gira Meat Club, which has existed for the last 30 years and which covers all the countries to be analysed here.

Gira’s extensive network of international experts, contacts and clients in the worldwide meat supply chain means that it is highly qualified to carry out this unique and highly challenging project. Experience has also shown that our long-standing reputation for research and consultancy in the global market opens doors for us to the most informed and competent sources of information.

Our specialist consultants – our credibility in the meat sector – our long client list – and the multiclient studies for which Gira is widely known, all these give us privileged access to decision-makers in meat markets throughout the world.
### Some of Gira's meat sector clients

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<td>Westbridge Foods</td>
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7. Timing & Subscription

Timing:
Completion 5-6 months after project go-ahead: Assuming sufficient Founder Client support is obtained, work will begin in early in the new year and the Reports and the Presentation will be available to clients by the summer 2016.

Subscription:
A Founder Client subscription to the complete study programme and the Presentation as set out above costs Euros 28,000 (before any applicable taxes). The price will be increased to those subscribing after work has started.

Part-subscription options are available, for example:
- Synthesis only subscription: Euros 14,000
- One or two species: POA
- One or more of the Country Reports: POA.

Payment will be requested as follows:
- 50% on invoice at the start of work
- 25% three months later
- 25% on delivery of the final Reports.

For more information, please call Richard Brown on: +44 1323 870 144, or email: rbrown@girafood.com.

In the unlikely event that insufficient Founder Client subscriptions are obtained, Gira reserves the right not to start work on the study. In this case, existing subscription contracts will become null and void.