



## BRIGHTANIMAL

**A multi-disciplinary approach to Practical Precision Livestock Farming for SMEs in Europe and world-wide**

### The Challenge

In a world in which there is growing concern about food and its impacts on human health, and in which consumers are taking an increasing interest in animal welfare and in which profit margins in animal production are diminishing, Precision Livestock Farming is seen as a road to the future. In BrightAnimal Precision Livestock Farming (PLF) is defined as: "Covering the life cycle management of animals and exploiting multiple identification and associated sensory and location technologies to optimise feeding and control to achieve objective yield factors, improved animal health and optimised usage of resources with respect to such factors. Traceability and food information management is an integral part of the PLF concept."

BrightAnimal is a Co-ordinated Support Action project - co-ordinating research activities rather than initiating new research.

### Project Objective

To contribute to economically, socially and environmentally sustainable development by outlining a practical and acceptable methodology for PLF by:

- Producing a framework for European and non-European small and medium enterprises on effective and acceptable precision livestock farming and to create an international, interdisciplinary network of interested stakeholders (technology, economics and social science and ethics) for further development and dissemination.
- Enabling the organising of conferences, meetings, workshops and seminars, exchanges of personnel, exchange and dissemination of good practices and, if necessary, the definition, organisation and management of joint initiatives.

PLF being a global subject BrightAnimal wishes to take advantage of expertise from outside Europe and has therefore invited experts from South Africa, China, Brazil, Thailand, Malaysia and Australia to participate and give opinions together with the European partners from UK, Spain, Norway, Denmark and Estonia.

### Key Points

- Monitoring animal health, environment, behaviour and welfare
- Identification, sensory data collection and integrated systems development for PLF

#### EATiP *Thematic Area of Relevance*

**TA1:** Product Quality, Consumer Safety and Health

**TA2:** Technology and Systems

**TA3:** Managing the Biological Lifecycle

**TA4:** Sustainable Feed Production

**TA5:** Integration with the Environment

**TA6:** Knowledge Management

**TA7:** Aquatic Animal Health and Welfare

**TA8:** Socio-Economics and Management

#### Key Words

PLF, Precision Livestock Farming, life cycle management, traceability, food information management, best practices

#### Project Information

**Contract number:**

227138

**Contract type:**

Coordination (or networking) actions

**Research area:**

KBBE - New and converging technologies for Precision Livestock Farming in European animal production systems

**Duration:**

24 months (01/05/2009 – 30/04/2011)

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- Systems and best practices in PLF
- Food information management and advanced traceability
- Sustainability, ethics and societal impacts of PLF
- Economical aspects of PLF

## Key New Knowledge Expected

- Production of a book on PLF in Europe and world-wide with special emphasis on the needs of small and medium enterprises, describing current and near-future techniques in PLF, taking into special account their practicality for SMEs as well as their acceptability in the broader sense.  
This book will also set the scene for future developments, while a chapter will be devoted to the creation of business cases for PLF and to cost and benefit analysis for SMEs. The societal, environmental and animal welfare aspects of PLF will also be analysed. Finally, the book will advance recommendations both for the industry as well as for research institutes and policy makers. The book will be available in English only. 400 copies will be distributed for free.
- Production of best PLF practices in a series of “problematic” areas such as aquaculture, dairy cattle, pigs and chicken/eggs. These best practice guides will give practical advice and guidance to the industry world-wide and will be put into the public domain as printed booklets as well in the form of a wikipedia.
- Representation of a showcase activity showing the best practice in action, physically represented in a demonstrator unit to enable a “hands – on” experience of BrightAnimal's recommendations.

## Potential Impacts



### **POLICY**

- Recommendations both for the industry as well as for research institutes and policy makers



### **Knowledge Transfer**

- Organisation of a series of international conferences and workshops to encourage the PLF debate.
- A showcase will be represented in a demonstrator unit in the UK.



### **SME**

- A book will be released to the public domain and will play a key educational role in explaining the techniques and technologies involved in implementing PLF and also the potential of PLF to radically improve the industry.
- PLF Best Practice Guidelines for SMEs

## Related Publications/Projects

Bio Business, Traceback, ICT Agri, agroXML, IT FoodTrace.

For relevant publication, please visit the project website [www.brightanimal.eu](http://www.brightanimal.eu).