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PG Economics Limited

Statement of Capability & Experience

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*Independent and objective consultants servicing the agricultural, agricultural supply trade, rural and food industries.*

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## **PG Economics: who we are**

PG Economics Limited is a specialist provider of advisory and consultancy services to agriculture and other natural resource-based industries. Our specific areas of specialisation are plant biotechnology, agricultural production systems, agricultural markets and policy.

The Company's two directors are Peter Barfoot and Graham Brookes who formed PG Economics in 1999. Both have worked at senior positions in agricultural consultancy and technology businesses.

## **Core areas of expertise**

The combination of experience provides the Company with complementary skills and capabilities to undertake ad hoc assignments, on-going management consultancy and advice in the following core areas:

- Commercialisation of new technology/biotechnology
- Farm economics and competitiveness
- Market dynamics & economics
- Market intelligence gathering & interpretation
- Technical & commercial auditing of technology
- Technical & market knowledge management
- Policy interpretation & analysis
- Value chain analysis & assessment.

## **Philosophy & attributes**

Our philosophy and approach to all services provided is based on and offers the following attributes:

- Ability to combine technical, economic/market knowledge & understanding into strategic information to support decision-making
- Active customer involvement in the development of consultancy project targets and implementation
- In depth experience & knowledge gained on over 100 consultancy projects
- Objective & focused on using reliable & substantiated facts
- Only use senior and experienced staff.

## Client base

Our clients come from both public and private sectors. These include the leading biotechnology companies, agro-chemical manufacturers, seed companies & plant breeders, animal feed ingredient manufacturers, breakfast cereal manufacturers, oilseed crushers, food processors, starch/sweetener manufacturers, farmers organisations, UK government (eg, DEFRA) and the European Commission.

## Expertise base

This largely derives from the experience and knowledge of the directors of PG Economics:

### **Graham Brookes**

An economist by training, he has 20 years experience of providing economic & market analysis & consulting services to both private and public sector customers. Graham has in-depth knowledge of the markets and supply chain developments in many sectors including cereals, oilseeds, rice, sugar, dairy, wine, potatoes, meat and processed product derivatives (including starch, flour, animal feed, oils, meals/proteins, beer and alcoholic spirits). He has considerable experience and understanding of farm economics and competitiveness, policy issues and impact on markets, especially relating to European Community Agricultural/Rural policy and the WTO. He is also a specialist in assessing relative competitiveness and the economic and environmental impact of new technology, such as the genetic modification of crops.

### **Peter Barfoot**

An agricultural economist with 21 years experience in the agricultural biotechnology industry and in consultancy. Peter worked at the Agricultural Genetics Company for 12 years in project management, business planning and development. He has a good understanding of technology and its application in agricultural and food markets. He has written and completed many market research projects on the market development and exploitation of agricultural biotechnology.

## Specific experience and publications of the Company's Directors

- *European arable crop profit margins 2006-07 (2007)*. Forthcoming publication covering crop profitability in 25 European countries
- *the likely impact of adopting GM cost reducing technology on arable cropping profitability in Slovakia to 2012 (2006)*
- *the economic and environmental impact of GM crops 1996-2004 (2005)*. Published paper in 2005 AgBioforum 8, 2&3, 187-196. [www.agbioforum.org](http://www.agbioforum.org)

- *Co-existence of GM and non GM crop arable crops: current practice and key principles for best management (2004)*. Published paper on [www.pgeconomics.co.uk](http://www.pgeconomics.co.uk)
- *Co-existence of GM and non GM crop arable crops: the non GM and organic context in the EU (2004)*. 8<sup>th</sup> ICABR Conference on public goods and public policy for agricultural biotechnology, Ravello, Italy
- *GM and non GM crop co-existence case studies: maize in Spain (2003)*
- *GM and non GM crop co-existence case study: the UK (2003)*
- *Evaluation of the soy communication and promotion programme in Germany 1999-2002*. Undertaken for the American Soybean Association
- *Paper on the possible impact of the Mid Term Review policy changes in the EU on US soybean interests (2003)*. Undertaken for the American Soybean Association
- *Paper on the possible impact of the EU's new GMO labelling regulation on supply and demand of GM versus non GM soybeans/derivatives (2003)*. Focused on impact on US soybean interests. Undertaken for the American Soybean Association
- *The farm level impact of using herbicide tolerant soybeans in Romania (2003)*. A study of the impact of Roundup Ready soybean use on farm yields, costs of production, profitability and herbicide use. Published paper.
- *The possible farm level impact of using GM crops in the UK (2003)*. Research undertaken for the UK Cabinet Office. Included an in depth international literature review GM crop impact on arable crops, examination of the markets for GM and non GM products, exploration of the economic issues associated with co-existence and assessment of the possible impact of GM cost saving technology on UK arable crop performance and profitability
- *GM crops in Europe: planning for the end of the moratorium (2003)*. Report for sale – included an international literature review of GM crop impact (why do farmers adopt the technology), an examination of GM traits undergoing trials and being prepared for marketing in the EU, a forward looking analysis of the markets for GM and non GM crops and forecasts for the commercialisation and penetration of GM crops in the EU
- *European arable crop profit margins 2001-2002 (2002)*. Book publication covering 2001 harvest arable crop profit margins for cereals, oilseeds, pulses, potatoes and sugar beet grown in 16 European countries (11 EU and 5 Central Europe)
- *The farm level impact of Bt maize in Spain (2002)*. Published paper examining the economic impact of using bt maize on crop protection practices, yields, costs of production, income and the environment
- *Impact of the Mid Term Review proposals on selective arable cropping in Europe to 2008 (2002)*. Forecasting of the impact of the Mid Term Review, EU enlargement and possible WTO changes on the main arable crops grown in France, Italy, Germany, Spain, UK, Hungary and Poland. Focused on impact on farm income and areas planted

- *Soymeal buying practices and quality requirements in the EU*. Based on a survey of animal feed compounders and users in France, Germany, Italy, the Netherlands and the UK. Focused on buying procedures and requirements, origins purchased, quality control procedures and testing, GM versus non GM issues and future expected requirements.
- *Anti GM crop sentiment and policies in the European Union: some economic consequences (2002)*. Published paper
- *Price transmission in the UK meat market (2001)*. Assessment of retail and farm level prices for beef, lamb, pork and bacon, factors affecting price transmission and developments since the outbreak of foot and mouth in February 2001. Conducted for a private client
- *A practical guide to managing risk for farmers (2001)*. For a private client – covering managing production, price, financial and human resource risks and how to use tools to reduce these risks
- *The EU animal feed sector: protein ingredient use and implications of the ban on the use of meat and bonemeal in the EU (2001)*: published paper.
- *Soyabeans and derivatives: global market dynamics 2001-2010 and the impact of GM technology (2001)*. Publication for sale
- *The European market for rapemeal to 2010 (2001): opportunities for adding value*. Undertaken for a private client
- *The role and use of enzymes in the European beer and spirits market (2000)*. Undertaken for a private client.
- *Barley: usage and key aspects of the value chain in the EU (2000)*. Undertaken for a private client.
- *GM & non GM feed ingredient market dynamics and implications for the EU feed industry (2000)*. Published paper.
- *The EU Commission's proposals to reform the sugar regime: comments (2000)*. Comments on the proposals for reform and implications for the regime submitted to the UK Ministry of Agriculture.
- *Market developments and drivers in the organic food market (2000)*. Evidence submitted to the UK House of Commons Select Committee report on organic farming.
- *Market dynamics of markets for genetically modified soyabeans (1999)*. Examined market developments in the global market for soyabeans, soyameal and soya oil and the market drivers for non genetically modified material relative to genetically modified material. Undertaken for a private client.
- *Economic costs and benefits of identify preservation for crops containing genetically modified organisms (1998/99)*. A private sector funded study (published in the spring of 1999)

examining the economics of segregation throughout the food chain, undertaken in association with Professor Buckwell of Wye College, University of London.

- *Evaluation of the EU export subsidy system for processed products (1999)*. Undertaken for the European Commission's Enterprise Directorate (in which one of PG's principal's had a major input) included detailed examination of the raw material usage and the processed product derivatives for cereals, sugar, milk products, rice and eggs. This included examination of the markets for and usage of flour, malt, beer, spirits, starch, sweeteners, milk powders, both in the food and non-food usage sectors (eg, chemicals, paper).
- *Technical and commercial audit of an ÉCLAIR funded project on cold-induced sweetening in processing potatoes (1998)*. Undertaken for the European Crisp and Snack Association and required a detailed examination of the science, intellectual property and the market dynamics of the European Crisp and Snack market. Several scenarios were presented on the routes for exploitation.
- *Research into the biotechnological developments impacting on wheat, oilseed rape, barley, tomato, sunflower, soybean and peas (1998)*. Undertaken for a major private sector client, this research examined the nature of biotechnological developments (patents, field trials, commercialisation) and the main players in respect of each of these crops.
- *The commercialisation of novel plant biotechnology traits in Europe (1997)*. This multi-client study examined in detail the development and application of herbicide tolerance in Maize, Sugar Beet and Oilseed Rape, the development of Hybrid Oilseed Rape, High Laurate OSR, High Amylose Potatoes.
- *A strategic review of the EU wheat and maize sectors (1998)*. This research for a private sector company covered the characteristics and requirements of EU users in the wheat and maize sectors. It included consideration of the impact of policy, market and technology influences, plus value chain aspects from farm to retail level.
- *An overview of the EU malting barley industry (1997)*. This study for a private client looked at the uses and value aspects of the malting barley usage chain in five EU countries.
- *Research into the EU calf milk replacer market (1998)*. This study looked at ingredient usage in milk replacers (animal feed), usage of EU milk replacers in the veal and other livestock production sectors, the structure of the industry and gave a future demand outlook.
- *Economic impacts from research into new crop biotechnology (1994)*. This project for the UK Ministry of Agriculture examined the scope for commercial exploitation of MAFF funded biotechnological research by UK industries.

## **What PG Economics can do to assist you**

We can undertake ad hoc consultancy projects, on-going management consultancy and intelligence gathering. Please contact either Peter Barfoot or Graham Brookes to discuss your requirements and we will endeavour to put forward a proposal to define our methodology and expected outcomes.

We can be contacted by email, telephone fax and post at:

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