

Food System Sustainability

Insights from duALIne

As Western-style food systems extend further around the world, food sustainability is becoming an increasingly important issue. Such systems are not sustainable in terms of their consumption of resources, their impact on ecosystems or their effect on health and social equality.

From 2009 to 2011, the duALIne project, led by INRA and CIRAD, assembled a team of experts to investigate food systems downstream of the farm, from the farm gate to consumption. Representing a diverse range of backgrounds, spanning academia and the public and private sectors, the project aimed to review the international literature and to take account of the experts' own expertise to identify major gaps in our knowledge. This book brings together its key conclusions and insights, presents state-of-the-art research in food sustainability and identifies priority areas for further study. It will provide a valuable resource for researchers, decision-makers and stakeholders in the food industry.

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Foreword

How will it be possible to feed the world in the demographic context of the twenty-first century?

The diversity of food systems throughout the world is a key element if we are to achieve this.

Little studied in terms of their sustainability, food systems have thus far been considered in terms of the challenges facing agriculture. ‘Food sustainability’ is unquestionably a major issue for the years to come. From the farm gate to the consumer’s plate, these systems now need to be analysed in terms of their contribution towards the pillars of sustainability. However, it is clear that any debate today on this issue cannot be based on consolidated knowledge; research therefore has a major role to play in facing this challenge.

Foresight workshops were initiated in related fields in 2009 and 2010: one on the adaptation of agriculture to climate change (ADAGE) and the other on plant species and sustainable production systems for chemistry and energy (VegA).

Regarding food issues in the longer term, INRA and CIRAD jointly performed a foresight study on the possible futures of farming and food systems worldwide in 2050: the Agrimonde platform thus laid the foundations for agricultural research within a framework of sustainability. In the same vein, our two organisations decided to mobilise private sector and academic experts working in this area to study the trends affecting global food systems in terms of their effects on the environment, health, social equality and the economy.

Launched in November 2009 and completed in June 2011, this project, called duALIne, involved some 125 experts contributing to 10 working groups. Inter-workshop seminars, two general assemblies and a public symposium to debate the preliminary findings marked different stages in the gradual integration of

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the results. Work in progress was regularly reviewed by a Steering Committee composed of representatives of the different stakeholders (agricultural organisations, industry, the retail industry, environmental protection associations, consumer associations, national and international government representatives and qualified personalities).

We would like here to extend our sincere thanks to all the experts involved and to all members of the Steering Committee, for their participation, their contributions and their advice, all of which enabled us to complete this exercise. Its findings will be used to guide research by our organisations, and we hope that this project will also enable a broader mobilisation of the national and international community to ensure greater food sustainability for future generations.

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