

### Regional sustainability transitions:

# **Overview of Research on Case Studies of Farming Transitions**

### Introduction

The FarmPath project is based on the premise that increasing sustainability in agriculture is best addressed by enabling flexible combinations of farming approaches and models, which vary to reflect the specific opportunity sets embedded in regional culture, agricultural capability, diversification potential, ecology, and historic ownership and governance structures.

To this end, a major piece of research was conducted in 2011/2012 which assessed change processes, by focusing on the development of niche innovations and how these influenced mainstream agricultural practices and institutional structures. Field research was conducted in seven countries, with three case studies of specific 'initiatives' (new approaches to agricultural production, marketing, organization or land management) undertaken in each country. The case studies were selected in sets of three, such that seven 'clusters' containing similar cases were studied across the seven study countries. A table of the initiatives and the clusters is presented below. Fact sheets on findings from each of these seven clusters are also available.

	Cluster	Initiative
1	Energy Production	On-farm Renewable Energy Production (UK)
		Energy Production by Agricultural Enterprises (Czech Republic)
		Wendland Bio-energy region (Germany)
2	Countryside consumption	Project 'solidarno' CSA (Bulgaria)
		New management options – combined hobby farming and residential interest (Portugal)
		Lifestyle land management (UK)
3	New forms of governance	Municipality Elena (Bulgaria)
		Tradition of the White Carpathians (Czech Republic)
		The Local Quality Convention (Greece)
4	Farmer Collaboration	CRIE Montado (Portugal)
		Machinery Rings (UK)
		Regional Value Ltd (Capital provision): Germany
5	Alternative Marketing Channels	Direct Marketing – Farmers Market (Czech Republic)
		Rennes Metropole (France)
		Santorini Quality wine production (Greece)
6	High Nature Value Farming	Besaparski Hills (Natura 2000) (Bulgaria)
		Valuing the Mediterranean wild resources (Portugal)
		Regional Park of Ballon des Vosges (France)
7	Reducing the environmental impact of farming	Green Algae (Brittany) (France)
		Mangfall valley: ground water protection through organic farming (Germany)
		Integrated Farming (Greece)

## European trends and societal responses

The trend towards intensification of agricultural production influenced many cases: several of the approaches studied were developed specifically to counteract this trend. The global trend towards intensification found its expression at the European level, where it was fully supported by EU policies into the 1990s (e.g. through as heavy modernisation investment projects, agricultural subsidies based on production). This led to an increase of large farms and reduction of small scale farming in productive agricultural areas and at the same time abandonment of marginal farms and land. Current EU specific policies like Less Favoured Areas support, no attempt to counteract these trends.

Related environmental impacts like water and soil quality deterioration, loss of wildlife and agricultural biodiversity as well as landscape degradation were frequently addressed in the research. Important socioeconomic issues have also been raised like increased dependence of farmers on input providers, leading to higher costs for farmers as well as marginalisation of a significant number of farms and areas of farmland.

Another economic trend at the global level that seemed to have affected in most of the case studies was the increased market power acquired by retail chains in the global food market which exert asymmetrically detrimental impacts on small scale providers. The research on alternative marketing channels particularly addressed this issue. A particular expression of the concept of sustainability for the agricultural sector, has

Y ANY

been the increased concern about negative externalities caused by intensive agriculture. A global issue closely related to the above is the increased degree of awareness for food safety.

These global concerns and trends, have caused responses by the society and authorities. Most prominent manifestations of the societal responses are the policy measures launched by the EU, state and/or regional and local authorities in reaction to the pressing issues. These policy measures (mainly through the two CAP pillars and EU environmental policy) have acted, in their turn, as external pressures to the initiatives under examination. Rural development policies (RDP) seemed to have actively influenced the evolution of almost all initiatives in most of the clusters. RDP measures such as the agri-environmental measures seem to have been very supportive in all cases while the Water Framework Directive (2000/60) and the Directive for Groundwater Protection from nitrate pollution caused by agriculture (91/676), have been mentioned as the most influential regulating documents in water quality related initiatives.

The intensity in the primary production process has been different across clusters and initiatives and even within them as well as the degree of involvement of the various links of the value chain i.e. production, processing, distribution, consumption. The resulting labour and income generation function as well as countryside amenity provision and environmental protection have been identified as important parts of the whole agricultural system.

On the other hand, new perceptions of the countryside including farmed landscapes, as tourism destinations as well as sites for holiday, week end or even permanent residence coinciding with technological developments both for transport and communication resulted to the creation of linkages between the housing, tourism and amenity regimes and agriculture.

Finally, the growing concern for climate change and the consequent EU and national policies for the energy production from alternative sources and its use changed existing patterns of agriculture as an energy producer and consumer.



One of two highland cattle on a lifestyle farm in Scotland. Cluster: Countryside Consumption (Image: Brian Sutherland).

### **Key lessons learned**

FarmPath case studies demonstrated multiple forms of agricultural system, span multiple time and spatial scales, while they are diverse in terms of innovations. The cases show that a niche could originate in the innovative action of either non-regime actors, in the form of bottom-up initiatives or regime actors, or both.

Young farmers appeared to play less of a role in innovation development than anticipated: although they were very important in some cases (e.g. alternative marketing channels) they were marginalized in others (e.g. renewable energy production, where only farmers with significant financial resources could successfully participate). However, new entrants were found to be very important in most of the cases, as they brought with them new ideas for how farms could be managed and systems could be structured.

The definition of 'farmers' and 'new entrants' were brought into question in several cases. Where land managers were primarily oriented towards amenity, for instance, they were not typically viewed as 'real' farmers by themselves or their neighbours. Although some new entrants had no farming experience, others had been raised on farms and returned to these later in life (e.g. following a professional career). Farming successors were also important to some innovation processes (e.g. driving the up-take of renewable technologies).

The strong enabling and limiting roles of policies along with an impetus of landscape pressures seem to be of utmost importance for both the development of the niches and the 'break through' of the niches in their course to emerging transition. Broader contextual changes – often policy related created windows of opportunities in (most of) the case studies: the recent crises in agricultural and food production, the emergence of new societal values and needs, and fundamental changes in policies, most notably the changes in CAP and EU cohesion policies. These contextual changes have been accom-panied by analogous national efforts to introduce novel policy measures, regionally/locally tailored programs and new governance structures. Successive reforms of CAP constitute a long-lasting and gradually strengthened land-scape pressure to the dominant agricultural regime which creates room for manoeuvre for a series of innovative actions on behalf of a multiplicity of actors. central to the 'success' of a niche; all these have to be constantly renewed, since a transition to sustainability has not an 'end point', but rather it is a continuous process of adaptation and change. Networks are particularly important to the process of anchoring. Firstly, the non-expansion of a new network beyond an initial 'core' to other community groups and external actors limits spread of the activity. Secondly, the confinement of animating and facilitating activities of a hybrid actor mainly to the members of the 'core' network weakens the significance of the niche as a learning space. Consequently, the initiative



Traditional vineyard in Greece Cluster: Alternative marketing channels (Image: Emi Tsakalou)

The learning element in the cases has been quite important, be it structured in a formal way or as an informal exchange of experience. The main topics have been around institutional and collaboration issues rather than simply technical processes.

The creation and stabilization of various networks along with the initiating role of hybrid actors and learning processes are neither prompts the creation of spaces of exchange, nor facilitates a reflexive process and engagement of new stakeholders in joint learning and action; thus, a further negotiation and consolidation of the sustainability strategy is impeded, while no effective mechanisms for the mitigation of conflicts is created. In relation to transition management theory, significant variation was observed as to the degree of 'niche development' and the relationships between niches and regimes. The niches range across the whole spectrum of 'non-integration' to 'strong integration' into the regime. All these variations remind us that transitions do not follow a unique pattern of change. Findings also challenge the utility of the three level model of nicheregime-landscape pressures: although this simplicity is appealing from a theoretical perspective, differentiating the three levels in empirically is challenging.

The initiatives cases studied present a different sequence of various forms of linking ('anchoring) between the niche(s) (innovations) and the regime (accepted practices and institutional structures). The 'interweaving' of technological, network and institutional anchoring is the rule, although, in some cases (e.g. the renewable energy production) there appears a relative 'separation' among the three forms, at least in some phases of the transition.

A niche has been conceptualized as a 'protected' space; an indication of such a 'protection' is the granting of various subsidies for novelties. Since many of the case studies involve grants to farmers (and other actors) e.g. in the context of multi-annual agri-environmental schemes, there must be a clarification about the 'sustainability' of the apparent transitions: increased reliance on subsidies (e.g. to produce renewable energy, establish local food markets, preserve environmental assets) cannot be considered 'sustainable' in the long term.

#### For further information

See the FarmPath project web-site: www.farmpath.eu

Cluster fact sheets are available on each of the seven groups of case studies.

### Contact

George Vlahos gvlahos@aua.gr and Pavlos Karanikolas pk@aua.gr Agricultural University of Athens (AU) Lee Ann Sutherland, The James Hutton Institute, lee-ann.sutherland@hutton.ac.uk

'FarmPath' (Farming Transitions: Pathways towards regional sustainability of agricul-ture in Europe) is a three year collaborative research project funded through Europe-an Commission's Seventh Framework Programme (Grant Agreement No 265394), which will run from March 2011 to February 2014. The FarmPath project is co-ordinated by the James Hutton Institute, Aberdeen, Scotland, UK.



Direct Marketing in Germany Cluster: Collaboration (Image: Simone Schiller)













The lames

Hutton

Institute



Craigiebuckler Aberdeen AB15 8QH Scotland UK

Dundee Invergowrie Dundee DD2 5DA Scotland UK

Tel: +44 (0)844 928 5428 Fax: +44 (0)844 928 5429

info@hutton.ac.uk www.hutton.ac.uk