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Chapter 2

The origins of the European IFSA: the first meetings and the agenda renewal

Jacques Brossier, Caterina Contini, Luigi Omodei Zorini,
and Artur Cristóvão

Abstract *In the mid-1990s the farming systems movement had reached Europe. The European Group is related to the associations founded in the USA, Latin America, Africa and Asia some years before. These were partly designed to support research and development in the Global South. The European Group followed a novel approach in that it applied the systems concept to the highly diverse situations found in European farming. Hence, we recall the objectives of the first meeting held in Edinburgh in 1993, and then assess how research themes have shifted over the past 20 years, by reviewing the programs of the nine symposia held during this period. Looking back, it is clear that European Farming Systems Research has revealed many of the major preoccupations of European farming and the increasing importance of human and sociological factors, in addition to technical and economic issues. This development is most encouraging and indicates that a dynamic learning community exists among European farming systems researchers and extensionists.*

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Origins of the European farming systems association

Beginning in the 1980s, symposia of the Association for Farming Systems Research and Extension (AFSRE)¹ were organised in the USA. The AFSRE, officially created in 1987, was founded with American university research teams working in developing countries with colleagues from those countries (MacArthur 2000). The objective was to conduct research into farming systems mainly focused on farm production, and undertaken under the guidance of the Consultative Group of International Agricultural Research centres (CGIAR) (see Gilbert et al. 1980). This research, usually carried out by agronomists and agro-economists, aimed to improve the model for generating and disseminating technical progress in farming, from experimental units through to the farmers themselves, using extension services. The objective was to make both crop and livestock production more effective. The symposia were supported by USAID, the Florida-based Farming Systems Support Project (FSSP) and American funding bodies, such as Ford and Rockefeller Foundations. They mostly drew researchers from American land grant universities and collaborating researchers from developing countries, but relatively few Europeans.

Even if considerable progress was made regarding greater uniformity in the concepts used in Farming Systems Research (FSR), the methods and concepts were nonetheless formulated in the early 1980s (see Brossier 1987; FAO 1994; Hart 2000).² By the mid-1980s the shortcomings of both theory and concept behind the approach were criticized (e.g. Maxwell 1986; Bawden 1996), and the approach itself considered too rigid. The Farming Systems Research movement seemed to be running out of scientific steam, and the causes were pinpointed by several participants at the symposia: the attempt to define a sole model for Farming Systems Research using a standard methodology; the lack of concern for epistemology; social groups other than farmers being insufficiently taken into consideration; an almost exclusive focus on farming in developing countries; the overwhelming presence of North American universities and associated research teams in developing countries, leading to difficulties for French-speaking countries and even for Europeans to make themselves heard.

In 1992, a suggestion was made to approach the upcoming symposium in a different way, and to organize it in Europe. Several European research teams were already working on Farming Systems Research in developed countries. There, research increasingly focused on complex development problems, on environmental issues connected with farming; on applied systems modelling concepts, on action-research, and on taking an interdisciplinary approach. It should be noted that the new Common Agricultural Policy supported this course of action by encouraging the Europeans to abandon the intensification model (a capital-based process linked to intensive use of chemical inputs, leading to the deterioration of the natural resources base and the marginalization of family farms).

¹At the 15th international Symposium, which was held in Pretoria (South Africa) in 1998, it was decided to change the name of the AFSRE to International Farming Systems Association (IFSA) (see MacArthur 2000).

²For a global and international perspective, see Collinson 2000.

Several European research teams adhered to this nascent farming systems movement: research teams in France, Ireland, the UK, Germany, Benelux, and Scandinavia (see Bingen and Gibbon 2012, this book). It is interesting to note that a number of American research teams had started to consider the situation of American farming from this perspective (Brossier 1993), even though these teams had surprisingly few connections with research undertaken in developing countries and thus with the AFSRE.

In the meantime, Farming Systems Research had made headway in Europe and particularly in France (Bonnemaire et al. 2000). The important role played by French research teams (INRA, CIRAD) is indisputable. Their research focused on action-research, R&D, spatial approaches (agrarian system concept, see Cochet 2012), role of social groups (growing importance of sociology, see for example Olivier de Sardan 2000), and the emerging preoccupation with environmental problems. The shortcomings of research confined to specific disciplines were underlined (hence the systems approach – whether constructivist or holistic).

The Edinburgh and the Montpellier meetings

In 1992, at the 12th AFSRE Symposium which was held at Michigan State University, Didier Pillot (France, GRET) and John Farrington (UK: ODI and Agrinet) offered to organise the next international symposium in Europe. Their offer met with enthusiasm, all the more since the President of AFSRE, Janice Jiggins, was a European. In 1992 the European Group was formed and a European representative was appointed to the AFSRE board. The AFSRE designated 1993 for regional meetings and decided to hold the following global AFSRE symposium in France in 1994 (MacArthur 2000).

The First European Convention on Farming Systems Research/Extension was thus held in Edinburgh in October 1993. It was the first opportunity to organise discussions between teams working on Farming Systems Research in Europe. It brought together about 60 researchers using the systems approach, from 19 different European countries. As reported by Jiggins (1994), the First European Convention marked the first attempt to bring Europeans who had been applying systems approaches to the problems of Third World agriculture together with those applying systems approaches within Europe. Also, this Convention was held just after the “shift in emphasis of the European Union agricultural policy from production to the restriction of surpluses, and increasing emphasis on environmental and social protection” (Dent and McGregor 1994:xvii). Several issues were raised at the Convention:

- The issue of how close the connection should be with the AFSRE. European researchers did not wish to restrict affiliations to ASFRE (considered by some to be too oriented towards developing countries, and too dominated by the Americans).
- It was discussed whether a European farming systems association should be created in addition to the existing disciplinary associations which were beginning to

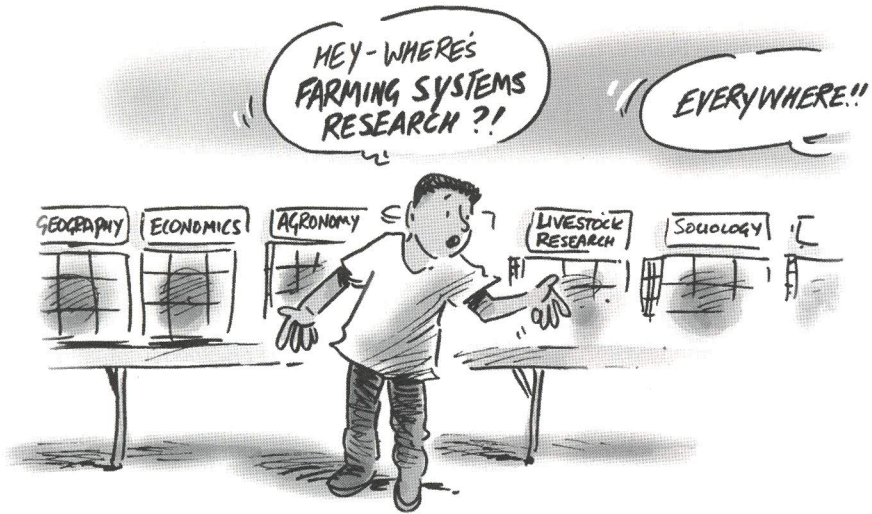


Fig. 2.1 As Farming Systems Research is fundamentally an interdisciplinary approach, it cannot be associated with any one discipline. This was a key reason to create a new scientific organisation (the European Group of the IFSA), while at the same time seeking to establish working groups within scientific conferences with a more disciplinary orientation

offer a platform for researchers using the systems approach (e.g. the European Federation of Animal Science (EAAP), the European Association of Agricultural Economists (EAAE), or the European Society for Agronomy (ESA)). It was decided that a separate association (i.e. the IFSA-European Group) would be preferable, as it would offer a space for the debate between disciplinary specialists.

- A core topic of discussion was whether systems research could be considered as a new discipline; and if yes, what were the links with other disciplines (agronomy, economics, livestock research, sociology, geography, etc.)? Today, there is still no clear answer, because the links with disciplines are important, and also due to the specificity of Farming Systems Research (Fig. 2.1).

The Edinburgh Symposium, although it did not attract all the European researchers using Farming Systems Research, demonstrated its importance and its relevance for studying European farming issues. The Edinburgh meeting was considered a success and the papers were published as a book (Dent and McGregor 1994).

A year after the Edinburgh meeting, in November 1994, the 13th AFSRE symposium was held in Montpellier (France). Although this meeting was international, the Europeans dominated it. It was a great success, with over 700 participants, a great number of presentations, many opportunities for new contacts, lively debates and innovative proposals to develop farming systems in Europe (Sebillotte 1994). On the occasion of the 13th international AFSRE symposium, INRA published a

book presenting the wide array of contributions made by the Agrarian Systems and Development (SAD) research department (Brossier et al. 1993).³

The discussions at the Edinburgh and the Montpellier Symposia played an important role in the consolidation of Farming Systems Research thinking, and in the creation of a diverse and broad scientific community (Sebillotte 1994). Both Symposia reinforced the understanding that Farming Systems Research represented a particular set of views for agricultural and rural development research and practices, which contrasted with the conventional views of transfer of knowledge and technology or innovation (Röling 1994).

Francophone and anglophone approaches to FSR

In French-speaking countries, origins of Farming Systems Research would be the research developed in the 1960s by tropical geographers – emphasizing the study of local territories and forms of organizing production – and neo-Marxist ethnologists, who underlined the importance of analysing power relations and conflicts, the relationships between exchanges and distribution, and the issues of dependency and social redistribution (Pillot 1993:22).

Such work influenced economists, sociologists and agronomists, and was behind the formulation of the approach known as ‘Recherche-développement de systèmes agraires’ (R&D of agrarian systems), which was applied both in tropical and French contexts. Important contributions were made by authors such as Capillon and Sebillotte (1980), Sebillotte (1974, 1978), Brossier and Petit (1977) and Brossier et al. (1993), among many others, all working for the Institut National de la Recherche Agronomique (INRA), especially in the ‘Systèmes Agraires et Développement’ unit (SAD) now called ‘Sciences pour l’Action et le Développement’ (Sciences for action and development).

In the English-speaking world, origins of Farming Systems Research can be found in international research centres such as IRRI, CIMMYT, ICTA, IITA, or ICARDA. In these centres, which played an important role in the so-called Green Revolution, researchers from different countries started questioning the socio-economic impacts of the proposed technologies, as well as their degree of relevance considering the numerous failures, particularly in more sensitive agro-ecological areas (Pillot 1993:24–25). Norman (1980), for instance, mentioned the growing energy costs associated with Green Revolution technologies, and acknowledged that many traditional farm practices were viable (in economic, social and environmental terms)

³The 26 papers demonstrate the breadth of the research done at INRA-SAD. They were grouped under six headings: (i) agriculture and the environment: a tight knit relationship; (ii) social elaboration of quality, industry subsector, agreement between groups; (iii) in support of a systems approach to animal production, concepts, methods, results; (iv) pastoral systems and land use: a topical issue; (v) agronomic theory, management sciences and decision support; and (vi) tools for regional development.

and should be preserved. Such questioning opened the way for the formulation of the approach known as ‘Farming Systems Research’, to which authors like Ruthenberg (1971), Harwood (1979) or Norman (1980), among others, made significant contributions.

Pillot (1993:25) underlined that in French-speaking countries the importance of human sciences was critical, and the humanist and Marxist influences were very visible. At the same time, in English-speaking countries the influence of neoclassic economics and agronomic sciences was crucial, as well as operational and pragmatic implementation concerns (see also Fresco 1984). Today, it is clear that farming and rural systems research represents a constellation of systemic and interdisciplinary perspectives.

The evolution of the European view of farming systems

Overview of the European symposia

Since the first meeting in Edinburgh, the IFSA European Group has organized Symposia every two years, gathering around 200 people each time (Fig. 2.2). The proceedings have all been published⁴:

- 1993 in Edinburgh (UK): Rural and Farming Systems Analysis, European Perspectives, edited by B. Dent and M. J. McGregor (1994)
- 1996 in Granada (Spain): Technical and social systems approaches for sustainable rural development, edited by W. Doppler and J. Calatrava (2000)
- 1998 in Hohenheim (Germany): Rural and farming systems analyses – Environmental perspectives, edited by W. Doppler and A. Koutsouris (1999)
- 2000 in Volos (Greece): European farming and rural systems research and extension into the next millennium: Environmental, agricultural and socio-economic issues, edited by A. Koutsouris and L. Omodei Zorini (2000)
- 2002 in Florence (Italy): Farming and rural systems research and extension – Local identities and globalisation, edited by L. Omodei Zorini and A. Cristóvão (2003)
- 2004 in Vila Real (Portugal): European farming and society in search of a new social contract – Learning to manage change; edited by A. Cristóvão and H. Langeveld (2004)
- 2006 in Wageningen (The Netherlands): Changing European farming systems for a better future: New visions for rural areas, edited by H. Langeveld and N. Röling (2006)
- 2008 in Clermont-Ferrand (France): Empowerment of rural actors: A renewal of farming systems perspective, edited by B. Dedieu and S. Zasser-Bedoya (2008)

⁴Except for the 1993 and 2006 Symposia, the proceedings are available for download at: www.ifs-europe.org



Fig. 2.2 The European IFSA Symposia have been held in various parts of Western Europe. The geographical spread shows how researchers in various countries identify with Farming Systems Research, their commitment to the European IFSA, and the value they see in meeting and discussing their latest insights

- 2010 in Vienna (Austria): The added value of systems approaches in times of change and uncertainty, edited by I. Darnhofer and M. Grötzer (2010)
- 2012 in Aarhus (Denmark): Producing and reproducing farming systems. New modes of organisation for sustainable food systems of tomorrow.

With the 1993 Edinburgh conference, the debate on values, procedures, methods and challenges of Farming Systems Research moved to Europe. The search for a space where a European perspective of farming systems could be developed found its motivations in the need to interpret rural development in light of the specificities of European agriculture, marked by small farming enterprises and a strong tie with

the culture and history of the territory. The interest in models other than those of large, capital-intensive cultivations characterised by industrial technologies was thus one of the aspects that shaped the European view from the very beginning. In this context, and parallel to the terms of the Common Agricultural Policy, Farming Systems Research in Europe has focused on the identification and development of an alternative to the exclusively production-oriented paradigm, shifting attention from farm profit to the relationship between agriculture, natural, social, and cultural resources and social welfare.

The Edinburgh meeting witnessed the encounter of different experiences gained in Europe, as well as in developing countries which, however, all share several key aspects. In this regard, Gibbon (1994) identifies the main points of contact between applications implemented in different contexts:

- the holistic vision of the social, economic and political complex that characterises rural systems,
- the interdisciplinary nature and flexibility of the approach,
- the attention towards marginality (be it of the areas, interest groups, and type),
- farmers' involvement in identifying problems, and
- the collaboration between researchers, extensionists and policy makers to define the possible solutions.

Since the Edinburgh conference, Farming Systems Research and extension has developed, with each conference focusing differently on the various aspects that have characterised the European view of the approach since the very beginning. This path has led to an evolution of the themes dealt with, the methods used and the role assumed by rural stakeholders.

Major changes

This section will point out the elements of connection and the major changes that have marked the European view of Farming Systems Research over these past 17 years. The analysis is based on the examination of the papers presented in more than 60 workshops organised in the course of the eight conferences held on a regular basis in Europe from October 1993 to July 2010.

The *conceptual and methodological aspects* represent a constant theme discussed at all conferences. However, the modality and the perspective these aspects are treated with change during the course of the various meetings at the conferences of Granada (Doppler and Calatrava 2000) and Hohenheim (Doppler and Koutsouris 1999), concepts and methods constituted the central themes of both conferences. Both of them sought to build a platform for the development of a structured methodology to provide the various experiences and applications with a basis common basis for these different experiences and applications, to underline how research must have rigour of method and a shared identity.

The principal scope of application discussed at these conferences was that of the *environment*. In particular, the workshops confronted this theme in relation to sustainability (see for example Bellon et al. 1999; Park et al. 1999), the necessity to integrate both the social and technical perspectives in managing resources (see Almeida et al. 2000; Gafsi and Brossier 2000), the relationship between scientific knowledge and local knowledge (see Hess 1999; Mielgo et al. 2000) and between research, extension, political and institutional contexts (see Koutsouris and Papadopoulos 2000; Dono and Locchi 2000).

In the years that followed, attention shifted from analysing the aspects shared by the various methodological applications to *exploring diversity* no longer perceived as a risk, but instead as a resource to improve the capability to adapt the approach to the issues that have emerged following the transformations of the agricultural and rural world. The beginning of this path can be dated to the Volos conference of 2000, during the course of which, the approach was conceived as a school of thought to promote innovation, be it in the scope of research, or in the frame of technical assistance. Attention towards diversities in view of developing the capability of adapting the methods to the existing phenomena was maintained at the later conferences, where the evolution of methods followed that of the dynamics concerning European agriculture and the rural world as a whole.

New topics

Alongside the methodological aspects, other themes also gained ground, some of which became common denominators of the conferences. In addition to the topic of the environment, other topics discussed with continuity include those related to the *learning process* in research and extension. In this respect the researcher's role is analysed, the modalities for creating a social space in which the learning process can be facilitated are explored, and tools are developed to enable the stakeholders' participation in the learning processes (see Röling and Jiggins 2000; Blackmore 2003; Ison 2002; Langeveld and Proost 2004; Noe and Langvad 2006; Magne and Cerf 2008).

The *food systems* theme made its way into the picture in 2002 at the Florence conference whose principal theme was the quality of productions and of local specificities. The modalities through which quality can be enhanced were analysed in relation to the tie with the natural, historical and cultural resources of the rural territories, and the possibility of offering a basket of goods and services capable of satisfying the broadest spectrum of the needs of society (Becattini and Omodei Zorini 2003). Many case studies discussed the strategies for enhancing quality, ranging from origin certification (Belletti et al. 2003; Ingrand et al. 2003; Tritf and Casabianca 2003) to biological certification (Milestad et al. 2003; Theodoropoulos et al. 2003), to rural tourism (Carvalho 2003; Owaygen 2003; Figueiredo 2003; Pardini et al. 2003). In this context, attention turned to the relationship between rural areas and urban areas, be it in terms of opportunities for the survival of local

identities in the global market, or in terms of possible issues to confront in order to create a relationship between city and countryside, capable of effectively promoting the sustainability of the local system on the economic, cultural and natural levels.

The reading of the papers presented in the course of various conferences point out that attention progressively expanded towards broader and more complex systems, more difficult to delimit and analyse. While in the studies presented during the early conferences, the point of departure of the analysis was the *family farm* and the relationships it develops with the surrounding environment, in the later conferences, interest converged on the *rural environment*, including its natural, socio-institutional and economic characteristics. Successively, attention extended to the urban areas, and with the Vila Real conference held in 2004, the system further expanded with the introduction of the discussion on the new social contract between European agriculture and society as a whole.

In this context, the *function* performed by the farm itself also transformed, from being a food producer to becoming a supplier of services of an environmental, cultural and social nature. There is consequently also an expansion of the range of activities examined, which range from the production of energy, to direct sale, to the offer of services of a recreational, educational or therapeutic type (Knierim and Siebert 2004; Gunnarsdotter 2004; Theodoropoulou 2004).

Another theme always present at conferences is that of the *transition, resilience and adaptive management* of farming systems to the changes of the policies and lifestyles of society. Central to this theme are the characteristics which on the farm and territory levels permit the farming community to confront the changes. This topic emerged as a specific theme at the Volos conference and was picked up again at the meetings held in Florence and Vila Real, becoming the fundamental theme of the conference held at Wageningen in 2006. The objective of the latter conference was precisely that of contributing to the development of new systems and arrangements that would facilitate adaptation to changes such as the liberalisation of international trade, globalisation, drop in the prices of commodities, reduction of aid to agriculture, the growing demand for quality productions and the growing sensitivity of consumers towards the environment, animal welfare, and climatic aspects (Darnhofer 2006; Macombe 2006; Hermansen et al. 2006; Reidsma and Ewert 2006).

Parallel to these transformations we note an important evolution with respect to the *role of the rural stakeholders* who move from being the object of analysis in studies that characterised the early phases of Farming Systems Research to becoming interpreters of the existing dynamics and partners of the development process (Brossier and Chia 1994). In this perspective, learning becomes a very central element. It goes beyond the transfer of knowledge, and implies the active participation of the local actors in the activities of testing and adapting innovations (Hubert 2006). The empowerment of the rural actors also became an increasingly important theme, indeed becoming the central topic of the conference held in Clermont-Ferrand in 2008, which aimed at promoting the strategies of the rural stakeholders by strengthening the capabilities to develop new projects. This path which witnessed the growth in importance of the rural stakeholders continued in the most recent conference, held in Vienna in 2010, where we note yet a further expansion of the

role of the rural stakeholders who become an integral part of the approach, along with researchers, extensionists and policy makers.

In the papers presented in Vienna, a view makes its way into the picture, which is no longer interdisciplinary but instead *transdisciplinary*, in which the rural stakeholders contribute to realising the process of sustainable development with knowledge, experience and work (Milestad et al. 2010; Leitgeb and Vogl 2010; Hunt et al. 2010). In this theme, emphasis shifts onto communication and ‘equality’ between subjects involved in the research (Alrøe and Noe 2010; Binder et al. 2010; Karner and Chioncel 2010). It is also stressed that this is a challenging path, both in terms of time and in terms of difficulty, and that there is a trade-off between methodologies capable of tackling complex problems relevant to the entire society, and simplified methodologies effective in defining concrete solutions (Aenis 2010; Leeuwis and Milgroom 2010). On the other hand, the reflections that emerged in the course of the Vienna meeting pointed out that dynamic and multidimensional approaches, capable of creating a space of understanding where scientists and stakeholders can cooperate, prove to be indispensable today, considering the changes of the rural and global world, and in the demands society advances for the goods and services that agriculture can supply.

Conclusion

While the IFSA is thriving in Europe, there has been much less activity at the international level in the last decade. The 13th international AFSRE symposium (November 1994 in Montpellier) was followed by two further biennial global symposia: the 14th Symposium in Colombo, Sri Lanka (11–16 November 1996), and the 15th Symposium in Pretoria, South Africa (29 November–4 December 1998; during which the name of the Association was changed from AFSRE to IFSA, see MacArthur 2000). There followed three more international Symposia of the IFSA: the 16th in Santiago, Chile (27–29 November 2000), the 17th in Lake Buena Vista, Florida⁵ (17–20 November 2002), and the 18th in Rome, Italy⁶ (31 October–4 November 2005). This last Symposium was organised with the FAO and IFAD under the title of ‘Global Learning Opportunity’.

There have not been any international gatherings under the banner of IFSA since 2005. The role of international development agencies and donor bodies in promoting Farming Systems Research during earlier decades has changed. Farming Systems Research no longer plays an explicit role for addressing global questions related to food security and livelihood of people, along with land use and environmental questions. Possibly, this is due to the incorporation of systems approaches

⁵See the conference website: <http://conference.ifas.ufl.edu/ifsa/>

⁶See the conference website: http://www.fao.org/farmingsystems/ifsa_symposium_en.htm. The proceedings have been published by Dixon et al. (2006).

into the endeavours of many agriculture and food related scientific groups. Perhaps the wider adoption – and indeed mainstreaming – of the ideas and experiences brought into national research and advisory systems during the height of the international farming systems movement, may contribute to explaining the decline in visible activity in this area at the global level. How this observation at the global level relates to the persistence of interest and the continuous re-interpretation of Farming Systems Research within the European network of scholars and practitioners is worthy of exploration.

Indeed the European Group of the International Farming Systems Association today presents itself as a point of encounter of various research experiences in the context of rural development, and the appropriate environment to analyse the various forms of organisation of European agriculture with respect to its capacity to adapt to the conditions of change.

The evolution of the research themes pursued by multi-disciplinary teams within the European Group does of course mirror evolutions taking place in society, and underlines the necessity to take human and sociological factors into consideration along with technical and economic issues. This is encouraging for the future of the European Group.

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