

### **Book of Abstracts**

### **ESRS2019**

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"Rural Futures in a Complex World"

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### Congress Theme: Rural futures in a complex world

Rural futures sit at the nexus of contemporary global challenges. Some of the challenges facing rural areas in the 21<sup>st</sup> century include climate change, migration, ageing, depopulation, technological innovations and urbanisation. People and rural places are diverse – different interests exist among long term residents, life-style migrants, retirees, migrant entrepreneurs, famers, among many others. Opportunities ebb and flow according to a complex array of different forces, both internal and external to the locality. Those opportunities differ for rural areas that lie close to urban centres compared to remote rural regions that may struggle to survive. In short, some rural areas are significantly more successful in this modern, complex and seemingly chaotic world, while other places seem to be increasingly marginalised. The result is that some places naturally evolve, adapt and self-transform, while others rely on outside forces to drive change. It is against this context that we want to explore rural futures in Europe as we move through the 21<sup>st</sup> century. We explore how knowledge is mediated between researchers, practitioners and policymakers. We identify three key elements of this complexity that raise questions for rural studies and which necessarily transcend disciplinary boundaries.

- 1: Innovation, artificial intelligence and digitisation
- 2: Social justice and rural spaces and places
- 3. Knowledge production, policymaking and research agendas

With over 30 Working Groups across these three Congress themes, this book of abstracts relates to many different topics including multifunctional agriculture; digitisation; smart villages; financialisation; environmental protection; data; food security; and corporate governance. Questions of social relations and networks; social justice and inequalities; cosmopolitanism; conflict; power relations; knowledge production; legitimacy and much more are at the centre of rural futures.

On behalf of the Scientific Committee

Dr. Ruth McAreavey (Chair)

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# Working Group 1: Digital Agriculture and Sustainable Rural and Food Future

The role of intermediaries in farmers' adoption of precision farming tools. The case of crop input modulation tools in the southwest of France.

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Keywords: Sustainability, Decision support tools, Precision Farming, Intermediaries

Precision farming uses drones and satellite technologies to collect data and then develop decision support tools for farmers. One example is the use of crop input modulation tools that aim to support the "optimal dose" of fertilizer farmers have to put within each plot of the land.

These tools are presented as sustainable and their development is taking off while there still are controversies about both their economic performance and environmental impacts. Traditionally, intermediaries play a key role in the evaluation of innovations developed for farmers and the reduction of their uncertainty, through field experiments, networking etc. In many European countries, these intermediaries are still collective organizations controlled by farmers. However, precision farming technologies can change how knowledge and evidence are produced.

This paper aims at better understanding the effects of digital technologies on technical change in agriculture, by addressing the role of intermediaries. We focus on the ways farmers adopt crop input modulation tools to gain more insight on intermediaries' role. We delimit our study in one focus region in the southwest of France, characterized by a high level of crop diversity and a wide range of rural actors, including start-ups proposing digital tools for farmers.

We conducted about 35 semi-structured interviews with farmers with different profiles (adopters of the innovation, non-adopters, droppers). We also made interviews with developers of innovation, Agricultural Chambers and farm machinery dealers. We attended events related to the development of precision farming in France: agricultural fairs, training courses in precision farming, robotics fairs, and local innovation cluster meetings.

We highlight two main results in this paper. First, we observed that intermediary actors do not reduce the uncertainty concerning tools' impacts. The evaluation of the efficiency of the tool happens fast or not at all. Second, digital technologies seem to change the role of intermediaries. Adoption pathways are driven by the intervention of cooperative advisors, who behave more as retailers of technologies than as real knowledge

intermediaries. Moreover, actors that are leaders in input and machinery industries tend to extend their role and are directly in contact with farmers to sell those tools. Finally, a tool's adoption doesn't seem to be triggered by environmental preoccupations nor by an evaluation of sustainability.

### New business and governance models for increasing trust and value equity in digitalised value chains: A review of the literature

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Keywords: Digitalisation, Trust, Innovation, Value Chains, Agriculture

Digitalisation is deemed essential to the sustainability of agri-food in New Zealand (Shepherd et al, 2018, Callaghan Innovation, 2018). As value chains within this bio-based economy seek to digitalise, they will need to develop a broad interconnected network of actors and digital technologies, including new business models, data management strategies, new business practices, networks and experiences (Dufva & Dufva, 2018; Jakku et al., 2018).

This creates opportunities and challenges regarding the ownership and use of digital technologies and data (Eastwood et al., 2017). One recognised challenge is that the formation of new connections among value chain actors and technologies in this interconnected network involves changes in trust among actors, and between actors and digital technologies (Carolan, 2017; Jakku et al., 2018). In particular, trust may be affected by concerns regarding transparency – who will have access to data, how they will make use of it (Fleming et al., 2018) and equity – who benefits from access to and use of data (Carolan, 2017; Wolfert et al., 2017; Jakku et al., 2018). This raises questions regarding which new business and data governance models may enable access to and integration of data to provide benefits to value chain actors (Wolfert et al., 2017) and realise transparency and equity (Agyekumhene et al, 2018; de Vries, 2018; Snow et al, 2017), so to build and maintain trust. The relationship between trust in value chains and its connection to digitalisation has however only been explored to a limited extent. This paper aims to explore this connection, and therefore reviews existing literature from three research domains: (i) trust in value chains, (ii) trust and digitalisation, and (iii) digitalisation of agri-food value chains guided by the following questions:

- 1. How has trust and changes in trust been conceptualised in value chains?
- 2. What are the implications of digitalisation for changes in trust?

3. How do different value chain business and governance models shape how digitalisation influences value chain trust and vice versa?

We present the literature review and bring together knowledge from these separate research domains to develop insights on the influence of digitalisation on trust in value chains. We explore how trust shapes new business and governance models. Future work will test these insights in case studies of digitalised and non-digitalised value chains.

#### The competing sustainabilities of digital agriculture

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Keywords: sustainability, technological values, big data, food regimes, qualitative research

This paper opens the category of "sustainability" to inquiry in the context of the design and use of agricultural big data and attending platforms. It works to reveal how ideas and ideals on sustainability are bound up with the production of the socio-ecological order.

Digitization of food production, under the application of sensors for collecting data and intelligent machines for mining them, is thought to present sustainability gains by substituting information for harmful or scarce inputs (Bongiovanni and DeBoer, 2004). This paper does not directly challenge this sustainability hope for innovation-led agricultural change; Instead, it leverages a science studies theoretical lens (Sugimoto et al., 2016) to unveil how multiple visions for, and ideals of, sustainability are held by social actors involved in the imagining, shaping and resistance of digital agriculture. Drawing on interviews with over 40 funders, designers and end-users of big data applications in North America, the paper reveals divergent materializations of digital agriculture which feed into competing "food regimes" (Friedmann and McMichael, 1989).

## Promoting adaptive capacity in the digitisation process of rural areas: the DESIRA methodology

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Keywords: digitisation, innovation, participatory process

In the 2030 Agenda for Sustainable Development, digitisation is identified as a specific goal, but it is also a pivotal tool for achieving other targets of the Agenda. Through processing of a variety of data from different sensors and devices, digitisation in rural areas, agricultural and foresty sectors promises positive impacts on production effiency, preservation of the environment and issues that rural communities are facing (such as in relation to mobility, access to market, health and social services, etc.).

New digital technologies are *game changers* in the sense that they contribute to reconfiguring of social practices (e.g. consumption, business models, service provision, etc.) generating both opportunites and threats in rural contexts and for rural stakeholders. Social risks related to what is known as 'digital traps' (such as digital divides, the design of ICT solutions and system complexity) can lead to unintended negative consequences, which may go against the Agenda's purposes. In order to minimise digitisation social costs, socio-political systems can anticipate them and improve their adaptive capacity to technological novelties. To do so, it seems necessary to develop a new conceptual framework that takes into account the mutal influence between social organisations and ICT development.

In this regard, the project DESIRA, funded by the European programme RUR-02-2018, aims to promote an innovative strategy to face digitisation challenges building a knowledge and methodological base to assess socio-economic impact of ICT-related innovations. Based on the Responsible Research and Innovation (RRI) principles, DESIRA intends to develop a conceptual and analytical frame to understand the implications of digitisation, that will detect how digital game changers connect (and change) data, things, people, plants and animals into a hybrid system that can be named a Socio-Cyber-Physical System. Involving 25 partners across 16 European countries, the DESIRA consortium will mobilise a wide network of actors (i.e. public authorities, citizens groups, farmers, academia, etc.) in a participatory research project. Through 20 Living Labs and one EUlevel Rural Digital Forum, the networks will help develop indicators for impact assessment, describefuture digitisation trends and scenarios and contribute to policy development across the EU. Based on the outlined scenarios, five 'use cases' will be developped to analyse plausible potential future development and recomendations. Also, two 'showcase technologies', with high potential impact, will be prototyped in open source to increase their reusability and impact. An ethical code for digitisation will also be developed in the project, which should help rural stakeholders identify technological solutions coherent with their social responsibility profile.

In this contribution, the method adopted in DESIRA will be reported as an innovative process to face challenges and opportunities of digitisation.

### Land Access Mapping in a Tenancy Universe: A participatory mapping framework to facilitate farmland access

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Keywords: Critical GIS, Participatory GIS, Farmland Investment, Land Access, New Entrants

This paper provides a critical analysis of The Farmland Monitoring Project (FMP), a web GIS intervention designed (by the author) to promote farmland access for tenant farmers in California. I first review the challenges of land access for new entrant farmers, highlighting spatial and social aspects of the problem. Then, I review contributions from the field of critical GIS that show how spatial interventions are thought to provide legitimacy for making access claims. Based on this review, I trace how GIS tools are increasingly being used to promote a variety of large scale and industrial agricultural visions, often overlooking or even entrenching the land access dilemma. Finally, I present a functional example of a geospatial land access intervention framework—a web based participatory GIS framework for monitoring, analyzing, and interrogating patterns of agricultural land ownership for beginning farmers in the California Central Coast.

The framework, embodied in a novel GIS tool called "Farmview", proposes to use participatory mapping tools to support farmers and farm support organizations in their access claims. The tool proposes to do this in three ways: 1) crowdsource the identification of available farmland parcels rendered invisible amongst existing sources; 2) Aggregate land ownership information for ongoing monitoring of consolidation trends; 3) Produce "story maps" that interrogate spatial delimitations of land ownership and management regimes. These three features aim to contest entrenched understanding of "available land" and provide new social power to farmer groups who struggle with land access.

Using the FMP as a case, I discuss the ways emerging GIS tools engage with the structural aspects of land access for beginning farmers. Thinking about the access dilemma from the perspective of the social relations that govern the ability to benefit from farmland, I contend that GIS tools oriented towards land access have a key role to legitimate appeals by farmers to authority. Despite this optimism, the FMP still carries embedded assumptions about land use and land transfer, an inevitable consequence of spatial representations of social systems. Within a landscape of rapidly emerging GIS interventions for agriculture, I bring the reflexive and power-aware spirit of the critical GIS literature to examine the future of GIS use for the land access challenge. As this scholarship suggests, GIS interventions can both provide new social power to its users as well as reinforce the status quo.

### Digitalization of advisory services in agriculture: towards new cooperation between farmers and advisers?

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Keywords: cooperation, advisory services, digital agriculture

Highlights:

Digital technologies are a major axis of transformation of the practices and aims of the cooperative advisory service:

- they make it possible to anticipate and act more precisely;
- they are part of an ultra-sophisticated and standardized Information and Consulting System;
- and finally, reappropriated by farmers in other ICS they appear as a means of empowerment over consulting organizations.

In a context of renewed climatic, economic and environmental challenges, the agricultural sector is facing strong incentives to engage an agro-ecological transition. The agro-industrial model is "greening" its techniques (Di Bianco 2018; Plumecocq et al. 2018). Meanwhile, the strong development of digital tools appears to be a great opportunity to address complexity and agro-climatic uncertainties.

The digitization of agriculture has been little studied regarding the transformation of the consulting trades. In France, studies focus on the appropriation of digital devices by farmers (Laborde 2012), their uses of different tools (Agrinaute, 2015, 2017) or the way these uses actually transform their daily work (Mazaud 2017). As far as consulting organizations are concerned, it is more the performance rationales underlying the front-office or back-office activities that are analyzed (Labarthe, Gallouj, et Laurent 2013). The increasing size of French farms is leading to a growing demand on digital tools, as well as the large scale installations in the United States, Northern Europe or Australia require more sophisticated support (Purseigle et al. 2017). Studying the "complex" innovations of precision agriculture, Eastwood (2017) invites us to observe how digital technologies induce a reconfiguration of professional networks, both in defining the roles of each and in the nature of established alliances. Meanwhile, Carolan (2018) points out that digital technology can induce attachments or dependencies between customers and service providers. What about France? How does digital agriculture transform the work, the arrangements or the logic of action of the advisers and their organizations?

Based on a detailed case study of how digital agriculture is implemented within big French cooperative (22.000 farmers), this communication focus on the transformations of the consulting relationship to farmers, brought about by digital tools in advice services. We conducted surveys with farmers and technical salesmen on a three-year participatory research program (PhD program). We analyze the collected information combining rural sociology and the sociology of work and professions. First, we points out how digital agriculture transforms both the ways of looking at, considering, evaluating and acting on the technical object. Then we show that digital tools enable new forms of cooperation between the technical salesmen. Finally, digital technologies are transforming the relations between market players, which develop new forms of cooperation and jointly restructure their service offer. Digital agriculture appears to be integrated either in highly sophisticated top-down approach or in collective practice groups, where farmers are given a central role in choice of indicators. Digital technology therefore question the durability of changes implemented, and the future division of roles between farmers and advisers. Our communication aims to enlighten research programs in the social sciences.

## Practices, politics and the renegotiation of "regimes of living" in a digital transforming agriculture

Moritz Dolinga, University of Basel

In recent years the development and implementation of digital technologies has led to a rapid transformation in almost all areas of the working world. In agriculture these changes are addressed by using terms like "precision" or "smart farming". In Switzerland digital change in agriculture is explicitly pushed forward by the government. In September 2018 the Federal Council released a national strategy "Digital Switzerland" which includes the aim of increasing competitiveness and sustainability of agriculture by the development and expansion of smart farming. However, while politics, the private sector and research in agricultural science work on ways of promoting digital technology on Swiss farms, little qualitative analysis has been done so far to investigate the impact in everyday life and work of farmers. Our project "Negotiating life within a digitally transforming agriculture" is based at Basel University and turns toward this laguna. Understanding digital agriculture as an assemblage in which different (human and non-human) actors, interests, practices and "regimes of living" (Collier/Lakoff 2018) coincide on different locations and on different levels (including state and private funded laboratories as well as research farms, farming schools, agricultural fairs and shows, individual farms etc.) we are interested, firstly, in the process of digitization. How is digitization brought to the Swiss farms? What are the mediating actors and practices? How are digital technologies intermingling with agricultural practices and what effects do they have on the latter?

Secondly, we are interested in questions of "life". What notions of life occur and what distinctions are made between different kinds of live? How is life reassembled in new ways in the digital agriculture? In my paper I will present and discuss the first findings and the leading assumptions of our newly started project.

### Changing knowledge networks in farming: digi-grasping for environmental management outcomes in agriculture

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**CSIRO Land and Water** 

Keywords: Digitalisation, Agricultural innovation systems, Digi-grasping, nutrient management, Digiscape

Agriculture is a sector in which digitalisation, it is often argued, will provide the next round of productivity gains, increase yields, efficiency and sustainability. However, there are likely to be broader implications arising from the digitalisation of agricultural innovation systems (AIS). Agricultural knowledge and advice networks are important components of AIS that are particularly susceptible to digital disruption. In this paper we look to review the current state and trends within agricultural knowledge and advice networks in Australia and the anticipated effects of digitalisation on those networks. Then, drawing on a qualitative case study of local farmer cooperation with advisors, industry bodies and scientists in Australia's Wet Tropics, we explore how digital technologies are being deployed in these networks to address nutrient runoff and crop health in sugarcane production.

By analysing in-depth interviews with participants in this local collaboration we explore the challenges and opportunities of digitalisation through the concept of 'digi-grasping' (Dufva and Dufva, In press). Acknowledging both the digital and the embodied being, digi-grasping recognises that human and non-human actors are in constant communication with each other to various extents (Dufva and Dufva, In press). By exploring stakeholder perspectives of digital technologies, real-world examples are provided of various modes of human being and doing in the digital world. From 'the everyday mystery of the digital world', through 'awareness' of digitality, digitally 'empowered being/s', and 'transformation' of human imagination and ways of 'knowing other than rational thinking' (Dufva and Dufva, In press).

### Beyond fascinating smart tools: "everyday digitalization" and the governance of agriculture and food

Jérémie Forney, University of Neuchâtel

Digital technologies and robotics have opened up intriguing new perspectives for thinking about the future of farming and food. Notably, a good deal of hope is placed in these new technologies, and in their potential for minimizing the environmental impact of agricultural practices and food production. Collecting extensive data sets on farms and the food chain, and connecting these to tools and machinery, is thought to harbour great potential for control, monitoring, and optimization. In short, like many other sectors of the economy, agriculture and food have entered the era of Big Data.

Despite a clear domination of the discussion by the disciplinary lenses of economics, agronomy, and technology sciences, social sciences have still demonstrated that this new era is driven by far more than the allure of innovative technologies or intelligent machines. In this paper however argue that the existing literature on the social dimension of agri-food digitalization has focused on "spotlight digitalization", generally overlooking significant aspects of the change happening in society that I would call "everyday digitalization". Indeed, notably in research focussing on the farm level, there is a concentration of studies looking at highly innovative practices and digital tools (precision agriculture, robots, etc.). While this is no doubt a very important field of enquiry, this focus nevertheless ignores and even renders invisible a number of other aspects central to digital technologies in the governance of agriculture. These include, for instance, the increased bureaucratization of agriculture that these technologies induce, as well as alternative uses of these new technologies by less powerful actors as with, for example, the increased use of smartphones and apps.

Based on a starting research project and the literature, this paper aims to explore some of the new research avenues that an "everyday digitalization" approach might open in the context of agri-environmental governance more specifically.

#### New geographies of agricultural production in Morocco

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Keywords: Digital agriculture, Productivity and sustainability, capital, Plan Maroc Vert, Morocco

Over the last few decades, transformations in the Moroccan agricultural sector have been shaped by changes in the land tenure structure and the Plan Maroc Vert (PMV) – a 15-

year plan aiming to boost the agricultural sector. Launched in 2008, the PMV offers a new vision for Morocco's agriculture by promoting the development of a modern, sustainable, and productivist sector. The actions are divided in two groups: the first pillar – a capitalistoriented agricultural production based on an extensive yet ecological approach to land and resources – urges private investors to enter the sector supported by public funding via a new spectrum of subsidies. The second pillar, defined by family farming, targets an amelioration of farming techniques and practices, and aims to increase production levels and efficiency. This (particularly when it comes to the first pillar) has encouraged a diversity in "new farm-investors" to enter the sector, bringing with them new logics and rationales for farming. The development of a greater range of crops and farming techniques goes hand in hand with the adoption of new technologies such as sensors and drones. In this article, I use the experience, practices, and aspirations of "new farminvestors" to describe and discuss current agrarian dynamics in Morocco. Based on empirical data, I highlight the mechanisms and processes at play through which digital agriculture is implemented, in an effort to explain how the future vision for farming and sustainability concerns are articulated on the ground. At the same time, I focus on the convergences and intersections between environmental and agrarian policies, to demonstrate how the future vision for farming and sustainability are deeply contradictory. My analysis shows the role of the PMV and its vision for fostering an increased intersection between farming and technology. The shifting agricultural savoirfaire toward big-data, precision agriculture, and digital farming is increasingly identified as an important tool for improving efficiency and productivity in agricultural production. I argue that the increasing popularisation of agricultural investment is changing perceptions of nature, and reshaping the agrarian community and agrarian spaces, while being characterized by an unequal access to resources and knowledge. In parallel, new geographies of agricultural production are rewriting the agrarian history of Morocco where capital and finance play an important role.

### How global digital agricultural techniques face local contexts: an innovation systems analysis of Smart Dairy development in Southern Chile

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Keywords: Smart farming, Innovation dynamics, Dairy, Chile, technology unpacking and repacking

As in other sectors, digitalization is also taken place globally in the dairy sector. Digital agriculture or so-called 'smart dairying', comprising technologies such as robotic milking

and personalized feeding, is spreading globally. There is however still limited insight on how these technologies develop in emerging countries and adapt to different dairy systems (e.g. between intensive dairy systems and pastoral systems) and institutional contexts. In other words, how global technologies go local. In this paper, based on a case study inspired by innovation systems thinking, we analyse the experienced and perceived barriers and opportunities to smart dairying development within the dairy sector of Chile is put in perspective. Main findings are that technology providers and smart dairy technologies are available, however adoption by different actors is still at a low level. This is due to many of these technologies not being adapted to Chilean farming reality. While apps being are built to handle big data sources and infrastructure availability to support robotic milking has been increased, however how it redefines practices and institutions is still unclear to actors. There is a broad network of actors in the dairy innovation in Chile, but limited sharing of information which hinders effective innovation to embed smart dairying. It became clear that the lack of knowledge, lack of resource mobilization in terms of funding and training availabilities, and the lack of legitimacy in terms of trust and willingness to share are important barriers. Therefore current positive points in the systems such as availability of a market for smart dairy technologies, the availability of the new associations of farmers that share ideas, the increase of trainings available by technology providers and the increase of research on uses of smart technologies in knowledge institutes could be further developed to counteract some of these barriers. These findings raise question to what extent sensitiveness to local conditions is inscripted in smart dairy technologies, and shed light on the co-evolution dynamics that need to be fostered when global technologies arrive in a new context and need to be unpacked and repacked.

#### Farmer Uncertainty and the Localised Ordering of Smart Farming Technology

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This paper examines the significance of farmer uncertainty in the implementation of smart farming technology. Drawing upon Singleton and Law's (2013) distinction between generalised and local forms of ordering, we investigate how smart farming technology engenders uncertainty and the ways in which farmers navigate this uncertainty in making such technology workable on-farm. Through the analysis of data from interviews with 59 Australian rice growers involved in the implementation of smart farming technology, the paper highlights two key ways in which uncertainty is intertwined in the ordering of smart

farming. First, we argue that the commercial-technological ordering strategies of transnational machinery/technology companies generate dilemmas on the part of farmers over which machinery brand will best suit their needs, whether or not components from different brands will be interchangeable, the extent to which they will have to sacrifice autonomy and flexibility, and concerns with brand-related technical support. We refer to these dilemmas as the *uncertainty of ordering*. Second, we argue that farmers find different ways of managing these dilemmas. We refer to this as ordering uncertainty, and argue that it takes two principal forms: (a) standardising of smart farming equipment under one brand, and (b) reliance on independent local agronomists to assist in the implementation of smart farming technology. Under the first form of ordering, farmers prioritise pragmatism and convenience over concerns relating to loss of farm autonomy and flexibility, while under the second, flexibility, responsiveness, and finding locally appropriate farm and paddock-level solutions provide a strategy for avoiding lockin to the technical norms of particular brands. In concluding, we argue that farmer uncertainty should not be treated only as a 'barrier' to adoption. It provides important insights into the complex ways in which farmers engage with smart farming technologies, the asymmetrical power relations engendered through this engagement, and the possibilities for contesting the commercial-technological ordering practices of machinery/technology manufacturers.

# Responsible futures: Navigating digital technology transformations in Australian agriculture

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**CSIRO Land and Water** 

Keywords: Responsible Research and Innovation, Co-innovation, Digitalisation, Agricultural innovation systems, 90101440

Digiscape

Digital agriculture poses both opportunities and challenges for the creation of more sustainable rural and food futures. The promise of digital agriculture is that advances in new forms of information and communication technologies can be linked and combined to provide a "new generation" of agricultural tools, which will drive improvements in

productivity and efficiency while reducing the risks and impacts associated with agriculture. The Digiscape Future Science Platform (FSP), an integrated programme of Research & Development within the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO) that seeks to facilitate digital transformation of Australia's agricultural industries and land sector, is one example of the significant efforts internationally to develop and implement the tools to realise the transformative potential of digital agriculture. However, there are also significant socio-ethical challenges associated with the evolving digitalisation of agriculture. The Responsible Research and Innovation (RRI) framework provides one way to address such challenges, acknowledging the power of research and innovation to create the future and opening up a dialogue about what sort of futures we want to encourage or avoid.

This paper uses four RRI themes – anticipation, reflexivity, inclusion and responsiveness – to reflect on how the RRI approach can help navigate the opportunities and challenges associated with the digitalisation of agriculture, building on Eastwood et al. (2017) and Rose and Chilvers (2018). We draw on empirical insights from interviews and surveys with researchers, engineers and designers involved in the Digiscape FSP. We consider how the RRI approach converges with existing principles in innovation theorisation, including co-innovation and strategic niche management, to identify recommendations for creating socially acceptable and trusted governance responses that would mitigate risks and guide the development and implementation of digital agricultural into the future.

#### Big Brother meets Animal Farm: Surveillance implications of smart farming

Francisco Klauser, Neuchâtel University

Farming today relies on ever-increasing forms of data gathering, transfer and analysis. Think of autonomous tractors and weeding robots, chip-implanted animals and underground infrastructures with inbuilt sensors, or drones and satellites offering image analysis from the air. Despite this evolution, however, the social sciences have almost completely overlooked the surveillance implications of the 'smart farm'.

This presentation offers an initial review of the main issues of power and control arising from the IT-mediated ordering and regulation-at-a-distance of the agricultural everyday. It does so with a view to outlining a broader research agenda into the (1) origins of and dynamics behind the current proliferation of smart-farming techniques (the making of smart farming), their (2) specific modalities of use (the functioning of smart farming), and

the resulting implications of the systems put into action (the acting of smart farming). In turn, the smart-farming problematic is used as a prism through which to advance new conceptual understandings of contemporary 'surveillance' and 'governing through code', which moves beyond the traditional research focus on the control of humans in urban space.

### Work, Post-Automation: Exploring the Interface between Decision-Making Technologies and the Meaning of Labour

Katharine Legun, University of Otago

Keywords: automation, robotics, work, labour, technology, augmentation, decision-making

As decision-making and decision-supporting technologies expand in agriculture, what constitutes farm work and how can we better understand its social role? This paper will discuss augmentation of human labour on the farm through new data and algorithm-based technologies. It will bring together insights from political economy, pragmatism, and actor-network theory to consider how labour, as a form of creativity and practical production, is expressed through acts of networking, negotiating, and translating in a changing technical environment. Drawing on interviews with agricultural actors who are implementing new environmental management technologies in New Zealand, as well as preliminary insights from a co-design project developing AI robotics, the paper will consider how technologies bring aggregated data drawn from a collective scale into customized prescriptions for particular farms. The paper will explore the type of labour and politics that emerges as farm managers and workers engage with these customized prescriptions and their abstract, aggregated sources. By placing this process within broader conversations around diversity, deliberation, and democracy, we can also consider what kinds of institutions are necessary to support farm work in the future.

## It is smarter but is it smart? And, if so, is it farming? Managing the transition from process-driven to data-driven farming

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Keywords: data-driven farming, smart farming, transition, data-driven decision-making

The recent boom in cloud computing and Internet of Things, along with the high availability of technologies like wireless sensor networks, automation systems, farmbotics, and unmanned aerial vehicles, led to a high enthusiasm for what researchers, ag-tech companies and policy-makers call smart (or digital) farming. Being based on the collection, analysis and use of real-time data, smart farming emerged as a revolution aimed at supporting farm management by detecting potential risks, predicting future occurrences, uncovering choices, and reducing reliance on heuristics in decision-making. The rise of big data offers farmers the opportunity to access enormous datasets which collect and store data derived from different sources, thus transforming agriculture from process-driven to data-driven. Nevertheless, such a transition is not an evolutionary but a revolutionary shift, associated with significant changes to which the involved actors are required to adapt. In the present set of studies we aim at depicting how Greek farmers and advisors experience the conversion from process- to data-driven farming. Study 1, using a mixed methods research design, and drawing on data from a sample of farmers, revealed that conversion to data-driven farming improves producers' decision-making performance, but reduces felt work autonomy and creativity, whereas it increases perceived task complexity, work pressure and stress. A follow-up qualitative strand indicated that, during the early stages of transition, farmers are faced with the challenge to reorient their roles and to balance smart technologies and old traditions. In this vein farmers have to play two games at once, since they are trying to marry old farm management practices with data-driven decision making. Our second study, based on data from a sample of advisors, showed that adaptation to a new, data-driven world is not an easy task, since it requires advanced skills, ambidexterity, and the development of a novel problem solving culture. Taken together, the present findings reveal that transition from process- to data-driven farming is an inexorable change, which poses difficult challenges to farmers and advisors, since both of them have to redefine their roles and identities while simultaneously rediscovering the concept of farming.

### A qualitative study exploring conditions, capacity and willingness to embed Responsible Research and Innovation principles in 'smart farming' in Ireland

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Keywords: attitudes, digital agriculture, responsible research and innovation, smart farming, socio-economic impacts

Technological innovations by their very nature are designed to solve problems; however, in providing solutions they also shape certain future social realities at the expense of others. Responsible Research and Innovation (RRI) has been proposed as a governance framework to guide the development of digital agriculture based on a shared understanding of values amongst multiple actors. Framed around four main principles – anticipation, inclusion, reflexivity, and responsiveness - RRI can help support the responsible development of digitisation in agriculture by anticipating and responding to possible tensions between techno-scientific progress and social, ethical, moral and cultural issues. Research suggests, however, that 'readiness' to embed RRI within digital agriculture remains relatively low. In the current study, qualitative research was carried out with key governance actors in Ireland to explore the suitability of existing conditions and the capacity and willingness of key actors to embed RRI principles within research and innovation in 'smart farming'. 21 semi-structured, one-to-one interviews were carried out with key governance actors, including representative of the farming sector, natural and social sciences, ag-tech industry, financial sector, and policy and government. The analysis explores the manner in which interviewees discussed the impact of digital technologies on society and rural environments, specifically focusing on their attitudes towards and suggestions for anticipating and responding to identified issues. Participants held different views on the processes and mechanisms required to anticipate socioeconomic impacts, to include multiple actors in decision-making, and to embed responsiveness into the research and innovation process. Positive views were evident, but not universal, in the sample with respect to ensuring reflexivity in research and innovation processes. Drawing on the findings from this study, consideration is given to the likely barriers and facilitators which may be presented when preparing to embed RRI principles within research and innovation for digital agriculture.

### Unpacking a Responsible Innovation pathway to progress our "digital agricultural dreams": the case of virtual herding technology in Australia

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Keywords: responsible innovation, virtual herding technology, environmental goods, ethical goods

Virtual herding technology (VHT) is an emerging digital agricultural system that has been designed to automate fencing, grazing regimes and animal monitoring on beef, dairy and sheep farms. In line with a general trend to frame digital agricultural innovations as materially and morally progressive, VHT is commercially promoted and anticipated by VHT stakeholders to be a way to shift livestock farming towards a more efficient,

informed, environmentally responsible and ethical agricultural industry. However, what tends to be sidelined or unexplored are the strategies and practices that might need to be developed to achieve such a progressive agenda and what form and scale of responsibilities people and organisations may need to adopt. In 2017-2019, our publicly funded project conducted a series of engagement workshops with VHT stakeholders including Australian livestock producers, agricultural advisors, natural resource management organisations and state-based public sectors (n=64) and research project members (n=11). The data generated from these workshops indicated that environmental and ethical goods generated through the application of VHT could be contingent on livestock farmers consistently applying a set of best practices in virtual herding (industry scale), formalising intentional use of VHT in natural resource management landholder agreements (organisational scale), negotiating third party access to the VHT user interface for compliance monitoring (organisational scale), linking VHT to food traceability programs in the retail sector (supply chain scale) and integrating VHT with placed-based food policies (regional scale). The Responsible Innovation 'work' that is involved with creating these contingencies to achieve our progressive 'digital agriculture dreams' suggest that there are additional responsibilities to identify (who is responsible for the ethical work in the VHT application space?) and new actor agency to be deliberated (should natural resource management organisations have the power to control the use of VHT on farms?). This paper will scope how these empirical findings could build on the concept and application of Responsible Innovation in the commercial application context.

#### The milking robot as driver for dairy farming system restructuration?

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Innovation and new technology in agriculture have for decades transformed farming and changed farmer practices. The milking robot, or automatic milking system (AMS), is an important example within family farming in Norway, as in other countries. Dairy farming is part of the foundation of Norwegian agriculture, and now more than 50 per cent of the milk is produced with AMS. At the same time, dairy farming is in a state of major change, where the expansion of AMS and associated volume expansion on the farms is a key factor. This affects, for example, the farm structure, land use, geographical distribution and work/life balance for farmers and households. In this paper, we investigate the research question: How can Norwegian dairy farming develop in the medium terms as an aggregated result of the increased use of AMS? To gain insight into how this system will

develop in the medium term, we developed a system dynamics model that simulates changes in system behaviour over time given changes in the dairy farming structure through an increasing use of AMS. The model focuses on the behavioural effects to farm concentration, farm centralisation and fodder importation. We used data from workshops with stakeholders in AMS in dairy farming, statistical data and literature review to both develop the model and initialize the simulation. The results of the simulation are presented in several scenarios.

#### Digital fences for goats in Norwegian agriculture

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Keywords: digital fences, goats, digital agriculture, Norway, Nofence

This paper explores a new technology for digital fences for goats called Nofence, where digital technology mixed with mechanical goat-collars create novel ways of goat farming in Norway. Digital agriculture poses challenges and opportunities both for animals, society and the natural landscape. The Nofence technology allow the farmer to define a digital fence on a map. When the goats approach this fence they first receive a sound signal; if they continue to the fence they receive a small electric shock. The technology allows the farmer to utilise grassland without physical fences.

Employing a sociological approach, we investigate both human and non-human actors and their relationships in developing and implementing this technology, as well as its impact on rural governance. How do innovation in digitization technologies give new meanings to human and non-human relations and assemblages? Does digitalization of agriculture make it more sustainable? How can Norwegian mountain goats point towards wider implications for rural social relations and environments?

ICT has the potential for improving productivity and efficiency in agricultural production. For goats, however, this technology may lead to surprising outcomes. Our case study shows that goats can become digitally skilled and that goats who possess these skills,may bee more valuable alive then dead, as they can be trained to "EAT GRASS" in very precise areas. As the rural governing standards concerning animal welfare have been slowing down the implementation of this technology, we will also investigate how the implementation and innovation practises have been progressing.

### Changing Relations between Humans, Animals and the Environment in New Zealand Dairy: The Role of Digital Technologies

#### Merisa S. Thompson, University of Sheffield

The increasing intensification of production and consumption of dairy across the world has been linked to climate change, forest destruction, excessive land and water use, water pollution, animal welfare and rising non-communicable diseases. Precision farming – deploying 'big data' technologies to achieve efficiency gains – is increasingly advocated by governments and a global dairy sector under pressure from consumers, environmentalists and animal activists alike. However, the consequences of this are poorly understood: inserting 'big data', smart and robotic technologies into relations between humans, animals and the environment irrevocably changes how they relate to each other, and to labour and capital, with varying cultural and economic effects.

Drawing on data from 25 interviews with farmers and dairy sector representatives, this paper explores how processes of technological change are reshaping human-animal-environmental relations in the New Zealand dairy sector. As one of the largest milk producing countries in the world, that is often positioned as a dairy innovator, digital technologies are increasingly playing a role across multiple aspects of farm systems management: the environment, animal welfare, health and safety and human resources. This paper explores the processes by which technology has been adopted and the ways in which it intersects with concerns about sustainability. It finds that whilst there is a strong focus on profit and environmental efficiencies, new narratives around work-life balance, industry fragmentation and regimes of regulation, compliance and accountability are also evolving.

#### Digital agriculture infrastructure: Prospects for adoption, innovation, and disruption

Steven Wolf, Cornell University

New digital tools for farming will require development of new off-farm services and infrastructure. Infrastructure refers to material, organizational, institutional and human capital resources that support a set of functions for a given territory or community. Analysis of off-farm services and infrastructure complements empirical research directed toward farms and farmers/workers, as the cost, scale, and complexity of new digital tools suggest that the vast majority of farmers will not apply these tools independently (Wolf and Nowak, 1995). In this sense, the quality of available services and infrastructure will mediate farm-level adoption of specific technologies. Further, these off-farm elements of

production systems – and the relationship with farmers - will mediate the development and socioecological implications of digital agriculture technology and practice.

There are indications that traditional agricultural service providers — e.g., cooperatives, local consultants, and retailers of genetics, chemicals and machinery - are developing new digital agriculture competencies in order to support farmers and add-value to existing relationships. There are also indications that multinational input manufacturing firms and technology start-ups new to agriculture are entering into these markets (Wolfert et al., 2017). Potential shifts in industrial organization linked to digital agriculture could have far reaching consequences for rural communities, the structure of agriculture, and perhaps policy networks.

The paper motivates and frames analysis of off-farm service provision and infrastructure as part of an institutional analysis of digital agriculture. This specific research thrust is envisioned as one part of a broader, critical program of Responsible Research and Innovation.

# Working Group 2: Smart Rural Futures: new technologies and digitisation in rural regions

Rural recreation: digital technologies and our (dis)connection with the outdoors

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Keywords: technology, social media, recreation, outdoor identity, social practices

Digital (smart) technologies are becoming an important part of outdoor recreation, with apps and social media offering new ways to plan, navigate and share experiences. This not only influences people's individual adventures - with literature debating whether technologies enhance or diminish experiences - but also has potential wider implications for recreation practices and the rural landscape.

Debates on the impact of technology on outdoor experiences have mostly been based on theoretical and philosophical considerations, while we lack empirical understanding about how digital technologies are used in natural environments. Our study explores the changes new digital technologies bring to outdoor practices by drawing on observational and interview data gathered in The Cairngorms National Park and wider

areas of Scotland. In walk-along and semi-structured interviews, hikers, mountain bikers and nature photographers where asked about their experiences with apps and social media.

We found that social media worked to organise where people went and how they interacted with rural areas. While nature organisations and tourist agencies make good use of this engagement potential of social media, there are unforeseen impacts to consider. Where the rural landscape for example sparked a longing for remoteness and wilderness – a motivation for outdoor recreation -, social media increasingly seemed to stage experiences in a planned and narrow way. We use these findings to discuss the impact of digital technologies, with their potential for data recording and online communication, on notions of authenticity, unpredictability and identity in outdoor areas.

### Using participation and imagination to foresee opportunities and challenges for the bioeconomy society - Four scenarios and how we got there

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The Bioeconomy is presented as one possible solution to replace the fossil economy, where renewable biological resources are turned into energy, food, health- fibre- and industrial products. Research however criticise these bioeconomy agendas to be too technocratic, and not be wary of environmental sustainability. The "renewableness" of biological resources being taken for granted. To tackle and mitigate these critiques and challenges, at the same time as showing the vast visionary space of how the bioeconomy society can look in the future, the research team (WP2) in Biosmart initiated an extensive Foresight analysis with a sustainability transition perspective. We asked: How can foresight analysis help us describe the necessary change we can do today, for the bioeconomy to become a sustainable solution to the societal challenges of the future? Using survey methods, internal exploratory workshops, and stakeholder workshops, we applied an iterative stepwise scenario process starting with 1) vision building and testing, 2) future images, to match the sector survey outcome, and 3) roadmapping. The results gave a bold vision for the bioeconomy as the starting point, where the extraction of fossil resources has ended, stating the overall principles of a zero-emission society with high quality of life, sustainable (economically, environmentally and socially) and circular value creation based on biological, renewable resources.

Four future images emerged out of the workshops, differing on two given dimensions: High/low accept of new technologies and high/low public regulation. These led to the different scenarios for the future bioeconomy society: 1) The environmentally conscious eco-society, 2) The technologically innovative knowledge-society, 3) The globally oriented biotech-society and 4) The politically driven bio-society.

Despite basic political and technological differences defining these bioeconomy societies, there were similarities regarding expected challenges and solutions. Common challenges represent resource utilisation and environmental externalities, but also how to keep the general population motivated when major societal changes are required. Similarities in solutions we can deal with now, were need for goal oriented knowledge development, through creating accept and adjustments for changes to come, and securing of institutions for development of knowledge-based information on what resources are available or scarce. Moreover, to create both digitized and face-to-face meeting places for increasing cooperation, participation, integration and coping strategies for navigating the information abundance. As such, this work represents answers to not only pillar three of the WG, but also the objective of knowledge production, policymaking and research agendas, though creating a window of opportunity for decision makers, strengthening of action legitimacy and the possibility of change, not only for the bioeconomy-actors, but also the individual.

#### Understanding and addressing policy barriers for a bioeconomic transition in Norway

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Keywords: bioeconomy, transition, policy studies, cross sectoral

The development of the bioeconomy calls for a shift in our approach towards policy studies. A bioeconomic transition is a comprehensive endeavour calling for coherent parallel activities from societal actors and institutions and vertical and horizontal policy integration. The development of a bioeconomy in Norway will place different needs on the bioproduction sectors and the people that work the land and the oceans. As there are several pathways towards a bioeconomic shift, and a wide range of bio-sectors is involved, managing the transition process and working together across different sectors to produce relevant policies is critical. The analysis of the barriers for a bioeconomic transition summarised in this paper is based on the results of work undertaken in the Biosmart project (financed by the Norwegian Research Council), including a literature

review and consultations with a diverse set of public and private sector stakeholders in Norway. In the process, (policy) barriers for a bioeconomic transition were identified and possible solutions explored through co-learning among researchers, policy-makers, and practitioners. The paper presents results of the mapping of the institutional context involved in implementing and supporting policies and identifies policy and institutional barriers for bioeconomic transitions. Findings of literature studies, stakeholder consultations and survey analysis indicate that access to private investment capital and fossil energy scarcity are minor drivers of bioeconomic transitions. Instead, state initiatives and governmental policies emerge as key drivers with the highest priority across different stakeholder types. While policy measures are seen as key drivers, dominating governing principles enhance siloing effects - although often unintended. Separate bioeconomy strategies emerge from sectoral siloes reflecting different interests and objectives and hindering coherent activities and balanced policy development. Ambitions of more cross-sectoral solutions need to be followed-up, both in public policies as well as investment opportunities. However, the evidence from the survey and stakeholder consultations, as well as the analysis of the national strategies, highlights the importance of maintaining both a cross-sectoral and non-cross-sectoral focus side by side. Not all bioeconomic achievements require a cross-sectoral focus and sectoral bioeconomic initiatives currently happening, for example, in forestry, should not be ignored when seeking cross-sectoral solutions. Building local discussion forums and regional platforms will facilitate systematic communication across sectors. The paper recommends developing a roadmap which translates the National Bioeconomy Strategy and the seven key principles of the Green Growth Strategy into concrete measures.

### What now glass cow? Biosynthetic protein and the impact of the post-animal bioeconomy on European agriculture

Rob J.F. Burton, Ruralis – Centre for Rural and Regional Research, Norway

Keywords: Synthetic protein, lab-meat, agriculture

In 1987 David Goodman and colleagues published the book "From farming to biotechnology" which asserted that substitution of GM based biotech within the food chain would create entirely new platforms for agricultural production and, in the process, threaten whole sectors of agricultural production. Shortly after, Frederick Buttel (1989) criticised this conclusion, suggesting that biotech was not revolutionary, or "epoch making" but simply an evolutionary part of agricultural development. The subsequent failure of GMOs to revolutionise agriculture seemed to indicate Buttel's conclusion was correct. However, 21st century developments such as CRSPR and optical gene sequencing technology have revolutionised the position of biotech in society by

making it available for a far wider range of applications and at a heavily reduced cost. The 2013 demonstration of a lab produced hamburger by Mark Post inspired numerous scientists employed in the medical and pharmaceutical sectors to begin work on the production of synthetic animal products to address many of the major concerns about contemporary industrial agriculture, for example, greenhouse gas emissions, water consumption, land use, animal welfare, antibiotics, food security, and shorter and safer value chains for meat. On the other hand, the establishment of a synthetic meat and milk industry could devastate conventional agriculture and thereby rural communities across Europe. Currently over 20 start-up companies are focused on producing synthetic protein products ranging from milk to leather to cat food produced from mouse cells. But will this technology lead to a true revolution in agriculture or simply be part of the evolution of agriculture as Buttel asserted? This paper explores the potential of biosynthesis technologies to revolutionise agriculture and discusses the impact they may subsequently have on rural regions in Europe.

### How many "likes" did you get? Participation motives and quality of knowledge shared in conventional and digital farmers' networks

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Keywords: farmers' networks, digital networks, conventional networks, knowledge exchange, motivation

Farmers' networks are considered as spaces for the promotion of sustainable agriculture, the co-evolution of innovations, and the facilitation of knowledge creation. In this work, drawing on data from semi-structured interviews and focus groups with 95 farmers from 16 distinct geographical regions of Northern and Central Greece we pursue two research questions. First, what propels farmers to participate in conventional and digital networks? Second, how digital networking affects the quality and the quantity of knowledge production and exchange? Our thematic analysis revealed that most of the farmers participate in both conventional and digital networks; however their participation decision is driven by different motives. Conventional networks can be divided into formal (agricultural cooperatives and unions, farmers' organizations) and informal schemes. Although economic incentives and individuals' desire to access new knowledge are crucial for the development of formal networks, the construction of informal networks is mainly driven by farmers' willingness to create collaborative environments in order to reduce feelings of market uncertainty and risk, as well as by their need to belong to a group

consisting of people who share the same values, beliefs and ethics. In this vein, informal networks bring together different understandings of farming, facilitating the building of a collective culture as well as the development of common norms, visions, and identifications. On the contrary, the nested structure of formal networks and the dominant power structures, reduce their ability to produce knowledge. Moreover, our results showed that participation in digital networks (which are by default informal) is guided by a particular knowledge sharing behavior, and by farmers' sociality. Nevertheless, lacking a centralized control, and permitting multiple-role behaviors, digital networks offer farmers authentic spaces for expression, dialogue, and connective action. In parallel, they serve as a basis for social comparison, thus allowing not only the exchange of information, and expertise, but also providing their members with opportunities to question and reconstruct their farm identities. However, the quality of knowledge produced through digital interactions is questionable, since a "popularity law" seems to govern the knowledge co-creation process. In sum, these results indicate that digital networks represent platforms where farmers virtually meet, interact with each other, and develop social ties, not ensuring, however, the reliability of knowledge shared. The present work provides an appropriate venue for discussing the pros and cons of digital farmers' networks and for analyzing their networking behavior in both the physical and digital world.

#### Smart Rural Futures: Will rural areas be left behind in the 4th Industrial Revolution

Paul Cowie, Centre for Rural Economy

Keywords: 4th Industrial Revolution, Smart Rural, Rural Development Theory

The 4th Industrial revolution is the term given to encompass a range of technological developments that many commentators argue will fundamentally change society in the same was as electricity and digital technology did previously. The paper argues the current debates around the 4th Industrial Revolution are centred on the urban core with rural areas once again being relegated to the peripherality and the remainder. The paper therefore examines these technologies from a rural perspective and considers what impact they could have in rural areas, both positive and negative. The analysis shows in many cases the technology will have just as big, in some cases a bigger, an impact in rural areas as in urban. To ensure rural areas are not forgotten the paper then examines some of the barriers facing rural areas when attempting to engage with the 4th Industrial Revolution. These are both physical and cultural barriers and draw on many of the extant theories of rural development. These rural theories also need to engage in smart urban theoretical debates and therefore the paper ends with a proposal to develop a research

framework that place rural areas at the centre of a research program that looks at both the technological aspects pf the 4th industrial revolution and the socio-cultural aspects.

#### Digital policies and emerging forms of inclusion and exclusion – the Swedish case

Patrik Cras, Swedish University of Agricultural Sciences

Keywords: Broad band, digitalization, policy, exclusion, inclusion

This paper addresses the emerging rural-rural divide in broad band infrastructure and its effects on processes of rural digitalization and perceptions of social inclusion and exclusion. As the urban-rural digital divide being addressed politically the frontiers of high speed broad band moves and the digital divide is being reshaped, a rural-rural divide emerge.

This paper addresses the case of Sweden. Swedish governments on both the left and the right side of the political spectrum has since 2010 presented high speed broad band delivery as a key priority of Swedish rural policy. The national government has set ambitious goals regarding next generation high speed broad band coverage and allocated a significant share of available EU funds for regional development and rural development as well as national resources to support broad band delivery in rural areas. This paper builds on the national evaluation of rural high speed broad band expansion jointly commissioned by the two state agencies responsible for financial support for broad band delivery in sparsely populated areas. In this project, started in 2017 and being finalized this year, we have conduced around 100 semi-structured interviews during research visits in four Swedish regions complemented with a telephone survey and econometric analysis based on available statistics. Our material covers a range of possible effects of the new infrastructure such as business opportunities, welfare service delivery, effects on employment, as well as changing work practices and emerging forms of spatial integration mediated through digitalization.

The present national government strategies are being translated differently into practice in different parts of the country and drawing on this we discuss the effects of establishing inclusive broad band networks in some rural regions in comparison with patchy and discriminatory broad band networks in other parts of the country. At the same time as the urban-rural divide are being addressed new forms of divides are emerging.

### Socio-cultural premises enabling social acceptance of a bioeconomic transition. Norway as case

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Keywords: bioeconomy, social acceptance, socio-cultural premises

Complex challenges such as climate change, environmental problems and resource scarcity call for a new approach to reduce fossil fuels and move to the use of more sustainable, biological and renewable resources for future consumption. The bioeconomy presents one vision to overcome these important challenges, and Norway aspires to be a pioneer in the bioeconomic turn, reflected in its national strategy for the bioeconomy.

However, there is no baselined understanding of the bioeconomy, which makes it a very difficult concept to relate to for the general public. In addition, previous research has mainly focused on the technological capabilities for realizing the shift to the bioeconomy, hereby more or less neglecting the social-cultural context. The transition to the bioeconomy is expected to have considerable consequences for society — and for rural areas in particular, given the natural location of most bioresources — addressing risk aspects, utility assessments and ethical considerations. Thus, public perceptions will play a crucial role since bioeconomic development ultimately depend on consumers and citizens' interests and acceptance. This paper contributes to this research gap by assessing socio-cultural premises enabling social acceptance of a transition to the bioeconomy.

We apply a qualitative, explorative approach in order to capture people's perceptions, understandings, preferences and concerns regarding the bioeconomic transition. The analysis is based on eight focus group interviews with a total of 53 participants representing members of the general Norwegian public.

Our findings indicate that generally high trust in public authorities and their assumed ability to ensure the safety and soberness of new products and processes is a central premise for bioeconomic acceptance in Norway. In addition, a sense of resignation from steadily uncontrollable external impact on one's own body and environments, both at home and when abroad, appears to make people more intrepid in the meeting with various new developments. As these premises are fear-repressive, they also seem to allow for willingness for future cultural adaptation.

#### Digital maps in social processes to address land fragmentation in agriculture

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Keywords: Farmland, fragmentation, farmers, owners, social processes, digital maps

Developments in machinery, market and policy has led farmers to pursue expansion of farmland. This has resulted in a situation with fewer farmers operating plots on many different places. Since options for extra plots through renting or purchase often emerge unexpectedly, the resulting land use pattern in an area becomes fragmented over time. Negative impacts of such fragmentation are increased costs, GHG emissions and traffic on roads. Even though there may be benefits of operating fields in different zones (e.g. extension of harvesting season), the overall effect is disadvantages. In the project Landfrag we address land fragmentation through a transdisciplinary approach involving different research disciplines (map expertise, agricultural economics, social scientists) and local actors (authorities, advisors, farmers' organizations). The aim is to obtain clearer knowledge about to what extent farmers experience problems and their view on eventual local interventions. Moreover, in cooperation with local actors we test concepts for local meetings for farmers and owners. In such local meetings, we have used digital maps as a facilitating tool. Based on combining two 'big' data sources, the land resource map (AR5) and the farmer record ('produsentregisteret'), it is possible to produce digital maps showing which fields are used by which farmers, actual roads and distances in a local area, for example parts of a municipality. In the project we have observed that such tailored maps raise interest and develop knowledge among local actors about the problem and possible actions. Such maps can also be used to simulate redistribution of land and potential advantages. However, it is crucial to realize that application of digital technology is socially situated, and that attempts at altering the distribution of land among farmers and owners is a sensitive, social issue as much as a technical topic. The social aspect includes issues such as who the farmers and owners have relations to (relatives, friends, neighbours) and the social structure in the local communities (the composition of small and big farms for example). Nevertheless, we observe that farmers expect initiatives to be taken to reduce problems stemming from land fragmentation. Hence, an aim of the project is to develop recommendations as to how local actors can approach farmers and owners, arrange meeting arenas and follow up. Such work is ultimately sociotechnical in that social competence and technical aids, such as digital maps, must work hand in hand.

### The need for interdisciplinary research approaches in assessing and designing digitisation policy for European rural areas

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Keywords: Rural digitisation, research agenda, interdisciplinarity

Digitisation presents a range of complex opportunities and challenges for European rural communities encompassing effects on social, environmental and economic outcomes. A thoroughly informed assessment and design of rural digitisation policy is crucial in order to enable rural areas to realize the benefits as well as to avert potential negative consequences of digitisation with regard to the resilience of rural areas. An interdisciplinary research agenda can contribute to such policy development as it facilitates the understanding of a complex and - *de facto* interdisciplinary - policy issue; however, it is also challenging as it requires solid expertise and a clear research framework that allows for a fruitful interaction between disciplines.

We propose to consider a well-informed, interdisciplinary research agenda integrating a diverse and complementary set of qualitative and quantitative research approaches: (1) a Pan-European econometric analysis of the socio economic effects of digitisation on European rural areas resulting in a bigger picture based on universal and measurable effects. However, in order to deal with the limitations of such econometric analysis, (2) community-based, place-specific approaches are a vital addition to the assessment of universal and measurable effects of rural digitisation policy on local communities. Finally, (3) a discourse analysis will explore potential biases in rural digitisation policy and further inform the understanding of the policy responsiveness to different stakeholder groups, e.g. local and non-local businesses, local and non-local policy makers, members of the rural community with different socioeconomic backgrounds etc. in the context of rural digitisation policy. What are the consequences of the current rural digitisation discourse on policy measures such as the accessibility of funding sources for different stakeholders with different socioeconomic background or the design of success measures in evaluation efforts?

This paper presents a timely research framework to deal with the impacts of digitisation in shaping the future development of rural regions, integrating a focus on quantitative and qualitative assessment as well as sociopolitical relations.

#### Active ageing in smart villages? Notes of caution from the field

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Keywords: Smart villages, Active ageing, Remote rural

Smart villages have considerable potential to promote active ageing and sustain independent living in later life. In demographically ageing communities, which includes many remote rural areas across Europe, eHealth technologies, smart homes and digital applications to facilitate social interaction, have much scope to support individual and community wellbeing. Successful development of smart, 21st century remote rural villages relies upon, and sometimes assumes, an appropriate interplay of sociotechnological factors including digital infrastructure, ICT literacy and the ownership and appropriate use of digital devices. Whilst in principle, the development of digitally assisted wellbeing in the context of the smart village might appear a relatively straightforward endeavour, in operational terms there are numerous and tangled issues to address. This paper offers some cautionary observations from the field, that acknowledge the challenges faced by remote rural places in their journey to become 'smart places' and identifies formal and informal interventions that could better position communities to become part of a wider, smart society.

#### Growing health: stakeholder attitudes towards molecular farming with tobacco

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Keywords: molecular farming, new plant breeding techniques, tobacco, qualitative research

#### Rationale

Plants offer a convenient system for the production of the high-value recombinant proteins used in vaccines and other pharmaceutical products. Recent advances in biotechnology have paved the way for new plant breeding techniques (NPBTs), which offer a relatively quick means of improving plant molecular farming (MF) systems. Scaling MF 'up' and 'out' from the laboratory to glasshouse and field will depend on the involvement of a diverse set of stakeholders, including: researchers, farmers,

agronomists, producer organisations and input suppliers. Understanding their attitudes towards the concepts of MF and NPBTs – as well as what barriers they perceive to the development of these technologies – will be paramount.

#### Methods

This study employs an applied qualitative approach, combining the agricultural innovation systems (AIS) conceptual framework with semi-structured interviews in four European countries with 20 key stakeholders. The interviews were transcribed and translated where necessary. An initial coding framework was developed in accordance with Framework Analysis and data were indexed by emergent themes. Further analysis of data is ongoing.

#### Results

Initial findings indicate a high level of support for MF using NPBTs. However, different groups expressed different concerns. Scientists and industry leaders see European Union regulation and the competitiveness of existing protein expression systems as the primary barriers to the development of MF. Scientists remain concerned over the biosafety of plant-derived molecules and the feasibility and applicability of open-field molecular farming. Farmers, agronomists and producer organisation representatives expressed concerns over the establishment of supply chains that can compete with existing tobacco contracts. However, farmers and agronomists were confident they could produce any tobacco crop provided it was approved and supported by the producer organisations to which they belong. These data suggest that producer organisations, acting as brokers between individual growers/cooperatives and large tobacco buyers, are likely to be important 'gatekeepers' for new MF technologies.

All stakeholder groups felt that the societal benefit of plant-derived medicine would act as a bridgehead for the social acceptability of gene editing and MF in general. Arguments made by scientists in favour of using NPBTs rest on their greater precision and equivalence with natural processes when compared to existing breeding techniques. Famers felt that producing medicines with tobacco has the potential to de-stigmatise tobacco producers and production.

This research is part of a project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 760331.

### Smart villages – smart solutions and social innovation in short food chains

Gusztáv Nemes, Hungarian Academy of Sciences

According to the now emerging 'Smart Villages' programme of the EU, "smart villages are communities in rural areas that develop smart solutions to deal with challenges in their local context". The working definition of the concept strongly refers to participation, empowerment, sustainability, co-operation and using existing resources for local development. Thus, it heavily builds on the best traditions of integrated (endogenous/sustainable/bottom up, etc.) rural development, embodied in the history of the LEADER Programme in Europe. The only real addition is the use of digital solutions in all this, made available by the rapid spreading of ubiquitous technology in every area of life. Nevertheless, technological changes can only bring cultural, economic, social changes through changing social practices. A good example for this is how ubiquities information (our smart phone and the Internet in our packet) has changed our customs and behaviour, how we travel, buy goods, arrange meetings, communicate, etc. Nevertheless, if we want to use such innovations for enhancing (rural) development, then social learning and finding innovative ways to use the available technology in reducing disadvantages is a crucial factor. In other words, technological and social innovation should be explored and understood in connection with each other.

In this paper we explore the smart village concept, what part of it is novel and how it connects to social innovation. We will focus on the actual processes of social innovation and new technologies in a few particular cases in rural Hungary, in the field of short food chains and rural tourism. We found that the application of new technologies (GPS, smart phone application, video) attracted much attention and greatly helped social processes and the reinforcement of social networks. At the same time, the social learning involved in the project was an essential part of enabling the local community and particular individuals to use new technology in their everyday work. The projects gave ample opportunities for rural development action, however, to make it a real development tool for sustainable tourism, benefiting local businesses, a better marketing and communication strategy should have been applied.

#### **Butterflies & Chameleons: Digital connectivity, Innovation and Rural Businesses**

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Keywords: Digitisation, location, innovation, rural businesses

The 4th Industrial Revolution offers both opportunity and challenges for rural communities and the businesses which function from them. Digitisation is changing the way rural communities and individuals interact with the wider world and shaping, voluntarily and involuntarily, how businesses function. Policy heralds the Broadband UK (BDUK) a success with headline figures claiming a 95% fibre broadband coverage. However, the universal optimum performance of the broadband network is at odds with this figure (Palmer-Abbs, 2018; Guardian, 2018).

This paper presents empirical evidence from a PhD that identifies the importance of business location and this relationship with a new five-fold digital typology (Palmer-Abbs, 2018) which depicts a very different digital tapestry as a consequence of the BDUK programme. This reveals a changing urban/rural and an evolving rural/rural digital divide. The typology offers a new way of looking at digital connectivity, business performance and the fine-line between rural business success or survival.

Rural micro-businesses are often a response to poor economic opportunities in peripheral areas where individuals use their enterprise and innovation assets to fill the 'work gap'. These businesses are often an accumulation of multiple income activities, based in the home or adjacent properties, with the ability to 'bend or brace' against economic impacts (seasonal and global). Digitisation and 'a fit for purpose' digital connection are considered a ubiquitous tool to modern business, and a means to access wider markets. The empirical evidence from this PhD research puts to rest the notion that rural businesses are the poor rural ICT relatives of the business world. It illustrates the multiplexity of rural businesses, their innovation behaviours, which often keep pace with, and outperform mainstream ICT exploitation. Critical to this innovation is super-fast digital connectivity (fixed or mobile).

The proposed paper, and session will offer empirical evidence which conveys:

- a comprehensive review of broadband infrastructure as an alternative transportation system
- the relevance and interplay between location and rural businesses
- the outcome of innovation as a tool to business survival or success

The narrative is pertinent to global digitisation in developed countries, related policy, and in furthering academic understanding of both broadband as a technology, societal need and current standing of the UK's digital infrastructure. It informs future research narrative, acting as a check to policy led dialogue, which is often over-positive about the progression of rural broadband (INCA, 2018).

#### Digital skills training by chance? The integration of ICT in schools

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There is a growing body of literature about the integration of ICTs in schools. This is also the case for Europe, where several studies focused on the barriers of ICT integration (see for example Skaftun, Igland, Husebø, et al., 2018). At the same time, digital divides are still an issue in European countries, and Germany is in this respect an interesting case. As mentioned by Schleife (2010), Germany still holds a rural digital divide (Schleife, 2010), and also schools often still have no NGA available (Beuth, 2018). Yet not only the connectivity is an issue at German schools, as a recent study has shown that there is also a lack of ICT integration at schools (Wübbenstiftung, 2018).

Western societies are moving ever more towards a digital knowledge society and there is a pivotal role for schools in facilitating this. We therefore want to answer the following question: How do headteachers experience the digital skills education at rural schools in Germany in the context of the rural digital divide and which digital skills are trained? This is done based on interviews conducted in primary and secondary schools in the states Lower Saxony and Baden-Wuerttemberg.

Preliminary insights show that it can not be guaranteed that all necessary digital skills are covered in all rural schools. Furthermore, each teacher might have a slightly different understanding of digital skills and which ones the students need. This suggests that closing the digital skills gap is partly dependent on the digital experiences and individual considerations of teachers.

#### **Developing Participatory Public e-services for Rural Peripheries**

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University of Helsinki

Keywords: Digitalisation, digital public services, e-services, participation, participatory development

Purpose of this abstract is to provide an overview on participatory digital technologies used in the public sector. Academic research on information systems increased substantially in the 1990s. The 2000s witnessed the similar surge of studies covering the

issues of eGovernment. Recently, researchers have been addressing participatory public e-services by analysing concrete development cases.

There are unique challenges for citizens' participation in developing remote locations. The key question for rural areas is how to provide high-quality and sustainable public services, and to support the adoption of novel technological innovations given that these areas are often characterised by long distances, expensive service production per capita, scarce material and human resources and lack of access to the latest innovations. Technology developers introduce novel solutions, but the public sector actors tend to realise only short experiments, which seldom results in viable services or products. In addition, the public sector scarcely collects or evaluates the experiences afterwards, and therefore, the best practices are only randomly identified.

We identified participatory technologies and methods already utilised in the public sector and those that could have promising prospects in the near future. Literature review, web searches and case analyses based on convenient sampling resulted in 15 technologies. We divided them further into three groups, based on their current or hypothetical future usage and popularity. These are The Cold Techs (e.g. E-forms and feedback forms, online questionnaires), which are very basic online technologies and commonly used. The Hot Techs (e.g map and GIS-based technologies, mobile apps and platforms, hybrid digital platforms, chatbots and digital recommendation systems, social media, participatory design/living labs, and crowdsourcing platforms) are technologies that are used, tested or developed actively at the moment. The Warm Techs (e.g. virtual reality and augmented reality, virtual assistants, games and 3D applications, real time participation technologies, and blockchain technologies) could make a breakthrough in the future, but are currently still not in widespread use.

The identified technologies are analysed in the participatory framework and contrasted against the rural context. The user perspective should be one of the central considerations when utilising participatory technologies. Participation should be made low-threshold and the technology used should feel rewarding or motivating in itself. Whereas older technologies are exploiting citizen participation for identifying possible problems, the future of citizen participation may increasingly rely on technologies that enable users to participate in problem-solving and other co-creative practises.

The abstract is based on the first stage of "Emergreen – Emerging Technologies for Greener Communities" research project funded by EU's Northern Periphery and Arctic programme (2018-2021).

## Scenario development as a method for understanding outcomes of rural digitisation: the case of the Scottish Crofters

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Digitisation offers development opportunities for rural communities facing social and economic challenges. In Scotland, small-scale sheep 'crofts' are important for the development and resilience of remote rural areas, including maintaining populations and providing a secure base for the development of small businesses. Yet crofts face numerous challenges – they lack economies of scale and are more likely to be occupied by older, less commercially-oriented farmers. Crofting regions are marked by an ageing population and are remote, making it difficult to access inputs and market products. Digitisation offers opportunities to change the way crofts are cultivated, how crofters access inputs and how they market their products.

Whether digitisation delivers on these kinds of promises, however, will depend on the capacity of land managers, local government, researchers and innovators to anticipate its impacts (whether negative or positive), as well as to identify appropriate pathways for development. Digitsation is a game changer — it reconfigures social practices and has complex repercussions, creating winners as well as losers. Those most likely to benefit are those already equipped to do so, including younger generations and those with more exposure and access to new technologies (particularly in urban areas). Conversely, those likely to be digitally marginalised include older generations, and those living in remote regions with poor access to technologies. Given that crofting communities are remote and increasingly ageing, they are potentially more at risk of being digitally excluded and becoming "losers"— for example by becoming more distanced from (rather than getting closer to) business inputs and new markets.

Horizon 2020 project DESIRA is a multi-actor project bringing together 25 partners, 16 European countries and a wide range of relevant stakeholders. The DESIRA network will co-produce knowledge pathways to mitigate digitisation risks and promote desirable technological futures for rural regions and sectors across Europe. Scenario development workshops will explore future implications of technologies in given rural contexts. For example, in Scotland we will work with crofting communities to develop "what if" scenario narratives. We will explore the external drivers (outside of scenario actors' control) and internal drivers (within scenario actors' control), and consider the winners and losers in different scenarios. Focusing on the case of the Scottish Crofters, we present the scenario development method adopted in DESIRA as an innovative approach to a) understanding digitisation outcomes and b) co-producing knowledge pathways to

desirable digitisation outcomes in different rural scenarios, which can inform policy recommendations for rural digitisation.

### The good digital farmer? The potential and pitfalls of information technology

#### - a perspective from the hills

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Keywords: Good farmer, Digital farmer, ICT, Hill farming

In recent years, the role of digital technology in farm business practice has received considerable attention, particularly through a precision farming discourse underpinned by the principles of productivist agriculture and exemplified in corresponding intensive farming systems. Such developments have tended to overlook more extensive farming systems, widely associated with less productive upland areas often portrayed as communities at risk, both economically and socially. Yet digital connectivity steadily permeates the everyday of the farming world in upland areas as it does elsewhere through the use of digital applications such as social media, news feeds and weather apps. Drawing on the notion of the 'good farmer' and foregrounding hill farming and sheep farmer practices in particular, this paper discusses the uptake, application and role of digital connectivity in two ways. Firstly, the paper draws upon findings from an ethnographic study that followed the Internet experiences and behaviour of hill farmers over the course of a 12-18 month period subsequent to the provision of broadband to the household. Secondly, the paper analyses the related social media activity of those farmers engaged in pedigree sheep breeding. The paper 'unpicks' the relationship between the hill farmer and information technology and in turn, the role of the Internet in the promotion and sale of livestock. Requirements to use an online platform to report the registration, movement and sale of livestock is a driving force for connectivity yet for some the personal benefits to be gained from the use of professional websites and social media in livestock marketing and promotion remain questionable. Perceptions of the role, access to and utility of the Internet appears to be bound-up in the nuances of intergenerational and personal and business relationships. Notions of the 'good farmer,' transferable to the digital world, both help and hinder on-line engagement. Better understanding of such nuances can inform efforts to promote Internet use, knowledge transfer and digital innovation amongst the hill farming community.

# Working Group 3: Animalia: Partnerships, policies and understandings for more than human rural futures

## Care as a driver of controversy: researching and contesting badgers and bovine TB in the UK

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Keywords: animal health, care, policy, polarization, conservation

The controversy over whether to cull wild badgers to help control the spread of bovine tuberculosis (bTB) in British cattle herds has been ongoing for nearly fifty years. This question has plagued several generations of politicians, policymakers, scientists, veterinarians, conservationists and animal advocates since they learned that badgers can carry bTB in the early 1970s. Questions of what is known, who knows, who cares, who to trust and what should be done about the complex connections between cows, badgers and the microbe *M.bovis* have been the source of scientific, veterinary, policy, and public debates ever since. While these debates have overtly focused on questions of evidence and expertise, questions of care have remained implicit, despite their repeated centrality in shaping policy decisions over the past forty years. This is curious given the increasingly heated and polarised nature of the public controversy, particularly since the Coalition government's decision to return to badger culling in 2010.

In this paper I will argue that changing intersections, alliances and divergences between the multiple cultures of care have shaped policy at crucial points over the history of the badger/bTB controversy. These involve the caring practices of three intersecting epistemic communities who have been involved with policy and public debates over badger/bTB since the 1970s: animal health, disease ecology and badger protection. Even within these three groupings shifting intersections between cultures of care are discernable, aligning with critical shifts over the history of the controversy. While most scholarship on care in science, medicine, conservation and agriculture focuses on its importance for building positive practices and connections between humans, other animals and wider environments, some work has explored more violent and conflicted forms of care (van Dooren, Keck, Haraway, Eva). I draw upon this work to argue that in recent years care has been a significant driver of conflict and controversy over badgers and bTB as its cultures of care have diverged over the years. Those involved care deeply, but who or what they care about and indeed what practices constitute care in the first place are very different. A sense of shared care within these epistemic communities may be co-constituted with beliefs in an absence of care between these groups, fostering mutual hostility. I argue that these caring drivers of conflict have further enabled the

entanglement of badger/bTB with adjacent environmental and agricultural controversies and wider processes of political polarisation over the past decade.

#### Animal Landscapes: new old risks on the small farm

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Two global challenges for the 21<sup>st</sup> Century produce sites of tension in rural spaces particularly small farms. The first, addressing the natural environment and anthropocentric climate change, has stimulated considerable theorizing around rewilding as a component of climate change mitigation and as a guarantor of biodiversity. Supporters promote a radical approach to traditional agricultural practices recommending the rebalancing of land use in favour of wild species including predator reintroductions and widespread restoration of wilderness areas. The second challenge concerns feeding the world's burgeoning population and is typically met with calls for significant increases in food production. The traditional response to increasing agricultural production has been to extend agriculture at the expense of wilderness and includes the suppression of wild animals alongside an engineered reduction in biodiversity typified by mono-cropping.

Small farmers throughout Europe and Africa, (interviewed for the SALSA¹ project), when questioned about constraints to the productivity of their land, focused on predatory and destructive wild animals. They could produce more food, many contended, through dewilding rather than re-wilding particularly in relation to predator control. Farmers were typically suspicious of or opposed to rewilding including species reintroductions and although diverse viewpoints were captured, most considered rewilding to be a production constraint. Production and rewilding appear locked in a series of problematic trade-offs at the level of farmer perception. Small farms are incentivised to participate in agroecological schemes and are penalized over traditional control practices whilst food and nutrition security agendas appear to depend on their ability to contribute to increasing global production by 50-100% by 2050.

Colonising influences are both urban and international with citizens in far off countries petitioning governments to both protect iconic species or otherwise produce newly

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<sup>1</sup> SALSA is a Horizon2020 project conducting research into small farms, small food businesses and sustainable food and nutrition security http://www.salsa.uevora.pt/en/

hybridized landscapes whilst concurrently tackling food insecurity. Through Beck's 'Risk Society' lens the paper examines the lived experience of small farmers in animal landscapes across Europe and Africa and the rapidly evolving governance environment reshaping the farming world.

# The sheep who shape 'something more than a human estate': presenting a neglected rural geography

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Keywords: rural space, production of space, more-than-human, sheep, UK uplands

This paper makes a further case for the increasingly-noted – at least within academia need to appreciate the diversity of past and ongoing forces that shape rural space, making it in poet Edward Thomas's words - 'something more than a human estate'. Whilst humans may overwhelmingly be prime movers in the 'production of (rural) space', we are not as absolutist in our control as is too easily assumed. Instead, there always remains an 'excess' in production that is exercised by animals, plants, other organic beings and by non-organic forces and entities. Humanity alone, in other words, does not ultimately control all (rural) production. This paper puts centre-stage the production of rural space by just one of these more-than-human entities: sheep. With a focus on the UK, it begins to map their substantial impact on the rural landscape, both physical and human. On the one hand, this is seen as being historically and in the present-day firmly directed through human agency, notably that of farmers and, more remotely, the scripters of agricultural and rural policy. On the other hand, the paper teases out more independent impacts from the sheep themselves, the excess to human intent that ranges from sheep's own agency to unintended consequences more-or-less largely beyond either human or sheep control. The conclusion argues that the diverse multiplicity recognisable within such an ovine-centric view of the production of space should be taken into account within debates on rural futures, such as those ongoing over the fate of the UK uplands.

# Gamecocks for 'County' Machos in a Western-Shaped Society: Perceiving Modern-day Masculinity through the Rural Tarlac Cockfghting Derbies

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Keywords: Gender relations, animal-human interactions, rural agency, cockfighting, game fowl

Cockfighting as an anthropogenic activity involving the combative matching of domesticated Gallus gallus has been regarded as a historically-old animal-centered recreational and money-generating (or gambling) sport. Historically, this industry has long been perceived as a masculine sport in various parts of the world, including Asia, Europe, and the Americas because of its physically dangerous nature. This blood sport which was originated in Southeast Asia; which was further institutionalized in the early Greek and Roman civilizations through France among other European countries. Philippines, as a former Spanish and American colony in Southeast Asia, is also regarded as one of the sport's most supportive societies, and up to present holds legal bounds for it to continue its operations. Anecdotes say that cockfighting is a "for-men" affair, and even in the age of boundlessness, there were instances by which people justify their masculine behavior using this form of agency.

This study sought to evaluate the extent by which rooster- or cock-raising and the practice of cockfighting is associated with masculinity of the modern rural Filipino males involved with such sport. Seasoned and amateur male game fowl owners, as well as cockfight derby goers in the municipalities of Sta. Ignacia, Paniqui, Moncada, and Camiling, Province of Tarlac were interviewed through One-on-one and participatory mechanisms. Results reveal experiences where rural male dwellers regard this sport as an affirmation of their hegemonic strength as heads of their households, community leaders, and producers of wealth. Male owners also have established high socio-cultural importance to their game fowls, by treating them as their own family members. There was also a reflection that the physical appearance of the game fowl is linked with the degree of sense of discipline and accountability (which is indicative of responsible manhood), specifically to cockfighting owners. In this modern era, involvement in cockfighting could be a relevant means for rural men to maintain their well-being.

# Cows eat grass, don't they? Contrasting sociotechnical imaginaries of the role of grazing in the UK and Irish dairy sectors

Orla Shortall, James Hutton Institute

Keywords: dairy, indoor farming, grazing, pasture, sociotechnical imaginary

The role of grazing in dairy farming has become increasingly contentious. Dairy farming is still widely identified with imagery of cows grazing on grass, but grazing is a declining practice in Europe. The UK and Ireland make for interesting case studies to explore the politics of dairy cows grazing as both countries are seen to have suitable conditions for supporting grazing dairy production but their dairy systems are structured very differently. This paper explores the sociotechnical imaginaries of a high welfare, environmentally sustainable dairy farming in the UK and Ireland.

Document analysis and interviews with key UK and Irish stakeholders revealed different sociotechnical imaginaries within and between countries. The paper identifies there sociotechnical imaginaries in each country. The dominant imaginary in Ireland was of a unified grass based production system that is seen as low cost and low risk for the farmer, high welfare because animals have access to pasture and inherently natural and environmentally sustainable because of the reliance on grass land. The dominant sociotechnical imaginary in the UK by contrast is that no system is better than another but the success of a system depends on quality management, stock keeping and decisions appropriate to the farmer's market and geographical conditions.

The paper explores the extent to which the sociotechnical imaginaries are comparable between countries by showing how they are co-created by policy, market conditions and commitments to particular conceptions of economic viability, high welfare and sustainability. There is a real sense in which the Irish and UK dairy sectors are not comparable, and produce milk to different specifications for different markets, from cows bred for different purposes. However, the different sociotechnical imaginaries can also be seen to pose a challenge to the other to the extent that science is held up as producing objective and a-contextual truths about best form of dairy production.

# Gentrification by horse: Assessing the embodiment of horses in rural gentrification processes

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Keywords: horsiculture, hobby farming, land use change, consumption countryside, photo elicitation

Small-scale 'horsiculture' properties are on the rise across northern Europe, reflecting the 'consumption countryside' and the growth of the experience economy. Recent analysis of census figures demonstrates a 56% increase in horse numbers in Scotland since 2001. New, often peri-urban, horse-based holdings are typically conversions of former agricultural small-holdings into lifestyle properties. As such, they represent a specific example of rural gentrification. In this paper, I consider the embodiment of horses within gentrification processes. Studies of gentrification typically focus on changes to housing and social standing of the locale. The added dimension of horse accommodation leads to specific patterns of social and landscape change. Qualitative interviews were conducted with the owners of agricultural holdings in Strathben Parish, Scotland. The paper focuses on the 7 households which spoke substantively about their horses, totalling 13 interviews, owing to the use of photo elicitation in second interviews across the group. Findings demonstrate that the materialities of horse bodies lead to specific landscape changes: qualities of pasture, styles of fencing and stables, and new sanded ménages. Maintenance of horses requires daily labour and physicality for their human owners, while also being predicated upon a degree of household wealth to make these resources available. The companion-nature of the human/horse relationships represents relational capital that is additional to the social capital produced through shared affordances of riding clubs, show jumping, eventing and dressage competitions. I argue that consideration of human/animal relations is an important component of gentrification studies.

### Game-Players, Commodities and Pests: The Changing Roles of Animals in Hunting

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Keywords: Hunting, Leisure, Recreation, Commodification, Labour

In historical times, the sport hunter was elevated in status above the utilitarian meat hunter. Today, there has been a reversal of this dialectic. Hunters everywhere increasingly justify their pastime no longer in terms of subsistence, but as constituting therapeutic wildlife management: culling for the ecosystem, to end suffering of animals, to protect human economic interests, and to prevent an excess of traffic-injured wildlife. In their rhetoric, hunting is a labor akin to a public service and hunters are stewards "without whom things will plum to hell" (Dizard 1999).

Elsewhere, hunting is valued as leisure precisely because it provides an escape from the stressors of everyday life, labor and duty. The leisure perspective is critical toward hunting

as labor, suggesting hunters become 'servants of the state', which takes the passion and freedom out of the sport, turning hunters into the garbage collectors of society, tending to e.g. cumbersome wild boar culling.

In this paper, we contend leisure and labor conflict in contemporary hunting in a way that impacts animal welfare. Leisure and labor are also intertwined in hunting, which challenges theoretical concepts of 'serious leisure'. Using hunters' reflections on social media, we illustrate hunters' concerns about where and when hunting tips the balance too far in either direction. We relate this to processes of commodification, the sportization of hunting and changing rural-urban dynamics in hunter demographics. Studying social media enables us to examine not only what it said, and in an uninhibited way using a forum as an enclave, but reveals an intertextual dimension of hunters' arguing with one another. Here we see that leisure vs. labor is a tension that is expressed within hunters, between hunting forms and different animals, and between hunting arrangements, in addition to hunters' meta-reflections on these tensions.

At the heart of hunting as leisure or labor sit animals as the materiality. Hunting for labor or hunting for leisure implies different ethical schemes for animal welfare. Whether animals are treated as commodities whose entertainment and chase can be bought, dispassionately as surplus units of production to be harvested, or as fellow game-players in a sport, compels different duties to game. Concretely, we see the labor vs leisure tension disrupt the moral economy of game (how hunters value and perceive wildlife), destabilizing traditional roles for animals. This study informs the core of our research project, namely changing human-wildlife relations in hunting.

#### **Sheep Diaries: Exploring Everyday Sheep Landscaping**

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Keywords: Sheep, landscaping agents, digital tracking, rural futures, uplands

Amid contemporary debates over the future of the UK's uplands, this paper seeks to acknowledge and illustrate something of the complexity of the processes that lie at the heart of these debates. We approach this task by directing attention to more-than human entanglements in landscape-shaping. Specifically, this paper foregrounds the everyday perspectives of sheep located within a sparse rural locality lauded for its natural landscape and heritage, as recognised in associated landscape designations. The paper introduces an interdisciplinary pilot study that spatially tracks the actions and behaviours

of a small number of sheep from a larger flock. This geospatial information is then collated into 'sheep diaries' alongside digital imagery and further contextual (human) information. Through this ovine lens, the paper then goes on to consider how these more-than-human agents, albeit always more-or-less entangled with their human counterparts, actively produce and reproduce rural landscapes through their everyday activities and spatial practices. In so doing, we aim to present alternative perspectives on rural production in an original, engaging and accessible manner, offsetting to some small degree predominantly human-centred ongoing discussions of upland futures.

### Working Group 4: Rural (im)mobility, social and spatial inequalities

### **Climate Variability and Agricultural Labor Mobility in Rural Egypt**

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Keywords: Farmers, Agricultural Labourers, Mobility, Climate variability, Egypt

The agriculture sector in developing countries is known for its poor working conditions, low rates of payment and growing job insecurity and levels of poverty. Environmental variability are placing more burden on the already affected labour force working in the agriculture sector which lead them to migrate searching for new pastures or jobs elsewhere. Agriculture in Egypt is one of the sectors that is witnessing environmental variability. Although it's high dependency on manpower and the less use of mechanization due to land fragmentation, the sector is considered as a labour scarce sector. The research aims to identify the influence of environmental factors, particularly climate variability and extremes, on labour mobility and to explore the interaction among the determinant factors that guide individual decisions on mobility between industries and across regions. Reinforced by mixed-methods approach, quantitative and qualitative data were collected using a survey and in-depth interviews. The study gathered data on the individual, household and community levels, taking into account the importance of adopting a multilevel model in exploring the determinants of migration.

The study was conducted in 4 villages of Damietta governorate located in the Northeast part of the Nile Delta region. Primary quantitative data were collected from 350 small landholder farmers and waged agricultural labourers using a questionnaire implemented via face-to-face interviews during the period from April 2018 to September 2018. Further 12 in-depth interviews were conducted with farmers and key informants to gather qualitative data about the community situation in the study area.

### Migration experiences and tolerance towards immigrants

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Previous research has yielded detailed information about the background, perceptions and experiences of those who are less tolerant of immigration and immigrants. While less is known about the effects of domestic and international migration experiences on the attitutes of the migrants themselves, there is some evidence that less mobile people are also less trusting, less open to change, and hold more conservative social and political attitudes. In Britan, people who still resided in their county of birth were thus more likely to vote in favour of Brexit and in the United States people who had never left their home town were more likely to vote for Trump, independent of race, income and education. In this study, we examine the effects of domestic and international migration experiences on tolerance towards immigation in three communities in Northern Iceland. While Iceland experienced massive internal migration to the Reykjavík capital area in the 20th century, internal migration has slowed considerably and rapid international immigration has contributed to both continued urban growth and the revival of stagnant or declining rural regions. Our results show that a large proportion of residents of Icelandic origin in Northern Iceland have lived in other regions or abroad. Controlling for factors such as gender, education, employment, and generalised trust, domestic in-migrants and local return-migrants hold considerably more favorable attitudes towards international immigration to the local community than those who have never lived elsewhere. These results are discussed in the context of changing patterns of mobilities and immobilities in western societies.

# Immigrant Farmworkers in Rural Communities: Approaches to Diminish Social, Linguistic and Economic Isolation

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Keywords: immigrant workers, labor, migration

Historically, migrant workers have travelled to farming communities across the globe to labor in fresh fruit and vegetable harvests. Typically migrants remain for short periods of time to carry out tasks such as pruning, weeding, and harvesting, that must be done by hand. Local workers are often not interested in short term employment, nor able to withstand the physical demands of stoop labor, climbing ladders, carrying heavy sacks

filled with produce or working in inclement weather. Farm work is the third most dangerous occupation in the US due to the inherent dangers of the work, and the risks associated with exposure to dangerous chemicals and pesticides. Increasingly, immigrant workers are doing these low paying jobs, and remain at the margins of rural society.

This paper draws from over 250 in-depth ethnographic interviews, and focus group discussions with an additional 200 immigrant farmworkers, conducted over the past decade throughout rural New York State. Interviews with unauthorized workers from Mexico and Guatemala examine their motivations for leaving their places of origin, their migration experiences, relationships in their new communities, and plans for the future. Focus group discussions extensively examine immigrants' motivations to stay or leave rural upstate areas. Farmworker interviews are complemented with information gathered from educators, health practitioners, community leaders, policy makers, and other service providers in rural upstate NY, about how these communities have changed to accommodate immigrant workers.

These case studies provide rich detail about how immigrant workers and rural residents perceive socio-spatial inequalities in rural communities, and how the receiving communities are changing to accommodate the needs of this new population. Since 2000 approximately two-thirds of NY's farmworker population have become year-round residents by securing employment in fruit and vegetable packing houses and processing plants in off-harvest months, or year-round work on dairy farms. Grounded in the realities of the living and working conditions of farmworkers, this research provides important insights into the challenges immigrant farmworkers experience, how they succeed despite literacy, educational, or language limitations, and how mostly Caucasian rural communities accommodate the language, housing, and socio-cultural needs of new immigrants. This research also provides important insights on how national policy changes such as intensified immigration enforcement along the northern border, put immigrants and agricultural production in rural areas at risk. Moreover this paper provides insights into how rural residents in both sending and receiving communities can contribute to the well-being of immigrant workers.

### Lifestyle migrants and intercultural communication in Swedish villages

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Keywords: intercultural communication, interviews, lifestyle migration, rural place marketing

The study analyses the experiences and practices of Dutch, German and German-speaking Swiss lifestyle migrants in rural locations in northern Sweden. The data presented here draws on interviews with Dutch, German and Swiss migrants in the Swedish counties of Örebro, Värmland, Västerbotten and Norrbottten. We analysed the data using intercultural communication (IC) theories. In particular, the study draws on the work of Geert Hofstede, considering mainly the differences in Masculinity and Uncertainty Avoidance indexes the author finds for the four countries. Communication and interaction styles are explored using Lewis's model, while overall adaptation to living in northern Swedish rural society is analysed using Berry's acculturation model. The study demonstrates that while Swedish culture may not be that different from Dutch, German and German-speaking Swiss culture on a global scale, the existing differences are relevant and impact expectations as well as the overall lifestyle migration experience. The analysis concludes with reflections on improving officials' understanding of these complex processes when working in rural place marketing. This study further contributes with improved intercultural insights into current lifestyle migrants' experiences in receiving communities in Nordic sparsely populated areas.

#### Rural mobilities against social inertia in post-crisis Greece

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Keywords: mobilities, migrants, quality of life, Greece

Since the early 1990s Greece was transformed from an emigration to an immigration country. During this time, the traditional flow of rural-to-urban migration was replaced by international migration coupled with counter-urbanization trends, contributing to new socioeconomic realities in rural Greece. Moreover, international migration has become an important aspect of local labour markets both in urban and rural areas of the country. However, since 2008 the economic recession has altered the socio-economic conditions in the country and deteriorated the integration prospects and challenges for migrants and natives. In the era of economic austerity, the various types of mobility are contested by social inertia in Greek rural areas.

Before the economic crisis the quality of life in rural areas prioritised living conditions over employment opportunities, but in the era of austerity it became more prevalent that living and working in rural areas should be seen in tandem. Along a number of issues such as employment opportunities, housing availability and conditions, education prospects, health services, etc. the local (permanent) population distinguishes its position from that

of migrants and/ or refugees, thereby introducing new challenges for the future of rural areas.

Drawing from an empirical ongoing research in the context of the IMAJINE Project<sup>2</sup> in Western Peloponnese in Greece, the paper aims at illustrating the complexity of mobilities that affect post – crisis rural Greece. By looking at the contested aspects of (im)mobility of locals and migrants living in the research area, the paper explores their individual and family strategies for social upgrading, improving their quality of life and/or competing for the same resources. Moreover, the analysis of the empirical findings sheds light on migrants' perceptions and experiences regarding their quality of life and the way territorial inequalities affect their migration decisions. The paper argues that migrants' decisions and strategies need to be seen in connection to local population expectations, in view of the new developments in rural areas and beyond the dominant debates of economic inequalities.

### (Im)mobilities, diversity and rural change: new patterns of immigrant settlement in rural France

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Keywords: immigration, diversity, rural, settlement patterns, residential mobility

Since the early 1990s, researchers have described the increase of immigrant population in France as the result of permanent settlement combined with new arrivals (as well as remigration). No fundamental change in the spatial distribution of immigrants in France related to this increase was documented. Most scientific research emphasizes the everincreasing concentration of immigrants in major cities and "banlieues", and rural areas usually remain unnoticed. Yet, the geography of immigration in non-metropolitan France has undergone significant change since the end of labor immigration in the mid-1970s, but also since the 1990s with the evolution of national and international labor markets (globalization of the countryside) as well as the development of new social representations associated with rural areas (counter-urbanisation, rural idyll). New patterns of immigrant settlement have emerged: some localities have become new places of immigrant settlement, especially in the South-West of France or in suburban areas, while immigrants have left other localities, as in the Northeast industrialized regions of France. The study of mobility/immobility of immigrants is thus a relevant indicator of rural

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change in a globalized world, as well as an invitation to question rural diversity and its social and spatial differentiating factors.

This paper aims at exploring (im)mobility processes of immigrants and non-immigrants that led to a change in the spatial distribution of immigrants over the last 25 years, focusing on non-metropolitan areas. Using census data from 1990 to 2015, I analyze the evolution of immigrants' patterns of concentration and dispersal in rural France. I test three main hypotheses – proportional change, concentration and dispersal – linked to demographic, economic and social explanations, using spatial analysis and cartography tools. Through my results, I highlight the link between demographic evolution of non-immigrant population and of immigrant population, which can lead to relative concentration or dispersal of immigrants (the concentration of immigrants in new rural areas can be due to recent arrivals of immigrants but also to the depopulation of non-immigrants). Results also point out the increased diversity of rural places that have recently experienced a process of concentration of immigrants.

#### The impact of place and space on residents' sense of happiness in rural Japan

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Keywords: happiness, periphery, mobility, community, space

Population decline of and outmigration from rural communities provide the backdrop against which media and academics discuss quality of life in the countryside and policy makers design rural revitalization programs. Yet how rural residents really fare in regards to their well-being and levels of happiness is still a matter of contention: Quantitative research so far remains divided as to whether people in rural or urban communities are more or less happy. To find out what makes life worth living in rural Japan, and how issues of mobility and immobility are played out in subjective well-being, we have conducted indepth interviews with 24 residents in both a small rural settlement as well as in a neighboring town in Kumamoto prefecture, Kyushu. The interviews consisted of three parts: word definitions on several, emotion-related terms, three quantitative questions on happiness, as well as a board-game type of approach to understanding the multi-dimensionality of happiness indicators.

Findings point to aspects of embeddedness into the community, age, the spatial pattern of family relations, issues of mobility as well as employment within or outside the locality in regards to the significance of place for the residents' sense of happiness. Opinions on

one's place of residence range from extremely positive to severely negative: from providing safety and a care network of extended family members to seeing the local community as bothersome, demanding of one's extremely limited spare time, and literally crushing one's freedom of control of one's own time. The paper argues that despite remaining marginalized in rural Japan, happy existences can be forged, with issues of age, gender, and profession of further importance. Comparing the subsets from rural and urban localities, we point out the differential impact of place and space on rural happiness.

### Could rural development programmes keep people in place?

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Keywords: Rural-urban migration, Rural development, Policy impact assessment, Path model

The central policy aim of the current rural development strategy of Hungary is to avoid mass migration from rural settlements and to try to contribute to immigration in villages through the development of various aspects of the socio-economic environment. However, several previous sociological and economic theories argue, that under certain circumstances and by the application of certain development tools, opposite outcomes can be expected. The case of Hungary and the 2007-2013 EU budget period provide a unique case for testing these hypotheses by applying quantitative tools. Among the countries of the European Union, the contribution of EU funds in development programmes was the highest in Hungary; the ratio of people living in rural and intermediate regions is one of the highest; and the relative social disadvantages of rural dwellers compared to the urban population is similarly one of the highest among EU countries.

Based on longitudinal and proportionate social, labour market and economic, high measurement-level data on various samples of Hungarian rural settlements (agglomeration vs. non-agglomeration, disadvantageous vs. non-disadvantageous villages), linear regression based path analyses were employed to assess the direct and indirect effects of 2007-2013 rural development subsidies utilized in Hungary. As annual in- and outward migration movements are registered systematically in Hungary on the settlement level, by the application these background variables as explanators, valid models of migration could be developed in the research.

Though several authors argue that development results are challenging to be identified, through some economic, labour market variables, direct and indirect effects of subsidies

on migration patterns could be found. However, among agglomeration villages, these effects seem to be less relevant, and regarding particularly settlements in the least developed microregions, contradictory effects are to be found, too. Results thus seem to reinforce previous theories arguing that development may affect regions with different original status differently. Furthermore, results also suggest, that the effect of changes in certain elements of the socio-economic surroundings (such as development of agriculture production, infrastructure, non-agrarian enterprises, rural-urban connections) provide different results in migration patterns. By the investigation of the this topic, the research aims to contribute to the scarce literature of rural development impact assessment, especially regarding rural-urban connections.

#### Gendered migration in rural areas and small towns of Iceland

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In rural areas and small towns of Iceland, the in- and out-migration is quite fluid but also gender biased where women are more likely to migrate to urban areas. To gain a better understanding of the individual- and community level process in small towns and villages a survey was conducted in small towns around Iceland, collecting quantitative information. In order to get some insight to in- and out migration, to what extent community-level attitudes influence individual migration intentions, the questions also focused on "the stayers", active and passive stayers, the role of interpersonal relations, changes in service provisions and changes in labour market. In those areas there is a disproportion of female out-migration and the data collection aimed at finding a gender difference in equality views, social status, social responsibilities, household responsibilities and work market, and if those factors affect women's willingness to stay. The in-migrants are quite a few in the areas in question and their resilience is something that could cast a light on the stayers, are family relations the main factor or are those communities attracting in-migrants for other reasons? This survey is a part of a larger project conducted by the Icelandic Regional Development Institute where migration and migration attentions in Iceland are analysed. This small-town survey will lay the groundwork for a more comprehensive data collection where these results give important information about the views and social status of small-town inhabitants, gender differences, their place attachment and place identity, belongfulness and happiness.

# The interplay between selective migration and spatial segregation in shrinking Hungarian towns

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Keywords: shrinking, town, selective migration, segregation

The process of shrinking cities has stimulated a rapidly growing scholarly literature across many disciplines (Pallagst et al. 2009, Baum et al. 2014, Haase et al. 2016). However, few research papers addressed the social aspect of shrinkage (Cortese et al. 2016, Baum et al. 2014) and they focused on capital cities or regional centers (Ostrava, Leipzig, Halle, Genova). To best of our knowledge the social spatial polarization in shrinking small towns has been neglected. The aim of this research is to extend current knowledge of this specific area by analysing individual-level Hungarian census data from 2001 and 2011. First net migration rates were calculated by educational attainment at settlement level (2001-2011). We found that the most educated active age residents were overrepresented among the emigrants independently from local economic situation. This kind of selective migration is well known, so the most remarkable result to emerge from the data is that only economically successful towns were able to keep their graduates (secondary education). On the other side of the spectrum, towns with the worst job opportunities have lost even part of their unqualified population. To shed more light on the hypothetical links between population decline and spatial polarization, segregational index scores (Clotfelter 2004; Kertesi-Kézdi 2014) were computed for every Hungarian town and city using 2001 and 2011 census data (population: unqualified active age population without employment). Based on the results obtained thanks to multivariate regression analysis, segregation is influenced by settlement size, share of roma population and local labour market condition. In other words segregation is affected, but not determined by population decline.

#### Migration, immobility and depopulation in Hungarian countryside

Imre Kovách, Insitute of Sociology HAS CSS

The decline the population of Hungarian villages of about seven hundred and forty thousand people is the balance of nearly three decades, however the rural population accounts, still today, for nearly thirty percent of the country's population .One of the peculiarities of Hungarian (and Central and Eastern European) settlement sturcture the much larger proportion of the rural population compared to the old EU states, remains unchanged after the millennium. The decline in the number and proportion of the rural population seems to contradict everything. The total population of the country also

dropped by nearly 700,000 between 1990 and 2017, but the proportion of villagers also felt from 38 percent to 29 percent inside total population. The decline in rural population are linked in literature to narrowing job opportunities, radical changes in labour demand for agriculture, inadequate transport and several unfavourable demographic trends. Analyzing demographic processes, I argue that as a result of the slow population decline over the last four decades, the number of inhabitants of small settlements and villages decreased the most and countryside, as before, is still a source of emigration. The largest population decline occurred in the countryside.

### Geographies of inequalities generated by education-induced mobility imperatives

Karin Topsø Larsen, Centre for Regional and Tourism Research

Youth (im)mobilities, and particularly those related to and induced by the seeking of education have been the focus of much research within youth studies as well as education sociology and rural sociology (see for example Farrugia 2015, Bæck 2015, Lindgren & Lundahl 2010, Bjarnason & Thorlindsson 2006, Rye 2006). However, many of these studies have, in terms of understanding the processes and structures that frame rural youth (im)mobilities a double blind side. Firstly, they tend to treat education-induced mobility processes as rural to urban mobilities, embedding mobility decisions into a narrative framework of structural and symbolic urbanization imperatives. Secondly, and closely related, these studies tend to treat 'education' generically and thereby, often overexpose youth segments who seek university-provided tertiary education — often located in larger cities - whilst underemphasising youth who seek other education programmes, including profession-based tertiary education and vocational education and training (VET) — often located more geographically dispersed than universities.

This is an unfortunate oversight, as young peoples' education-induced mobility patterns are much more complex than classic rural-urban mobility theories would suggest, and the more temporal aspects of mobility – of disembedding processes, of education progression imperatives and of translocal pulses in such mobilities is understudied. Motility, the capacity to be mobile (Kaufmann et al 2004), is an acquired capacity that is framed by institutionalised power structures, amongst which, when it comes to young people, education systems are central.

The paper is conceptual, but empirically based on a combination of a revisited qualitative analysis of 21 narrative interviews carried out in 2015 in connection with a PhD study (Topsø Larsen, 2017) and an ongoing quantitative study of the mobility patterns of young VET students from rural areas in Denmark.

The paper argues that (rural) youth (im)mobilities are framed by specific education systems and the socio-temporal and spatial mobility corridors (Massey, Harvey) that such education systems generate. What is more, education policies often do not recognize these spatio-temporal imperatives and policy discourse focuses on youth, who are blamed for being 'immobile', implying that 'overattachment to place', particularly to small rural localities, is a detriment to education attainment. The result is socio-spatially uneven patterns of exclusion and inclusion, which effect young peoples' chances of living where they want to and seeking the education programmes they aspire to.

# Immigration and Population Change in Rural America: A Demographic Lifeline to Depopulating Rural Areas?

Daniel T. Lichter<sup>1</sup>, Kenneth M. Johnson<sup>2</sup>

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Rural depopulation has become a signature demographic phenomenon throughout much of developed world, including United States and Europe. In the United States, rural counties often peaked in population size before 1950, especially in the agricultural heartland (Johnson & Lichter 2019). Many counties, especially in remote rural areas, have been "left behind" by an increasingly urban settlement system marked by on-going shifts away from farming and other extractive industries and by the ascendancy of a globalizing economy.

Chronic rural out-migration and rapid urbanization have redefined the settlement system over the past century. Perhaps ironically, parts of rural America also are now being transformed by new rural in-migration of immigrant populations, including Hispanics, who arguably are providing a demographic and economic lifeline to many declining rural communities. Indeed, between 2000 and 2010, Hispanics accounted for over 60 percent of all nonmetropolitan population growth. Growth of the Hispanic population both from migration and natural increase often makes the difference between overall county population growth and decline. Our previous research reported that the population increased in 353 counties between 2000 and 2010, but only because Hispanic population gains exceeded losses among non-Hispanics (Johnson & Lichter 2016).

Our singular goal is to highlight the new racial dynamics of population growth and decline processes, including both migration and natural increase, in nonmetropolitan America. To accomplish our goals, we use 3,141 counties as the unit of analysis, tracking migration, natural increase, immigration and population change data over the 1990-to-2016 period. Nonmetropolitan (or rural) counties are classified by U.S. Office of Management and

Budget. Population data come from the decennial Censuses, while historical data on births, deaths and migration for 1990 to 2010 come from newly-available integrated age specific net migration files (Winkler, et. al 2013). Demographic data from 2010 to 2016 are from the Census Bureau Population Estimates Series.

Our preliminary results show that Hispanics—through both net in-migration and natural increase—have provided new growth in nonmetropolitan counties that otherwise would have faced incipient population decline. Hispanic population gains occurred in 86 percent of the depopulating counties between 2000 and 2010. Moreover, 21 percent of previously depopulating counties gained population overall between 2000 and 2010, in large part due to Hispanic population gains. Among many rural counties that peaked in population size in 2010, this occurred only because Hispanic population increased between 2000 and 2010.

Hispanic immigrant population has a growing demographic grip on rural America in the post-2000 period. New Hispanic in-migration and fertility often made the difference between overall population growth and decline. This is significant from a policy standpoint during the current period of rapid population aging and below replacement fertility among the native white population. Our analyses provides new lessons for studying depopulation in the United States and other parts of the developed world, including Europe.

# Change in mobility and impact of rural gentrification in remote commuter villages: The case of the rural area of Leicestershire, England

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In recent years, the commutable areas surrounding large cities have expanded according to changes in work and lifestyle as well as the increase in mobility across the Global North, including Europe. Most of the commuters moving into such areas belong to the middle class, and their inflow has caused gentrification. In gentrified villages, conflicts in culture and lifestyle often arise between incomers and native villagers. While such negative impacts are observed, positive impacts are also perceived, such as an influx of new cultures, development of 'bridging' atmosphere and beautification of landscape. This paper discusses and explores how the increase in peoples' mobilities causes rural gentrification and what is the nature of local community changes caused by the progress of rural gentrification by focusing on the conflicts and harmonies between the incomers

and native residents of the Leicestershire villages, an area which is becoming known as the remote commuter belt of the London Metropolitan Area. This paper employs a quantitative approach based on an analysis of statistical data, such as the UK Census, to ascertain the process of gentrification in the area. In addition, records of the community council proceedings as well as literature about the area are reviewed. Survey interviews of residents were conducted to qualitatively capture their perceptions of the changes within their communities. In the case of the Leicestershire villages, the concept of traditional rurality struggles with that of new rurality under the progress of gentrification. On the other hand, gentrifiers seem to be attached to their local communities, and they are important actors in the management thereof. As a result, we conclude that the aforementioned coexistence of conflicts and harmonies should be regarded as a phenomenon which indicates that these villages are becoming cosmopolitanised.

# Promoting migration into rural and semi-rural areas? Local government responses to sustainability challenges in small villages of Catalonia, Spain

Ricard Morén-Alegret, Autonomous University of Barcelona's Geography Department & ICTA

In English language, hamlet means 'small village' and, at the same time, Hamlet is the main character of an existential tragedy authored by William Shakespeare. In many parts of Europe, including some areas in Catalonia, sustainable development of small villages is under threat due to, among other factors, depopulation, while many migrants or unsettled people are looking for a new place to live. Ageing and depopulation make these (often rural) places more vulnerable to natural hazards (e.g. wildfires) or uncontrolled speculation/abandonment.

The research project titled "HAMLETS. Immigration and Sustainable Development in Small Villages" is based on the hypothesis that (international and internal) immigrants have the potential to make social, economic, environmental and cultural contributions to the sustainable development of small rural municipalities in Catalonia. It is inspired by humanist geographies as well as political ecologies (see: www.uab.cat/hamlets). In this study, municipalities with fewer than 500 inhabitants are considered small villages, i.e. hamlets. In Catalonia, the area covered by these hamlets is about 35% of the territory, but less than 2% of the Catalan population reside in these small villages. Thus, in the 336 Catalan municipalities with fewer than 500 inhabitants (INE, 2016), population density is usually very low. During the period 2017-2020, the main study area is the autonomous community of Catalonia (Spain).

Among other results, this presentation offers data and reflections from a survey on local sustainability challenges that was conducted among local governments of Catalan municipalities with fewer than 500 inhabitants. In that exploratory survey participated mayors, councillors and civil servants. Responses were obtained from 49 municipalities (over 14% of the total) distributed in 25 different counties. For instance, an outcome of that survey is that the number of inhabitants during winter in small villages is much lower than official statistics indicate: on average, key respondents informed us that just about 75% of the population registered in 'Padrón Municipal' was really living in the villages during winter. The demographic situation was usually worse in inland mountainous and relatively remote municipalities because there in winter residents were on average just about 63% of the population officially registered as resident in those municipalities. In order to face that situation, 15 respondents claimed to have local policies in order to attract new permanent inhabitants (international and/or internal immigrants). However, in contrast, some other municipalities (usually placed relatively near metropolitan areas or the coast) were not interested in promoting local policies for attracting any kind of immigrant (e.g. in order to keep the so-called 'charm' of the village). In addition, in tune with the increasingly nationalistic/xenophobic political situation, some respondents were interested in selecting the geographic origin of immigrants (e.g. preferring just newcomers original from other parts of Catalonia, Spain and/or Europe with 'costumes that would not interfere with what the [rest of the] population is doing').

# Choosing to stay in the era of mobilities: reflexive and (s)elective biographies of regional stayers

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Keywords: Mental staying, immobility, young adults, regional staying, elective biography

Increasingly, the staying processes of young people in peripheral areas is a topic of research. However, most research focus on the "leaver" by regarding staying and leaving as binary opposites and as local processes on the local level. In this paper we see staying and leaving as interrelated processes by focusing on young *regional* stayers. We define regional stayers as people who have left the parental home, but who stay in the home region. This paper explores how young students' personal narratives relate to prevailing migration and mobility discourses. We use the concept of elective biographies to demonstrate that staying processes have both geographical/physical and mental/emotional dimensions. A total of 20 in-depth interviews were conducted with Masters students from the University of Groningen in Groningen and Leeuwarden

(northern Netherlands) and the University of Southern Denmark and the University of Aalborg located in Esbjerg and Odense (southwest Denmark). We found that young people include narratives of mobility, disconnection and personal agency in their elective biographies to adapt their staying process to the mobility discourse. In other words; in the era of mobilities, young adults develop strategies of staying by including experience of time-limited geographical mobility.

#### Place attachment, deindustrialization and rural mobility: an empirical study

Xaquin Perez Sindin Lopez, Copenhagen University

This article analyses the phenomenon of place attachment in one rural area of industrial decline in the northwest of Spain. The research brings together theoretical and empirical literatures on both deindustrialization and place attachment. After conducting selfadministrated postal survey among former industrial workers, a representative sample of 327 former industrial workers was used for analysis. The questionnaire includes Retirement Satisfaction Inventory variables (F. J. Floyd et al, 1992), behavioural (social capital related questions, medical treatment for anxiety, current municipality of residence and others) and attribute variable (birthplace and origin related questions and other socio-demographic variables). Different statistical association test according to variable nature (mainly Chi square, Cramer's V and regression coefficient) were applied in order to identify statistically significant relationships between the different variables. Semistructure interviews and focus groups were also conducted to enrich the research process, accounting for a mixed methods approach. After a rapid deindustrialization process and the implementation of an early retirement plan in the late 90s, 28% of the former workers left the town. Two variable exhibits the highest association. First and foremost, the length of residence: the percentage of former employees who decided to emigrate after retirement is much higher among newcomers than those living in the community for longer, confirming the observed in the literature on place attachment (Lewicka 2011). On the other hand, results show significant relationship between selfreported health status and mobility, being worse among those who decided to leave the town. This article shows the paradox that those who move to urban areas for "better life" exhibits greater problems of post-retirement social adaptation than those remaining in the "depressed" town, while contributing to better understand the relationship between place reputation and mobility.

#### Could 'related residents' save depopulated settlements in rural area of Japan?

Yukihiko Saito, Chiba University, Japan

This paper aim to evaluate the role which 'related resident' play in sustainability of depopulated settlements, and to propose municipal programmes to support them.

27.7% people are over 65 yo in Japan. Especially in rural area, depopulation and aging is serious problem. Nanmoku-Village in Gunma Prefecture is most aging municipality where 60.5% residents are over 65yo among about 20 millions. Rural situation in Japan is good reference for those in EU countries in near future, even though it prove that the government have failed in land policy and decentralization since post-WWII. Depopulation is caused that most of local young people go to cities for education and employment, and do not return, that a few people immigrate to rural.

Therefore this paper focuses on 'related resident' most of whom have a blood relationship with residents and live in the outside. Many of them often visit settlements for cultivation, joining traditional ceremony, maintaining vacant houses and graves. Related residents include a few people who have no blood relationship with residents and buy or rent vacant houses as summer houses.

At 3 settlements, there are 117 vacant houses and 71 resident houses which means 62% houses are vacant. Related residents who cultivate are at the rate of 19% among all who cultivate. Cultivation generate strong motivation to visit settlements. 24% of related residents visit there more than once a month. 12% of them do the same, even as houses have been vacant for more than 10 years. Half of related residents maintain vacant houses.

Many of them enjoy chatting, drinking with residents, walking, hiking, fishing, outdoor cooking, picking wild plants, river bathing, and just watching TV in fresh and quiet air at the veranda.

Among related residents, summerhouse users are only 5 families, 4%. Among residents, immigrants are only 8 families, 7%. However, related residents visiting there regularly are 77 families.

It is predicted related resident will play the major role.

But over the years, they quit cultivation and secondly quit maintain vacant houses, and finally they relocate their graves and stop to visit, which shows the process of related residents disappearance.

Giving them some privilege(Ex. Delivering motor way tickets for their returns), inviting a party with residents, making a place for gathering and inviting gardening lectures are proposed as municipal subsidy programmes, toward their inclusion as honored residents, for their contribution to spatial management regarded as personal and traditional activities till now.

### Everyday life and mobility in the sparsely populated rural Finland

Maarit Sireni & Mari Kattilakoski

University of Eastern Finland, the Karelian Institute

The northern peripheries of Europe are associated with remoteness, isolated communities, resource based economies, a loss of employment, youth out-migration and population aging. However, uni-directional, permanent out-migration is not the only mobility trend in sparsely populated areas. For instance, long-distance commuting and working from home have emerged as substitutes for out-migration for some people. In addition, some people want to return to their roots, which causes remigration to their own or their spouse's home. At the same time, rural communities have become the locus of a range of work and leisure related mobilities that are increasing in both scope and scale. Such mobile groups include seasonal, temporary and foreign workers, tourists, outdoor recreationists, second home owners and users, berry pickers, hunters and fishers. Hence, rural communities that are often perceived as being stable and fixed, can be approached as dynamic space, as an intersection of flows of people and objects and, as such, continuously in a state of flux.

The present paper aims at identifying the different forms of everyday mobilities in the sparsely populated rural Finland. It focuses on rural dwellers' narratives of their mobilities and immobilities, paying attention to the possibilities and difficulties included in built and digital infrastructure, mobility services, distances to service centers, weather conditions and road maintenance associated with practicing everyday mobilities in rural settings. The paper draws on textual material produced by rural inhabitants, who participated in a writing competition and wrote about their everyday life in the countryside. Narrative approach is used as a methodological basis for the study.

### Immigration to rural areas and changes in local youth's life trajectories

Marie Holm Slettebak, Norwegian university of Science and Technology

Keywords: Labour migration, rural areas, native mobility, social inequality

After the EU-enlargements in 2004 and 2007, large numbers of labour migrants have arrived and settled in Norway. Many rural areas, previously unfamiliar with migration, have experienced a large influx of labour migrants. These migrants, which mainly are lowskilled workers from Eastern Europe, are now overrepresented in many rural industries, such as the fish processing industry, on shipyards, hotels and in agriculture. In the small and often uniform labour markets in rural areas, large changes brought about by labour migration might affect choices concerning settlement as well as educational and occupational choices. In this paper, I examine whether this influx of labour migrants to rural areas have had any effect on the mobility patterns of natives in rural Norway. Many rural areas struggle with depopulation and much is written about the potential in immigrants "rescuing" rural regions. However, if increasing numbers of immigrants affect native inflows or outflows, it is an important part of the picture and must be considered in the overall debate about immigration and depopulation in rural regions. While a large number of studies exist on the effect of immigration on native labour market outcomes, less research exist on the effect on natives' geographical mobility, and particularly in rural areas. Previous research suggests immigration has a negative effect on native net migration, but other studies provide conflicting results. Some studies also find differential impact on different skill groups. Panel data regression with municipal-level register data from 2004 to 2016 is utilized to explore the effect of immigration on mobility patterns of natives in different skill groups.

# Opportunities in rural regions, and reasons for having to leave. The residence choices of young people with a refugee background as a subject of official discourse

Tiina Sotkasiira, University of Eastern Finland

Keywords: young people, asylum seekers, refugees, rural, periphery, choice of residence

The paper discusses the residence choices of young asylum seekers and refugees who have settled in the Finnish countryside. By looking at internal migration from the point of view of local actors, it shifts the focus from residence choices as individual deliberation to politics and discourse that categorize and regulate the movement of these young people within Finland. The study draws on interviews with the heads of reception centres, local authorities and other actors who are involved in the settlement and integration of asylum

seekers and refugees in their respective rural municipalities. The paper reveals the importance of the discursive positioning of young asylum seekers. When asylum seekers are positioned as "young people", they are encouraged to fulfil their dreams, which usually means moving to the city. However, when they are positioned as "refugees", they are regarded as people who benefit from the security, peace and quiet of the countryside. In addition, the settlement of "refugees" in rural regions is associated with economic risks, meaning that the welcome that local actors extend towards young refugees is conditional. The discursive positioning is strongly linked to structural inequalities, especially in relation to education and work opportunities being increasingly concentrated in urban centres, and duly placing young rural inhabitants at a disadvantage. The paper is based on the article published in the journal Nuorisotutkimus [Youth Research].

### **Rural Stayers in the Spotlight**

Annett Steinführer<sup>1</sup>, Aileen Stockdale<sup>2</sup>, Tialda Haartsen<sup>3</sup>

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Population and rural geography research has mainly focused on the 'migration discourse' (Barcus & Halfacree 2018; Cooke 2011; Cresswell 2011 & 2012; Sheller & Urry 2006; Stockdale & Haartsen 2018) and has given limited attention to those who do not move (stayers). Yet, residential mobility is an infrequent occurrence in most people's lives (Coulter & van Ham 2013; Coulter et al. 2016) and national migration rates are in decline: the expansion of daily-life and virtual mobilities (e.g. commuting and social media) has increased the possibilities to stay (Cooke & Shuttleworth 2017). Staying, especially in rural areas, is frequently reported in negative terms (Looker & Naylor 2009; Nugin 2014; Tucker et al. 2013). But increasingly there have been calls for it to be considered more positively, for example, in a recent Special Issue of Population, Space and Place 'Putting rural Stayers in the Spotlight'. We concentrate on the agency of stayers and view staying as a positive and deliberate decision (based on senses of rural identity and selective and elective (s/elective) belonging) which is re-evaluated over the life course (Geist & McManus 2008; Haartsen & Stockdale 2018; Hjälm 2014). Those who elect to stay and to belong are likely to be a valuable resource contributing to rural community quality of life and participatory society.

We report on our preliminary research which shows that the decision to stay is renegotiated at key life stage transitions (Haartsen & Stockdale 2018; Stockdale et al. 2018), and introduce our new international research project (STAYin(g)Rural) which examines

staying in three countries (N Ireland, Netherlands and Germany) and at three life course stages: the young adulthood, family formation and post-retirement stages. In doing so, we adopt a life course perspective on staying and position the decision to stay within stayer biographies. We seek to capture the multiple types of contemporary rural stayers (for example, newcomers who have stayed; those staying in the rural but not in their home rural area; etc.), staying processes, and stayers' participation in and contribution to social community life. All have been under-researched to date.

### Inequalities over the lifecourse in the brave new world of mobility

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Keywords: mobility, inequality, lifecourse, urbanisation/counterurbanisation

Technological advances in transportation and communication have ushered in a new era of mobility theorised by scholars such as Bauman, Castells and Urry. These technological advances and increases in physical and techological mobility have in turn eroded classical distinctions between urban and rural. Rural dwellers in small communities may for instance interact with an enormous range of strangers on a daily basis, enjoy specialized services and visit global cities on a whim while urban dwellers in large cities may easily live their social life in small, close knit virtual communities or spend a considerable amount of time in various rural settings around the world. Place of residence has furthermore become much less dependent upon employment requirements as more people can at least partially work at home, in public spaces or literally on the move. The choice of residence may be instrumental or expressive but tends to be tentative and lifecourse based. Moreover, increased mobility in some of life's domains (e.g. employment) permits residential immobility as a deliberate choice. However, we argue that this brave new world of fluid mobility is not experienced equally: it varies by lifecourse stage, social stratification, gender, and ethnicity. This is illustrated using the shifting concepts of urbanisation and counterbanisation to conclude that the new era of mobility reflects and reinforces inequalities across the life course and across urban and rural space.

### Exodus or entrepreneurial rebirth? Young generation's preferences and the socioeconomic future of rural areas in Poland

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University of Wroclaw

Keywords: entrepreneurialism, young generation, rural areas, social-economic transformation, Poland

Significant changes in structure of national and global economy, such as deindustrialization, expansion of creative economy and new model of industrialized agro production, have resulted in progressing depopulation and rapid aging of many rural areas in European countries (Wilkin, Nurzyńska 2018). One of the most important consequences resulting from these processes is a strong concentration of younger and well-skilled people in big cities and high unemployment rate among local communities living outside of metropolitan areas. Due to the socio-economic changes observed on the Polish rural areas, the state policies aims to limit the demographic and spatial consequences of the ongoing depopulation by implementation of different activities that would create opportunities to restore the local economy and labour market. In our paper, we try to evaluate effectiveness of these policies basing on the results of the research project which was conducted among young citizens residing on the provincial rural areas in Poland. The paper not only discusses the preferences and entrepreneurial skills of the young generation, but also tries to evaluate their suitability for the socio-economic needs of the examined regions. Using the neo-endogenous development approach (Bosworth, Atterton 2012, Ray 2001), we are going to assess opportunities to prevent migrations of young labour force and to strengthen their local identity as well as soft and innovative skills, entrepreneurialism etc. Thanks to that, we would like to answer the question whether it is possible to create a new innovative jobs improving attractiveness of the labour markets on the rural areas and their socio-economic condition. A great emphasis will also be put on the discussion about social barriers and awareness in order to outline recommendations which would be useful to improve effectiveness of local and national policies, and to make the neo-endogenous approach more effective in overcoming socioeconomic problems that are met by Poland and other European countries facing with depopulation of the provincial rural areas.

### Migration and spatial inequality: the case of the Netherlands

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Keywords: quality of life, spatial inequality, e/im-migration, (im)mobility, Romania, Netherlands

We will present preliminary results from the on-going H2020 IMAJINE project. The project aims to understand territorial inequalities and spatial (in)justice through the lens of migration. It responds to questions related to the way perceptions about quality of life influence the decision to migrate, and how migration in turn affects the quality of life in receiving and sending areas.

### Specifically, we look at:

- 1) how migration affects the perceived and experienced wellbeing, liveability and quality of life of long-term residents in both migration sending and receiving areas. The study focuses in particular on how residents perceive or experience the material and social effects of migration on the place, be it the village, city, region or even country. One of the premises of this study is the assumption that objective effects of e/im-migration (e.g. economic) to or out of an area might not always match the subjective experiences of the persons living there.
- the role of expectations and information on migrants' decision to migrate and on their experienced and perceived quality of life at destination. Individuals start with positive expectations about what they can achieve through the migration process, which shapes their decision of whether and where to migrate, however, they eventually have to face the reality at destination, which may or may not match their initial expectations. The difference between expectations and reality, mediated by prior knowledge, social networks, demographic and household characteristics as well as work and educational status before migration, shape the wellbeing, quality of life and liveability of migrants at destination.

The matching of sending and receiving regions, or immigrants and residents, will enable our deeper understanding of how migration reflects and affects spatial inequalities and quality of life.

The study is based on 15-20 in-depth interviews conducted with Romanian immigrants in the Netherlands, Dutch residents in the Netherlands and Romanian residents in Romania (a total of 45-60).

# When traditional rural communities meet the postmodern family. Role of (im)mobilities in the rural family changes in Poland 1989-2019

Sylwia Urbańska, University of Warsaw

Keywords: rural communities, migration/(im)mobility; gender, class and social change; traditional vs. postmodern families, Poland

The aim of the presentation will be to answer the question, in what relations do migrations/(im)mobilities to the changes of the traditional rural family remain? How is the decision about migration present in the individual and collective strategies (such as divorce, cohabitation, other intimate life models) of the rural residents? Is the greater possibility of migration from Central and Eastern Europ after the fall of socialism and the drainage of the mass of the workforce open the possibility of changing the gendered moral regimes in villages, or, on the contrary, it causes its retraditionalization in the sphere of gender and family relations. In order to answer the questions, I will look at those individuals and groups who solve family dilemmas with the help migration/(im)mobility, as well as with those who, despite problems and pressures, decided to stay. What is the gender and class dimension involved in this process? What is the impact of migration/(im)mobility processes, and how can we explain their contribution to the emergence of diversity in rural moral orders?

The analysis is derived from two various qualitative research. The first research I conducted in rural areas of Eastern Poland and in Polish migrant communities in Belgium in the period of 2005-2010. I was analyzing experiences of transnational family life of Polish women workers (carers, cleaners), who came to Belgium mostly from rural areas (54 IDI). At that time, I focused on studying the relationship between migration and the transformation of rural families since the fall of socialistic system in Poland. The second project, which is ongoing since 2017, is an attempt to identify and explain whether and how the patterns of family relationships and gender roles in rural families (20 IDI) are negotiated in Polish traditional communities. How are the tensions between traditional norms and post-modern patterns being solved? Especially in the context of the multi-dimensional transformation of rural areas, and the broader transformation of the family after 1989's political changes in Poland. Both studies that combine biographical and ethnographical methods resulted with interesting findings about relations between migration/(im)mobility and social changes in rural communities.

#### 'Why should ('nt) I leave?'

Monika Mária Váradi, Hungarian Academy of Sciences

Keywords: selectivity of (im)mobilities, mobility aspirations and capabilities, residential decisions, social and spatial inequalities

For some people living in disadvantaged rural regions, mobility/migration has been a means to overcome social and spatial inequalities. However, research on rural outmigration highlights the selectivity of mobility movements which reinforces inequalities both at national (between rural and urban areas) and global level (between 'developed' and 'developing' countries). Based on empirical evidence collected in a Hungarian rural small town, the presentation aims to discuss the selectivity of rural (im)mobility within the conceptual framework of mobility (migration) capabilities and aspirations.

In order to provide a better understanding of the interplay between inequalities and (im)mobilities, my presentation aims to go beyond residential decisions made by individuals and families. The access to economic, human, cultural and social capital (capability) as well as perceptions and images of achievable well-being in terms of living conditions, safety, and mobility prospects (aspiration) at home or somewhere else influence decisions about leaving or staying. Both, mobility capabilities and aspirations are unequally distributed within (local) societies along class position, ethnicity, gender and age. However, the connection between aspirations, capabilities and residential decisions is anything but linear. People living in deep poverty and without any access to economic, human and cultural capital become mobile by only relying on their strong family networks, while others are capable to leave but do not do so because of their attachment to familiar spaces.

Through the analysis of semi-structured interviews conducted with local residents from different class position, gender and age, the presentation will focus on the question of how unequal redistribution of mobility capabilities and aspirations affects residential decisions and the way these decisions strengthen or weaken social and spatial inequalities.

#### Who's place? Pending contests in multi-migrant rural areas

Mariann Villa, NTNU, Norway

Keywords: In-migration, tourism, diversity, cosmopolitanism

The paper explores diversity processes in a rural mountain winter sport destination characterized by growing tourism and increased international labour in-migration. The paper applies to calls for research on studies of globalization and mobility as experienced in rural localities and by permanent populations. In particular, the notion of precarious rural cosmopolitanism (Woods 2018) is helpful to unfold the ambivalences in the locals' thinking and practices related to what they experience as new and challenging configurations of the place. The analysis base on interviews with local populations, in a rural town characterized by multiple diversities due to in-migration and tourism (ethnic, social, cultural, economic). Local inhabitants alternate being self-confident in their experienced cultural skills learnt from living in the particular mobility era of the place, and feeling sub-ordinated and swamped by the same mobility. Rural prosperity is generally requested and applaused, by local inhabitants and local authorities. When in-migration and mobility are dominant aspects of local prosperity, discourses on the diverse populations' impact upon or inter-relations with each other arise. It might be a paradox that in-migrant is a defining category in local communities characterized by high mobility. The question to be asked then is how does one become entitled to claim the recipe on how to inhabit (socially and culturally) in the local place?

### Rural Cosmopolitanism, Refugees and Restricted Mobilities in Rural Towns: Experiences from Ireland and Wales

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Keywords: Refugees, Rural Cosmopolitanism, Civil Society, Ireland, Wales.

The geographical distribution of refugees and asylum seekers has become a major political issue in Europe as the displacement of people by the Syrian civil war has added to existing patterns of migration from Africa and Asia. The debate has not only been framed at national scales around the distribution of refugees and asylum seekers between EU member states, but also through questions about where refugees and asylum seekers are settled within countries. Whilst several EU countries, such as Germany and Sweden, have established policies of refugee and asylum seeker dispersal, including to rural areas, in Britain and Ireland the tendency has conventionally been to concentrate refugees and asylum seekers in cities with more diverse multicultural populations. In the early 2000s, both countries introduced dispersal schemes with asylum seekers assigned to reception centres in rural localities. The scheme has faced both opposition from local rural residents objecting to the perceived disruption of presumed homogenous monoethnic rural communities and criticism from humanitarian civil society groups who

highlights concerns with the spatial and financial constraints imposed on asylum seekers and their isolation from cultural networks and resources. More recently, the settlement of Syrian refugees in the UK has broken with the policy of the previous 25 years by dispersing refugees across the country, including into rural districts. This paper examines case studies of two rural towns in Ireland and Wales that have received asylum seekers or refugees. Ballyhaunis, Ireland, has hosted a direct provision centre for asylum seekers since 2001, with around 200 asylum seekers in residence at any time, as well as a shortterm refugee orientation centre. Aberystwyth, Wales, received Syrian refugees under the first wave of the UK government's programme, following grassroots lobbying, and has subsequently welcomed refugee Syrian families under an innovative community sponsorship scheme. The paper compares the experiences of asylum seekers and refugees in the two localities as well as the response of local civil society groups. It draws on the concept of 'rural cosmopolitanism' to explore how local engagements with refugees and asylum seekers draw on ideas of sense of place and international connections and to examine how refugees and asylum seekers negotiate formal and informal restrictions on their mobility and assess how their capacities are restricted or enabled by the small town location.

#### People's mobility, labor market disequilibrium and rural development in the US

Xue Zhang, Cornell University, USA

Keywords: mobility, labor market disequilibrium, human capital, rural development

This paper uses the county to county migration and commuting data in the US to explore the impact of labor market disequilibrium on people's mobility between urban and rural. The labor market disequilibrium is conceptualized by the framework of job-human capital balance, and is measured by the differences between supply and demand in the local labor market and the differences of pull and push factors between labors markets. This research uses Group Logit regression to address the following questions: What factors differentiate people's commuting and migration? How does the labor market disequilibrium impact people's mobility? What are the differences in people's mobility between metro counties and nonmetro counties?

The research finds that the decrease of domestic migrants could be explained by the increase of commuting. People's mobility, commuting and migration, is not only in response to the labor demand shock, but also as an adjustment force to the disequilibrium between labor supply and labor demand and between labor markets. High skill labor is more likely to move, as expected. This research also finds that low skill labor

is stuck in urban. Spatial mismatch still exits as an explanation of the low mobility of low skill labor in urban.

This paper argues that rural development should link the exogenous development and endogenous development emphasizing the importance of local resources and extra-local connectivity, which is illustrated in the neo-endogenous development theory. This paper finds that it is important for rural areas to increase the human capital along with the matched job opportunities. Only increasing educational level will lead to more people working in metro counties. Surprisingly, rural counties with higher educational level have fewer out-migrants. The commuting 'brain drain' could improve rural development since people commute rather than migrate to metro counties. The increase of the connection between rural and urban could help rural development. Also, this research finds that more competitive labor in the professional related industry are more likely to stay rather than commute or migrate to other places. It is a good sign of the labor market. The creation of high skill jobs could be filled by local competitive workers. The localization of service sectors in rural could attract more in-migrants from urban and decrease outmigrants. Localization increases social cohesion and develops a diverse and sustainable community. Rural areas with rich amenities could attract tourists increase tourismrelated business, and attract retirees' migration.

# Working Group 5: Poverty, Inequality, Social Disadvantage & Opportunity Structures in Rural Areas

## Self-organized Assistance Services in Rural Germany – Opportunity Structures between Participation and Fragility

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Keywords: daily help associations, old people, volunteering, shared responsibility, self-organization

In the past about ten years, many self-organized assistance services have been founded by citizens in German rural communities. These civic associations provide daily help to those in need, especially elderly people. Already in the 1990s, such civil society organizations were discussed as forms of a "solidary", "social" or "local" economy. They were considered as possible solutions for the acute crisis developments and problems of livelihood security and the loss of gainful employment - at that time especially in big cities. It is no coincidence that in scientific and political discussions such civic-organized daily

help in rural communities is now being considered as "new forms of self-organization" connected with the discourse about the "crisis of an aging society". The history of cooperatives shows that they have rarely emerged as democratically conceived economic organization or solidarity-based structures: The motive to find each other as a cooperative was the overcoming of an existential threat. The discourse in the 1990s therefore assumed that the idea of such self-organization could be reactivated depending on social problems such as unemployment, gaps in care and social inequalities.

The actual sociopolitical discourse considers such forms of self-organization to be necessary to cope with the tasks of caring for the elderly, especially in those areas where the opportunities for care and participation are no longer obtained from the state. In an action research project with three local daily help associations in different rural areas in Germany, it was examined to what extent such forms of self-organization can influence the structural disadvantages of local communities.

The results show that these civic associations focus on the constitution of the social. In addition to enable a self-determined life in old age, the preservation and liveliness of the community are at the center of their activities. Thus, these civic help associations have deeply anchored democratic principles of participation. In the self-organized help associations in our research participation is made possible by the committed people negotiating their interests, needs and motives with each other and also with their addressees. These negotiations take place on three levels: engagement with others (1), concrete assistance arrangements with the older addressees (2) and other institutional actors in the community (3). Such self-organized structures thus have an important role in the governance of opportunity offers in rural areas. At the same time, they are extremely fragile and require political and practical support.

#### US Farm households' access to health insurance and health care along the life course

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Keywords: farm households, health insurance, health care, life course approach

Health care and health insurance policies are shifting in both the US and Europe. The extent to how these changes will impact the farm population is not well understood but, in the US, farm households have pointed to the rising costs of health care and insurance as a threat to their livelihood. In rural areas, the difficulties paying for health care and insurance are compounded by the lower density of health care providers, lower

proportion of employers offering health insurance benefits, and fewer insurance options on state insurance marketplaces. Despite farm households' challenges meeting their health needs, we actually know little about their lived experiences including their health needs, how they access health insurance and health care, and the consequences on the farm operation. Using a life course approach, we draw from a primary dataset of 1,064 survey responses and 31 interviews to explore: 1) the extent to which farm households' health care needs change along the life course, 2) whether health needs impact the farm operation differently as farm households age, and 3) the differences in how farm households access health care and health insurance. Examining differences across age is particularly important in the US context because beyond the associations of age with wealth, health inequalities, and physical fitness, age is associated with the cost of health insurance and type of coverage available. Our preliminary findings indicate that issues are salient at any age. Younger farm households seem to be the most vulnerable and the most dissatisfied with their coverage despite reporting the lowest health expenses. Middle age households, who should be the least vulnerable, report challenges in accessing care and similar levels of dissatisfaction. Older households are also negatively impacted by health expenses despite eligibility for Medicare (the single-payer coverage for individuals over 65 and individuals with disabilities). Ultimately, our preliminary findings show how even a more privileged strata of the population, one that is mostly white, overall well educated, and owns business assets, experience challenges meeting their health care needs. These findings point to structural issues with the way health care is organized. Considering that US health scholars and policy makers tend to focus on individuals' ability to navigate the health systems through knowledge and resources, our work highlights the importance of more widely adopting a political economy perspective that explicitly considers the extent to which the organization of health care and insurance systems impede access to care. With recent increases in medical cost sharing in Europe, our study is relevant beyond the US context as it provides insights into how farm households navigate a health care system with high out-of-pocket expenses.

## Changing forms of disadvantage and opportunities in transforming rural peripheries in the Czech Republic and Germany

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Living in rural peripheries often aggravates existing social disadvantage. Structural weakness, manifested by lacking jobs, weak transport opportunities and hardly available services, multiply the difficulties experienced by households with scarce resources. At the same time, peripheries are often understood as stagnant and less dynamic environments.

It has rarely been investigated, how the living conditions of the local population in general and of socially disadvantaged groups more specifically – modify, if a peripheral rural region gains a new development impetus and undergoes profound transformations. Based on four cross-national case studies, our paper investigates the effects of such transformations on the opportunities of the local population and existing forms of disadvantage. Specifically, we ask, how new industrial investments and tourism expansion is reflected in local living conditions in peripheral rural regions. First results of our continuing interview-based research indicate that both forms of rural restructuring introduce significant and unbalanced modifications of existing regional opportunity structures. However, their effects on disadvantage cannot be interpreted unambiguously. Whereas economic and infrastructural developments create new forms of labour market opportunities and reduce poverty, newly emerging opportunities are not evenly accessible and attractive to all residents. Infrastructure and service development do not follow economic growth and population change. At the same time, these rapid changes introduce new forms of cleavages within the local population and alter the patterns of rural peripheralisation.

The paper is based on an ongoing comparative research project on social disadvantage in rural peripheries in the Czech Republic and eastern Germany. In the presentation we will also discuss and reflect upon cross-national similarities and differences.

### Tracing gender inequalities in Swiss agriculture and their consequences for women's social security

Sandra Contzen, Bern University of Applied Sciences

Keywords: gender inequality, social security, women in agriculture, Switzerland

Switzerland is one of the wealthiest and among the most developed countries in the world. However, reading gender equality it seems stuck in the Stone Age. After several rejections, only on 7th February 1971, men accepted the women's voting right on the national level; gender equality was anchored in 1981 in the Swiss Constitution and in 1988 the marriage law was adapted, eliminating the legal subordination of women to their husbands. However, women are still doing most of care work and are responsible for the household — a fact known worldwide. While the Swiss school system follows gender equality norms, e.g. no longer teaching girls only in cooking or sewing, the classical professional career of women in agriculture perpetuates their traditional role as good housewives and mothers. Men's professional agricultural career, however, prepares them to run a farm as a farm operator. Hence, the professional careers in Swiss agriculture clearly prescribe women's and men's roles: men are the producers, i.e. responsible for

the business sphere of the family farm, and women are the reproducers, i.e. responsible for the household-family sphere of the family farm.

This paper traces the construction of gender inequality in Swiss agriculture and how this is translated into the well-known gendered division of labour. It investigates based on qualitative interviews, conducted in 2013 and 2014 in the German speaking part of Switzerland, how it is represented in the narratives of women in agriculture and what social and financial consequences might derive especially in case of divorce or old age.

The paper shows diverging narratives among women in Swiss agriculture, depending on their status on the family farm and on their professional background. By linking the typology of farming-family configurations developed by Contzen and Forney (2017) to the narratives, the paper shows how different groups of women in agriculture exist and how their status on the farm leads to more or less gender equality, especially with regard to own income and social security, important means to deal with risks such as divorce or in old age.

The paper concludes that despite propositions of the Swiss federal council to change parts of the agricultural law to foster more gender equality in Swiss agriculture – its adoption depending on the Swiss parliament and probably on the Swiss voters – the classical professional career for women in agriculture and its consequences for women's professional identity and self-image perpetuates gender inequality in Swiss agriculture.

#### Consequences of inadequate opportunity structures on teenage childbearing

Elek, Zsuzsanna Réka, Hungarian Academy of Sciences

Keywords: teenage childbearing, cycle of deprivation, inadequate opportunity structures

Most social scientific studies frame teenage childbearing as a social problem, and focus on the negative long-term effects on mothers and their children, but only few concentrate on the concrete features of opportunity structures from the perspective of the adolescent mothers and their children. The present pilot research was held in three of the most disadvantaged rural areas in Hungary, and interviews were made with mothers who had their children as adolescents. The presentation highlights the mechanisms of how the lack of adequate availability of jobs, social, educational and housing services effect the everyday life and life chances of teenage mothers and their children. Inapproprate opportunity structures in the case of teenage mothers and their children can lead finally to the cycle of deprivation and social exclusion as the spatial and social disadvantages are highly connected. Although the child protection system would be responsible for

decreasing certain difficulties of families, we experienced a high level of mistrust from the side of the most needy families. The role of Roma ethnicity will be also in consideration. While the lack of adequate opportunity structures interfere the breaking of the cycle of deprivation, concerned families adopt resilient strategies in which the role of the family becomes highly essential.

### Job Opportunity for Solving Social Exclusion in Czech Rural Areas - Strategies Adopted by Rural People

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Czech University of Life Sciences Prague

Keywords: Local Action Groups, rural areas, rural development, social exclusion, social inclusion

The paper focuses on relatively little explored issue of rural social exclusion in the Czech Republic. The main aim of the paper is to evaluate Czech rural areas from the perspectives of the spatial distribution of social inclusive activities and the attitudes of rural populations to the utilisation of local natural potential for these activities. Attention is also paid on strategies adopted by Local Action Groups (LAG) in the face of social exclusion. When considering the issues of inequality and social disadvantage in rural areas interlinked dimensions appear – the concepts of multilevel governance, neo-endogenous rural development and the concept of social exclusion and inclusion. The paper is based on both secondary and primary research. The secondary research analyses data on organisations located within rural municipalities and dealing with inclusive activities. The primary research is based on a questionnaire survey (N=687). It focuses on the perception and knowledge of rural inhabitants about the realised social inclusive activities. The case study deals with creating the opportunity structure for social disadvantaged people to be more successful in labour market. It is based on the interviews with director of LAG Brdy-Vltava who created the concept of "shared working team". Research was conducted in the rural area located relatively close to the big city. Higher qualified workers therefore find often employment in this city. However, the problem lay in employing low-skilled workers.

Three types of social inclusive activities within rural municipalities have been identified and deeply analysed – sheltered employment (jobs for people threatened by social exclusion), social services and social entrepreneurship. The data shows that social inclusive activities are distributed relatively equally within Czech rural areas. Perception of the utilisation of local natural potential for social inclusive activities within Czech rural

areas is influenced more by social (family) than geographical (local) space. The "shared working team" researched by case study seems to be suitable approach to solving social exclusion and rural poverty at local level. The main benefits of this approach are: to offer job for people who wants to work and are not able to get job in "common" labour market, to improve the public spaces of LAG municipalities, to increase confidence of local population towards disadvantaged people. The results of the paper show that strategies adopted in the face of social exclusion in rural areas should focus rather on community work with people threatened by social exclusion and to offer them protected job.

#### Economic and social disparities among residents in regions

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Keywords: economic and social disparities, residents, region, territorial differentiation

Economic and social indicators show than in Lithuania as well as in other countries, the social, economic and environmental status differences between urban and rural areas are not reducing, and this influences the uneven possibilities of economic independence for the residents and inconsistent economic prosperity for various groups of residents. Negative processes are forming: territorial differentiation between urban and rural areas, relevant socioeconomic differences, social exclusion and inequality, large migration flows. In order to solve these issues, it is necessary to name decision alternatives that would allow identifying economic development directions that are based on knowledge, innovations, entrepreneurship and would ensure sustainable regional development. The aim of the research is to assess the economic and social disparities among residents in terms of territory. In order to reach the aim, the following objectives have been set: 1) to determine the evaluation criteria for assessing economic and social disparities among residents, 2) to analyse indicators that determine economic and social disparities among residents, 3) to name means that would reduce economic and social disparities among residents. After conducting the research, it has been determined that the country's economic situation, changes in the labour market structure and work, the changing environment of country's politics, culture and institutions usually reduces the economic and social possibilities of persons. There has been observed marginalisation of small town and district residents, prejudice; the stereotypes that have been formed in a society influence men and women when choosing a job; it is more difficult for a young person in the labour market who is just starting a professional career and does not have experience or appropriate education. In different areas, there exist high unemployment, small income that is disposed by the households, and the following problems are highlighted: poverty and social exclusion, inequality, emigration abroad and migration from rural regions and small towns to urban areas.

Persistence of high and long-term unemployment on developed rural areas as a result of informal economy and unfair labor practices. The case study from Kuyavian rural communities in Central Poland

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Keywords: Long-term unemployment, structural unemployment, unfair labor, employment disadvantages, rural "moonlight economy'

In recent 10 years unemployment rate in Poland dropped from 21% to 4-6%, when rural unemployment decreased from appx. 25-30% to 7-10%. At the same time some rural communities still face persisting high unemployment (above 15%), being excluded from this positive trend. What is the most interesting - in many cases these communities are of high infrastructure standards, well developed public services and present economic prosperity. In this paper I will discuss structural, institutional and processual nature of this phenomenon and will try to present its possible explanations. Main assumption is that persisting rural unemployment is no longer a result of economical and social breakdown, but it's rather rooted in brand new cultural aspects of rural communities' life. It is a kind of the game with social security system and informal economy, that is played by rural families. It is also an adaptation strategy with regard to growing immigration of cheap labor force from the East. Another explanation is connected with high level of unfair labor practices of rural and small-town companies in contemporary Poland. The paper is based on the field research carried out in 2017 and 2018 in 6 rural communities of Kuyavia Region, Central Poland (98 IDI's and 6 FGI's).

### Geographic Mobility and Immobility among the Rural Poor: Rural Areas as Collecting Grounds for America's Poor?

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Have America's rural areas become a new "collecting grounds" for the poor and other impoverished minority and immigrant groups? Historically, rural areas, both in the United States and Europe, have experienced chronic outmigration of the "best and brightest," including highly educated and skilled young people. The clear implication is that spatial inequality nationally has accelerated, leaving behind rural people in a rapidly globalizing economy. Indeed, a recent paper by Theide, Kim, and Valasik (2018) reported substantial post-2000 increases in concentrated rural poverty, measured by increases in the number of high-poverty counties and the share of the population living in these counties. The

demographic processes responsible for new patterns of concentrated poverty, however, are less clearly understand.

Previous studies have focused primarily on selective out-migration from rural areas. In this study, we focus on migration both into and out of rural counties, including counties with disproportionately high poverty rates (i.e., over 30 percent). Our fundamental goal is to shift the usual focus from selective rural out-migration to rural in-migration from urban areas. Theoretically, we draw on a large urban residential attainment literature which has focused overwhelmingly on the residential mobility of minority populations into predominately white or middle-class neighborhoods (as measured by median income, housing values, or low crime rates). In this paper, we shift attention to rural areas. Specifically, we ask (1) whether new rural in-migrants from urban areas are disproportionately poor and economically disadvantaged; and (2) whether rural out-migrants are disproportionately drawn from non-poor and economically advantaged (e.g., as measured by education) populations.

To accomplish our goals, we use up-to-date and newly available proprietary household data from the Panel Survey of Income Dynamics (PSID) linked with population data at the county level. We nest poor rural people within counties that vary over time along a number of ecological and social demographic indicators, including urbanicity, poverty rates and other indicators of local economic disadvantage, including unemployment, welfare participation, and female headship) from the U.S. decennial Censuses and the American Community Survey.

Unlike most previous studies based on cross-sectional (post-migration) data from the Current Population Survey, Decennial Censuses, or American Community Survey, the PSID allows us to measure both pre- and post-migration poverty among movers. These baseline estimates of poverty are then compared with poverty rates among stayers. Unlike previous studies, we identify flows or streams of migration, focusing in particular on both the origin and destination of poor and non-poor movers. We identify movements between metropolitan and nonmetropolitan counties, as well as between economically-diverse and heterogeneous nonmetropolitan counties (e.g., micropolitan and non-core counties).

More broadly, our study provides empirical evidence of the rural-urban interface (Lichter and Brown 2011), i.e., how systems of inter-county migration between urban and rural areas contribute to growing spatial interdependence and economic inequality in America.

### Sentimental or practical? Young university graduates' motivations to live in rural areas in Poland

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Keywords: young adults, university graduates, motivations to live in the countryside, remote rural areas

From the historical perspective, after year 1989 Polish rural areas and their inhabitants entered the period of significant social, economic and cultural changes, including disagrarization of employment and significant improvement of basic local infrastructure. Apart from that, since 2000, we observe in Poland a positive balance of migration from cities to villages. Still, does it mean that rural areas could be perceived by younger generations, especially highly educated ones, as an attractive place to live? Traditionally, those young people, who decided to study, were convinced that only the city can provide them with satisfactory life opportunities. However, the recent studies show that about 30.0% of university graduates of rural origin decide to settle in their villages. Therefore, it is reasonable to ask what happens to those highly educated young adults who decide to live in rural areas: why they made such choice and what are its implications for young people themselves and their rural communities. The paper is based on 92 in-depth interviews conducted in 2016 and 2017 with young adults (aged 25-34) with the university degree who live in 10 rural municipalities scattered around different regions of Poland. The municipalities selected for the study are located at some serious distance from the largest urban centers and usually no less than 80 km from middle-sized cities. In result, the presented research focuses on more remote rural areas, not on those adjacent to larger cities which are slowly turning into suburbs. The outcomes show that the interviewees' motivations for living in rural areas are often complex and based on a mixture of emotional reasons (e.g. a strong attachment to the place), as well as practical ones (e.g. better housing opportunities than in the city). Fuzzy cluster analysis enabled to divide the interviewees into three groups according to their dominant motivation to live in the countryside: 1) "partner-oriented" type, 2) "community-oriented" type and 3) "joboriented" type. The study shows that each type is characterized by different levels of the interviewees' community engagement and their future plans about leaving or staying in the countryside. Relationships between the distinguished types and the interviewees' socio-demographic characteristics, as well as their educational and professional choices are also analyzed.

#### Understanding immigrant women underemployment in Northern Iceland

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University of Akureyri

Keywords: Immigration, gender, employment, labour market, Iceland

Iceland has gained attention within the past decade both for becoming sought-after destination country for migrants and for their constant engagement to extend gender equality within their societies. However, immigrants living conditions and gender have rarely been connected in the public discourse, and the living and working conditions of immigrant women have been largely ignored. This study examines the labour market situation of immigrant women in rural Iceland.

Marginalization remains a problem for many immigrant women within the rural labour market. Research shows that labour force participation rates are lower among immigrant women, and that underemployment is more common amongst immigrant women. A pilot study realized at the University of Akureyri shows that immigrant women are one of the most vulnerable groups of people in the labour market in Iceland.

Many women occupy positions that do not fit with their level of education; despite having higher education-levels than men, 30% of immigrant women who took part in a survey in 2016 among 20 immigrants in the North of Iceland are in employment that does not suit their background, compared to 8% of Icelandic women. This difference has a direct impact on the income and immigrant women earn significantly less than Icelandic women (or immigrant men), as they are in occupations that do not take their education into consideration.

It investigates in particular job mismatch among immigrant women and examines existing practices which might focus on lessening the gap between women's skills and their current position in their respective host countries. Findings indicate that improving proficiency in the local language, encouraging hesitant employers to hire immigrant women and improving the confidence of women in their capabilities could be efficient measures to tackle the underemployment of immigrant women in Iceland.

#### LEADER – an instrument for spatial justice? – a comparative study across Europe

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Keywords: LEADER, spatial justice, social justice, social inclusion, community development

The LEADER acronym specifically references actions that develop the rural economy (Liaison Entre Actions de Développement de l'Économie Rurale). It is aimed at spatial justice and territorial cohesion as trying to reduce rural disadvantages in general in relation to urban areas. Yet, particularly by those who implement it on the ground, LEADER has been viewed primarily as a programme for bottom-up, place-specific rural development. As a consequence, some (but not all) LEADER programmes have been able to target, to a greater or lesser extent, places and types of people considered to be at disadvantage within the rural area . They have done this by targeting actions on, for example, towns and villages with high levels of deprivation, rural women, young people, older people, people with disabilities and migrants — Dax and Oedl-Wieser, 2016; RELOCAL, forthcoming).

Arising from case studies carried out for RELOCAL, a Europe-wide study of the justice of community-level development, this paper asks the question: 'How and with what results has the LEADER Programme addressed spatial (in)justice across Europe?'. We discuss this question with specific regard to the 2007-2013 and 2014-20 programming periods, across three territorial tiers and drawing from diverse materials assembled to address the multi-dimensional RELOCAL conceptual framework (https://relocal.eu).

We first consider political intentions and policy at the EU level of LEADER; then how EU LEADER policy has been interpreted and implemented through three different national administrations (England, Hungary and Romania); we then focus in on the experience of three respective local action groups (LAGs). We consider the national context of policies for social inclusion and economic development, within the context of increasing territorial and social inequality, both within and between regions. Thus, the paper looks at both social and spatial (territorial) justice questions, and considers (Shucksmith, 2000; RELOCAL, forthcoming) to what extent there are trade-offs in LEADER actions between reducing disparities between rural and urban regions and addressing disparities within the Local Action Group area.

### Inequalities, disadvantage and displacement: neglected dimensions of rural gentrification?

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Keywords: rural gentrification, displacement, assets, England

Inequality and social disadvantage have long been central motifs within the study of gentrification, often bound into notions of displacement that have been viewed as a definitive of, at least, critical perspective on this concept (see Slater 2006, 2008). There have, however, been suggestions that displacement has itself become displaced from this central position (Slater 2006), and claims in both urban and rural contexts that replacement rather than displacement might characterise many instances of so-called gentrification (e.g. Hamnett 2003; Halfacree 2018). Set against these arguments, it is possible to identify signs of a resurgent theoretical and empirical concern with displacement and associated issues such as inequality and social disadvantage, at least within urban studies (e.g. Slater 2009; 2010; Davidson and Lees 2010; Davidson & Wyly 2012; Zhang and He 2018). Such work can be seen to highlight the significance of inequalities and transformations in a range of opportunity structures beyond housing and labour markets that have long formed a central component of gentrification related displacement, including access to public and private services, consumption opportunities and affective connections with people and places. The current paper seeks to explore whether rural research could draw lessons from such work, drawing on an ESRC funded comparative study of villages in five rural districts of England. Employing an asset-based theorisation of gentrification, it is argued that displacement needs to be viewed as a multi-dimensional expression of inequalities in opportunities to access to material, communicative and affective assets. Attention is drawn to the significance of the spatialities of these assets and their connection to ideas of direct and indirect forms of displacement that have emerged from the work of Marcuse (1985, 1986), and also to the temporal dynamics of gentrification and displacement, with often exhibit both asynchronicity and extended duration. It is argued that these features demonstrate the significance of 'relations of exteriority' (De Landa, 2006) within the formation of gentrification, but that displacements, and associated issues of social inequalities, disadvantage, isolation and exclusion, are very much in evidence in the contemporary English countryside.

#### Facing inequality in Northeast Germany: Neighbourhood as a social resource?

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As in many European countries, the German political and scientific discussion on the situation of rural areas aims at the identification of "hidden" resources to face the problems of changing living conditions. One key concept assumes the Anglo-American approach of "caring communities". In doing so, it is on the one hand, acknowledged that the German Welfare system is no longer able to grant the equal living conditions in the countryside however, on the other hand, the discussion about "carers" and the need for care remains still unsolved.

For example, the concept of "caring communities" refers to an increasing responsibility for people including elderly people. Older people are now perceived as healthier, having a higher education and more financial resources compared to past decades. But is this true for all regions in the same way – or are rural areas in this respect underprivileged? At the same time, the images of ageing have changed. A higher age and the time of retirement are connected with the concept of activity and volunteering. The neighborhood in villages and small cities is still considered to be "sound" and therefore able to take over more responsibility. It seems that an old pattern of harmonious rural life conditions is assumed to continue even in scientific conceptualisations and political purpose.

Our presentation puts the social potential of rural neighbourhood under particular scrutiny referring to an empirical research carried out (by us) in 2014/15 in northeast Germany, Mecklenburg-Vorpommerania. Starting with the main features of the current international discussion on neighbourhood, we will refer to the fact that neighbourhood in social sciences it still a non-rural topic. Neighbourhood has been stressed on the one hand, in the context of anonymity and social alienation and on the other of "social capital" and networks, however both discussion lines are related to concepts of "modernity" and non-urban regions are seldom considered.

Our research allows for the comparison of social relationships in Northeast Germany in a more "village" and more "small town" neighbourhood. Based on large empirical material, the question concerning "neighbourhood support and caring" can be discussed on a solid base: age comparison, interest in caring, and evaluation of neighbourhood relations in general.

Our results show that the concepts of "caring communities" or neighborly help seem to be questionable, or at least difficult to implement. If such neighborly help initiatives are

used as replacement for governmental or public tasks (for example, the "Bürgerbus" which replaces the public transportation especially in rural areas), volunteering becomes enforcement, because people and the local community are addicted to these services and therefore it is conceivable that "caring communities" help to create or strengthen (new) inequalities.

### Examining Poverty, Inequality and Social Disadvantage in Rural Nigeria using Opportunity Structure Theory

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Keywords: Poverty, Inequality, Social Disadvantage, Opportunity Structure, Rural Nigeria

Rural Nigeria represents more than half of the whole country which makes it significant enough to be reckoned with and where resources should be channelled to facilitate development and sustainability. Farming or other agricultural activities are predominant business in rural Nigeria due to availability of fertile and abundant land mass. More than 80 percent of Nigeria's farmers are smallholder farmers and they are the main producers of over 90 percent of domestic farming output in rural communities. Despite being characterized with huge landmass and various natural resources, poverty, inequality and social disadvantage is visible across rural areas. In Nigeria, poverty is especially extreme in rural areas, where up to 80 percent of the population lives below the poverty line, and social services and infrastructure are limited. Rural poverty in Nigeria is evenly distributed across the country, rather than concentrated in specific geographical areas while the rural populace are faced with very limited employment opportunities besides farming and fishing. Inequalities are witnessed in rural areas as a result of unequal distribution of the gains from economic growth with concentration in urban centres and cities. However, enormous opportunities abound in the rural communities with availability of huge land for farming, rural industrialization and rural entrepreneurship, as well as natural resources with tourist sites. Rural is beautiful and powerful, it can feed and grow the whole nation but it cannot develop herself unless innovative ways and approaches are employed. In this paper we appraise how opportunities for rural economies may affect rural development among various community types. There is a need to better understand not only the relation among poverty, inequality and social disadvantage and rural development, but also what opportunity structure drive or hinder the development of rural economies in different communities. The article contributes to the debate about the relationship of opportunity structure and rural development from two perspectives. We

examines rising and persisting poverty and inequality in rural contexts. Secondly, we also address how different national welfare systems influence the structure, availability and governance of opportunity offers in rural areas and what it means for social disadvantage.

### A Sure Start? Child welfare services, professionals and the recreation of socio-spatial inequalities in Hungary

Alexandra Szőke, Hungarian Academy of Sciences

Keywords: early childhood prevention, Sure Start programme, socio-spatial inequalities, welfare professionals, Hungary

Sure Start houses were set up in Hungary in the early 2000, adapting the British model, to combat social exclusion and compensate unequal opportunities related to socio-spatial inequalities. The underlying idea is that disadvantages should be addressed at the earliest possible age, as development can be influenced the most at this period. As such early intervention in the long-run can break the reproduction of social problems related to poverty, exclusion and segregation. Thus Sure Start houses were set up mostly in remote rural areas or town segregates, offering for families early developmental services, assistance, healthy food, washing opportunities, parenting advise and a place to play together.

My paper examines the complex and often contradictory effects of this welfare programme on socio-spatial inequalities and exclusion. Even though the working of these houses are centrally financed and regulated, my year-long ethnographic research conducted in three locations (remote village, small town and the capital) shows that in fact these houses are very differently organised with diverse outcomes in the different locations. This is partly linked to the discretionary power of the professionals working in the houses and partly to the structural constraints and opportunities within which they work. Due to limited funding, the availability of local resources and professionals largely determines the quality and content of the service, resulting in the reproduction of existing socio-spatial inequalities. The more remote rural areas with little resources are not able to provide the material circumstances and developmental services that would be needed to compensate the place-based disadvantages of their clients, whereas in the capital or well-situated towns the houses can easily draw on local resources to offer multiple and good quality services. However, the everyday interaction of professionals with parents have the potential for both alleviating and reinforcing socio-spatial inequalities, depending on the attitude and personal conviction of the professionals. Through these personal interactions they can not only propagate certain ideals and norms of child raising, but also reinforce lines of social exclusion and the wide-spread

differentiation between deserving and undeserving citizens. At the same time, these interactions can also lead to the opening up of informal and non-state channels of assistance that can alleviate exclusion and poverty. Thus my paper argues that we need to examine both the structural frameworks and the everyday workings and interactions, and attain a spatially sensitive angle in order to uncover the complex and often contradictory effects of such programmes.

#### The Dynamics of Low Income in Rural Britain 1991-2008: analysis of the BHPS

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This paper analyses the dynamics of low income in rural Britain between 1991-2008 by comparing a rural sample with a non-rural sample using the British Household Panel Survey of around 7,000 households who were surveyed each year during this period. In the most general sense, we seek to examine rural and urban income distributions and inequality. More specifically, we focus on low income mobility, the distribution of low income spells, the characteristics of those on low incomes and possible trigger events associated with low income entry and exit across the rural and urban samples. We also consider the impact of policy changes during this period, notably the election of the 'new Labour' government in 1997 and their social policy reforms which are shown to have led to substantial decreases in poverty. The results reveal that both rural and urban poverty fell from 1999 when Labour began to introduce their spending programme and reforms: comparing 1991-99 with 2000-08, rural poverty fell from 17% to 13% while urban poverty fell from 19% to 16%. Notwithstanding that rural poverty was slightly lower than urban, 50% of households in rural Britain experienced at least one spell of low income during this 18 year period (compared with 56% of urban households). This reveals that rural poverty is not a minority experience ("pockets of rural poverty") but that half the population of rural Britain was at risk of poverty over this period. The analysis examines how the composition and incidence of poverty changed during that period, with reductions in poverty in old age and in child poverty, for example, and assesses the role of different policy measures. The paper also reveals a number of important dynamic aspects of the rural low income problem, such as the greater persistence of low pay in rural areas and the growing importance of poverty in work and in self-employment.

# Whither sustainable livelihoods? Understanding rural inequality through a political economy-informed livelihood pathways approach

Mark Vicol, University of Sydney

Livelihood approaches to understanding rural poverty and inequality in low-income countries have had a significant influence over the last three decades. Such approaches have enabled a welcome shift in rural poverty research from conventional econometricdriven and single sector analysis to a 'people-first' approach that takes the individual lifeworld as the starting point of analysis. However, in recent years formal livelihood frameworks have increasingly been critiqued as 'a method in search of theory': that is, pre-occupied with micro-individualism and agency, particularly in the unproblematised and overly-instrumental use of the livelihood capitals framework. This is at the expense of understanding the broader social and political relations that structure livelihood possibilities and outcomes. In response, Ian Scoones (2015) has recently proposed an integrated approach that combines the insights of livelihoods analysis with critical agrarian political economy. Such a combined approach can address critical questions of why certain livelihoods are possible for some, but not for others. There remain, however, theoretical tensions in combining these two different frameworks, particularly because for agrarian political economy the primary analytical category is class, while for livelihoods the focus is the individual or household. This paper proposes that a livelihood pathwaysbased approach provides a way forward for resolving these tensions. This is illustrated with reference to insights from a study of contract farming in Maharashtra, India.

#### The "ruralisation" of housing crisis in Hungary: the transformation of allotment gardens

András Vigvári, Hungarian Academy of Sciences

Keywords: housing mobility, rural-urban fringes, transformation of rural areas

This paper concerns the ruralisation of housing crisis throughout the transformation of allotment gardens. Peri-urban rural fringes have historically played a key role at uneven spatial development throughout the social history of Hungary. These areas have traditionally fulfilled an intermediary role in demographic flows between urban-rural developmental hierarchies shaping an affordable housing close to the urban core areas. The housing usage of allotment gardens is the latest phenomenon of spatial exclusion and housing crisis in the peri urban areas showing the "ruralisation" of housing exclusion after the 1990s transformation.

Hungarian allotment gardens ("zártkert") are situated outside of the administrative border of the city therefore these are registered agricultural but not residential areas. One consequence of their remoteness is that these gardens are usually lacking communal services, e.g. public utilities are not connected and the post service does not reach out to them either. During state socialism these garden plots served as mixed farming and recreational spaces. However, after the regime change in 1989, these recreational activities and agricultural functions declined and these spaces gave housing function because of their still optimal geographical proximity to the city and the cheap dwellings available there.

In my paper I give a brief overview of the most important theoretical points of my anthropological investigation that was based on my field work experience at an eastern suburban neighbourhood in Budapest. The focus of my research was to understand how the former rural allotment gardens have been transformed after the post-socialist transformation in Hungary and what kind of new post-rural functions appeared since the regime change there. My research question is in correspondence with the broader theoretical framework of how residential areas in post-socialist urban centres have been shaped in and around the city and how excluded people shaped the former rural areas on the peri urban edges into habitable places.

# Working Group 6: Politics and policies of rural authenticity and the return of nationalism and populism

Spectres of the 20th Century Political Ideas and the Nowadays 'Authentic Rurality': An Analysis of the Romanian Public Discourse on agri-food issues

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Keywords: rural authenticity, agri-food policies, food advertising, nationalism

Recent research on Romanian consumers' buying behaviour patterns shows that about 81% of the food that Romanians buy in one month is produced in Romania. About 92% of those choosing national products are mainly targeting perishable food: dairy, meat, fruits, vegetables. The main reasons for buying these products are the desire to support Romanian companies, small producers and, in general, the national economy and the perception that the domestic food is more natural, fresher, safer and has a better quality. The way consumers relate to Romanian products is consistent with the public discourse

on food and agriculture, which has lately been marked by strong ideological elements that inoculate a very specific way of understanding authenticity by referring to rural areas. The expressions of the public discourse range from naive food advertising that outline idyllic pastoral images of the countryside as a source of authenticity to impacting political action such as the adoption of the Romanian Law 150/2016 on the marketing of food products. The latter has forced large retailers to purchase at least 51% of agricultural and food products from local producers (short food supply chains), which has raised concerns about compliance with the principle of free movement of goods. As a result, the European Commission has launched an infringement procedure against Romania. The present paper discusses the concept of 'authentic rurality' in relation to the agri-food sector by analyzing: agricultural and food policies, public speeches of political actors and advertisements of the best sold Romanian food products.

### Back to the authentic and good life? Between political and media narratives and the experience of rural incomers in times of crisis, in Greece and Portugal

Elisabete Figueiredo, University of Aveiro, Portugal

Despite the wide and well-documented transformations in rural areas in Europe, there are persistent and widespread assumptions that identify the rural as the opposite, and often alternative, to the urban and that portray the rural as unchanged and unchangeable. Frequently, those assumptions are based on a representation of the rural as 'authentic' and 'genuine', keeping the 'true' character, values and soul of a given country, contrasting with the 'artificial', 'problematic' and ever-changing nature of urban areas. These representations are related to the notion of rural idyll and tend to portray the rural as the epitome of the 'good' life. Although these are relatively long lasting images of the rural, they seem to be restored and reinforced in times of financial and economic crisis by political and media narratives, as recently happened in Greece and in Portugal.

Those narratives — with strong similarities with the 'ruralist conservatism' conveyed during dictatorship times (particularly in the Portuguese case) — became more evident after 2008, increasingly and mutually reinforcing the social construction of the rural as a 'space of refuge' from the 'urban-centred crisis'. Both in Greece and in Portugal — the two cases analysed here — the times of crisis were fertile in evoking the rural as authentic and full of opportunities mainly in agriculture and tourism-related businesses, particularly for younger generations, stressing, at the same time, the successful examples of relocation and the prospects of a better and rewarding life in the countryside .

Our aim is to analyse and debate the content of the political and media narratives on rural authenticity in times of financial crisis and to compare it with the concrete experiences of people that relocated in the countryside since 2008, highlighting the diversity of situations, motivations and adaptation strategies. The analysis is based on an unstructured and exploratory examination of the political and media narratives on the 'back to the countryside movements', together with the (also exploratory) analysis of 24 interviews with people that have returned to or relocated in the countryside during the times of crisis.

#### Of betrayal came mistrust

Bjørn Egil Flø, Norwegian institute of bioeconomy research (NIBIO)

Gradually, throughout my 20 years as a rural sociologist I have seen a growing mistrust to politicians, bureaucrats, institutions and even researchers. But the first 10 to 15 years I was almost blind for it, I was so busy doing what I thought was my job – finding concrete solutions to the rural communities different challenges – that I didn't really listen to the stories they told me. But all changed when I met a retired fisherman on a pier towards the Westfjord a windy winter day in 2004.

This paper is a retrospective and partly a autobiographic text based on the authors own experiences from more than 7 years as an electrician at a shipyard in western Norway back in the 1980'ies, and data from different interviews with rural people all over Norway from 2004 till 2017.

In more and more of our rural communities, fishing hamlets and mountain villages people are feeling that they are drained out as a community and left to die alone. The politicians that grew up in the 1980'ies and onwards don't reach them with their rhetoric anymore and they are feeling powerless and betrayed. The traditionally strong Norwegian rural policy have gone slowly from a rural policy were the state took the responsibility to a systematic individualization of the responsibility for own success. We have gone from a strong morally based rural policy to a neo-liberal rural policy defined by a naive believe in laissez-fair economy, privatization, tax-reduction, deregulation, free trade and reduction in public spending. Together with less political attention to rural issues, more professionalised politicians and an active degrading of the national state in favour of international agreement and global actors, a feeling of betrayal started to grow. And the betrayal fed the mistrust

But there are still time, there are time to slow down. Time to start seeing, time to listen. Maybe that will help us to re-discover the importance and the mutual benefit of both urban and rural prosperity.

### Protest Activity and Processes of Social and Political Mobilization Among Polish Farmers: the Past and the Present

Grzegorz Foryś, Pedagogical University of Cracow

Keywords: mobilization, farmers protest, political-national and economic interests

As a result of modernization processes, the peasant class became a subject capable of engaging in collective activities whose goal was not only to change their position or defend their own interests, but also to contribute to modernization processes.

This also applies to the processes of emancipation of Polish peasants. In the period of the last one hundred years, protest activity of this social class (i.e., peasants, and later farmers) can be divided into three phases with distinct social, economic and political conditions, in which the discussed social category was functioning and engaging in collective protest activities. These were: the inter-war period (1918-1939); the period of real socialism (1945-1989) and the 3rd Polish Republic (since 1989). In each of the periods, the peasantry class was undergoing emancipation, professionalization and transformation into farmers, and later agricultural business people. Additionally, the determinants and mobilization capabilities of those classes were changing.

Protest activity of Polish peasants and farmers in the above-mentioned periods had several dominant characteristics. First, it was cyclical, which seems quite obvious, since it is impossible to be permanently ready to engage in protest activity. Second, the cyclicity was mostly caused by broadly understood economic reasons. Third, apart from economic factors, national and political issues played an important role in mobilizing protest activity in this social category. Of course, the importance of these factors differed between the inter-war period, the Polish People's Republic, and the last three decades. Fourth, the activities were initially organized by political organizations (in the inter-war period), which were later replaced by trade unions (in the Polish People's Republic and the three decades after 1989). Fifth, the scope of forms of protest has evolved, from mass meetings, marches and strikes in the inter-war period, through strikes and petitions in the times of real socialism, up to road blocks, occupations of public institutions and destroying produce after 1989. Sixth, the demands raised during peasants' and farmers' protest actions have always been mainly economic; political demands were uncommon (which confirms the previous statement about the economic foundation of peasant and farmer

protests). Finally, seventh, we can see a clear upward trend as regards the effectiveness of protest activities in the three above-mentioned periods.

In this article, I would like to focus mostly on mobilization capabilities of farmers and agricultural business people in contemporary Poland. Which model of interests articulation properly describes their protest activity?

#### The material preconditions for the rise of populist movements: the case of Norway

Eirik Magnus Fuglestad, Ruralis – institute for rural and regional research, Norway

In the wake of rising populism channelled mostly through right wing nationalism in much of the European continent, Norway has been different in that its strongest populist expressions have been centre left. Also more strongly than in most European countries, this expression of populism has had an almost exclusively rural dimension, where grievances are directed from the peripheries of the country towards the centre. This is not a new situation in Norway; the country has a long tradition of left- wing or centrist rural popular dissent towards the centre. This has strongly influenced conceptions of the rural and the national, as well as ideas of what Norwegian modernity and authenticity is. This paper will take a historical materialist approach, focusing on property regimes and class relation, to first do a brief analysis of the peculiar Norwegian tradition of left-wing/centre rural dissent. Then, the paper will discuss this analysis in the context of the current rise of populism in Europa and the US. What can this analysis tell us about the nature of populist movements and the material preconditions for their emergence?

# Food and nutrition security in the age of re-emerging nationalism. Evidences from the public debate

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The recent rise throughout Europe of political movements that develop sovranist and populist narratives tend to magnetise food and rural discourses revolving around topics such as food heritage preservation, 'locavorism', cultivated biodiversity, employment and landscape protection, food and nutrition security. The widespread emphasis on these topics is being increasingly enrolled in conservative political views, sometimes in open opposition to the free movement of people and goods. Among those topics, food and

nutrition security is probably among the least investigated in its correlation with sovranist and populist narratives.

An in-depth analysis of the media debate on food and nutrition security along eight years has been applied in the countries involved in the EU-funded Transmango project (Austria, Belgium, Finland, Ireland, Netherlands, Latvia, Lithuania, Spain and UK). The project aimed at exploring vulnerabilities in the European food system and among more marginalised social groups that may determine food and nutritional insecurity. The comparative reading of the outcomes led to identify twelve perspectives from which food and nutrition security is perceived and debated: Ecological, Free trade, Quality, Solidarity, Social, Sovereignty, Technology, Wholesomeness, Food Citizenship, Individualism, Patriotism, Regulatory. The twelve perspectives have been then analyzed in their mutual relations and aggregated into competing frames shaping the food and nutrition security debates in Europe: a 'regional sustainability' frame and a 'global efficiency' one, plus two minor but emerging frames named as "food for the poor" and "state-centred".

Some of these perspectives seem to echo the populist and nationalistic political positions. This is true in particular for the Patriotism frame (mainly identified in Nordic countries like Finland and Lithuania), in which food and nutrition security must be first and foremost granted by the strength of national production in autonomy from global market forces. This would occur in opposition to the free trade discourse or as a way to safeguard national interests in a globalized world. The role that large corporations play for national food self-sufficiency is also highlighted: they are not seen in opposition to small producers, but as key actors of an excellent national food sector to be proud of. Other perspectives, like Sovereignty, Quality and Food citizenship, present across a larger number of countries, are characterised by elements that can explicitly or implicitly support a view of food and nutrition security concerns based on self-reliance and national pride. Further studies on this aspect would shed light in similarities and differences between countries.

## The roots of the nationalist use of rurality: rural propaganda during the Fascist Italian regime

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The rise of nationalistic and populist movements across Europe witnesses the crisis of the cultural appeal of modernization and globalization, and provide a challenge for those still looking at the perspective of an open and inclusive society. A different line of "alternative"

thinking has been represented in the last decades by the emergence of concepts like "authenticity" and localness in the social debates about rurality and food. In recent years the latter elements are being increasingly enrolled in the populist and nationalist narratives, linking the preservation of rural territories and food traditions to a conservative, if not reactionary, political perspective.

To better analyse these trends it is worth looking back at a past which may seem remote in strictly chronological terms, but also close to the contemporary challenges, where the roots of this conservative rural discourse can be traced back. The rural rhetoric of the Italian Fascist regime provides an interesting example in this regard, not least because of its influence on many other countries at the time, and give insights into possible ideological drift of these narratives.

Rurality was more than one of the 'discourses' produced by the regime, to become a pillar of its ideological construction. This rhetoric had deep roots in the Italian society of the time: urbanization had created a newly urbanized class sensible to 'rural nostalgia', and countryside was often described by the media as a cradle of traditional values vis-à-vis easy-going urban lifestyles. In this context the regime promoted the image of a country that had to be more 'rural' than 'urban', as stated in an article published in 1928 by Mussolini himself.

Beyond this broad cultural landscape. the link between fascist propaganda and rural rhetoric was rooted in specific policies. In this sense, the rural discourse can be seen as a structural component of the fascist political action, rather than a cultural superstructure. Policies like land reclamations and battle for wheat were indeed 'used' to increase the regime's popularity, but before this, they were even designed and planned according to their propaganda potential rather than for the true interests of the agrarian sector (often sacrificed in favour of the manufacture). Besides, through the image of 'heroic' pioneers who were rescuing the marshlands, the regime presented the land reclamations as 'battles', and the peasants as 'soldiers' on an internal war front, paving the way to a wider, and more dangerous, militarist enthusiasm.

# The smaller the better? Political Narratives on Immigration and Migrant Integration in Rural Norway

Guro Korsnes Kristensen, Berit Gullikstad

Norwegian University of Science and technology (NTNU)

Over the last decades immigration to Norway has increased, and today immigrants are represented in all Norwegian municipalities – including the most remote and rural parts of the country. In some small municipalities, labour migrants account for a substantial part of the population, in others there are more refugees. Whereas labour immigration is directly related to the labour market and the industry in a region and not neccessarily part of a political strategy, the settlement of refugees is a political decision where the local government can decide if, and how many refugees, to settle. The increase in the number of people to be settled during 2016 placed strains on the capacity of the municipal services. Thus, the central government provided economic incentives for five years after settlemet, causing many small municipalities to welcome rather high numbers of refugees. When the number of refugees coming to Norway decreased in 2017 and 2018, the situation has turned to a "fight for the refugees", where both rural and urban municipalities are trying to convince the central government that they are the best place to settle new refugees. At the same time, quite a few municipalities are experiencing economic problems due to refugee settlement as quite a few of the refugees have not become part of the labour force but instead relyiong on public welfare systems when the economic incentives from the central government had stopped.

The aim of this paper is to explore the ways in which the experiences with immigration and migrant integration are narrated by local politicians in some selected rural municipalities. What is presented as positive/negative immigration and successful/failed migrant integration – from the perspective of the local community? Is success and/or failure explained by specific local characteristics – and if so; what are they? Which imaginaries of the local community and 'the locals' do these narratives produce, and how do the various narratives about rurality, place and groups of inhabitants relate to national discourses on rurality, immigration and integration?

The paper is based on qualitative interviews with 14 mayors from selected rural municipalities in Mid-Norway, and the main analytical tool has been narrative analysis.

#### The re-emergence of the rural in the current political conflict

Pavel Pospěch, Masaryk University

Keywords: rural, populism, urban-rural divide, culture

The rural-urban divide has been declared for dead many times over the course of the 20th century, yet the distinction remained surprisingly resilient. In recent years, we are witnessing a resurgence of the topic from an unexpected and disturbing angle: populist leaders from across Europe and United States proclaim themselves to be champions for

the rural people against urban elites and the rural-urban divide is gaining an unprecedented political momentum.

What did the rural do to deserve this? – this is a question that we must ask in face of the current development. Why, among all the potential conflicts between liberal cosmopolitanism and conservative-populist nationalism, has the rural been elevated to such a prominent position? This paper argues that to answer this question, we must look at how structural features of rurality are culturally recoded in the populist discourse. Poverty and deprivation, localism, patriotism, leisure and thrift – all these qualities may take on different manifestations in rural and urban areas respectively, and these differences can be culturally coded in different ways.

In this paper, I will draw on neo-Durkheimian sociology to analyse the civil codes which the current discourse employs. I will also build on the cultural turn in rural sociology to present the rural - rather than as an objective entity - as a signifier which must be filled with meanings. On this theoretical background, I will attempt to show how populist movements recode structural features of rurality to produce a new sacralisation of the rural and to locate it at the heart of the current political conflict.

#### Dealing with the option of wind energy development on the island of Amorgos

Maria Proestou, Humboldt Universität zu Berlin

Achievement of a low carbon economy involves transition to bioeconomy accompanied by European, national, and federal state policies and characterized by conflicts over land. The German Renewable Energy Act supported agricultural biomass production for energy purposes reflected in the excessive silage maize cultivation for biogas. The biogas boom has caused increasing land rental prices in rural spaces and land competition, thereby endangering participation of small farms in bioeconomy value chains.

Farm diversity is a societal demand and a policy objective at EU and national level. Current institutional settings fail to govern land use for energy production purposes in the light of incomplete implementation of existing regulations. According to the current discourse on land markets, non-agricultural purchasers of land and non-local investors have a competitive advantage and drive family farms out of the market. The political discussion on bioenergy triggered agricultural policy design changes reflected in the Agricultural Structural Protection Law drafted by the federal state of Lower Saxony in 2017. We explore the content and rationale of this law issued by the then government of Lower Saxony namely a coalition of the German Social Democratic Party and The Green Party. The analysis shows that the drafted law restricts the expansion of large farms, prioritizes

land access for local farmers, discourages non-agricultural buyers from entering the market, and seeks to prevent the entry of shareholding companies into agricultural land markets. For example, the proposed policy defines land purchase as disadvantageous land allocation if the buyer is a non-farmer or owns more than 25 percent of the agricultural area located in the respective municipality, thereby preventing land sale or land lease to large-farm owners.

According to our analysis, the drafted law involves populist elements. Populism focuses on the antagonism between the masses and the enemy and/or its symbols. Following the current discourse, external non-agricultural investors constitute symbols responsible for structural changes caused by increasing land rental prices in the wake of the biogas boom. External buyers are also associated with unsustainable farming practices and negligence of agro-ecology in favour of benefit extraction. The drafted law gives rural residents higher purchase priority than external buyers by considering rural residents better managers of the land without explanation.

#### Revisiting the 'Politics of the Rural' in the Age of Populism

Michael Woods, Aberystwyth University, UK

Keywords: Rural Politics, Rural Protest, Populism

A recurrent feature of the recent rise of populist or insurgent political movements in several parts of the world – ranging from the Brexit vote in the UK, increased support for right-wing nationalist and populist parties in Europe, to the elections of Trump in the USA and Bolsonaro in Brazil – has been an apparent rural-urban cleavage in voting patterns. Rural support for populist or insurgent candidates and positions has been associated in public discourse with economic marginalization in the context of globalization and political and cultural disconnection with perceived 'metropolitan liberal elites'. However, rural discontent is not new. There have been sporadic rural protest movements – some with an electoral dimension – in several countries since the 1990s. In earlier research (Woods, 2003, Journal of Rural Studies), I linked these movements to the disruption of settled rural policy regimes and a shift from a 'rural politics' to a 'politics of the rural' in which the meaning and management of rurality was the core issue of concern. This presentation positions recent expressions of rural populism in this longer trajectory. It traces connections between earlier rural protest movements and contemporary populist movements and considers whether the 'politics of the rural' thesis can be employed to understand recent political developments. The presentation draws on data from a number of previous studies of rural politics and protests undertaken since 2000 in the UK, USA, France, Australia and Brazil – including data from interviews and questionnaire

surveys with activists, field observation and analysis of media reports and election results – and combines this with an initial analysis of contemporary evidence from secondary sources including media reports and election data. The paper aims in part to outline an agenda for possible further research.

#### Working Group 7: Organic 3.0: beyond old binaries, beyond organic?

#### Moving towards Organic 3.0? Stories from New Zealand dairy farmers

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Keywords: decision-making, profitability, system resilience, biological, dairy

Following economic policy reforms in the mid-1980s, New Zealand has been recognised as a model of unsubsidised agriculture. This is considered a positive achievement by neoliberal proponents, but also raises issues regarding environmental impact, including claims that the environment is subsidising the sector. Environmental degradation, especially of waterways, and social pressure has led to the introduction of regulation restricting nitrogen leaching from dairy farms, and, in some regions, the ability for dairy farmers to expand their operations. Many farmers experience that these regulations are pushing them to become semi-organic, and as a result, some have made the journey to become certified organic.

For a majority of dairy farmers, profit per hectare has become the new business model as regulations are increasingly restricting intensification. Although there is an increase in dairy farmers converting to organic production, the combined economic and environmental pressures are also eliciting 'non-organic' strategies, such as biological production. Thirty semi-structured interviews have been conducted with organic, biological and conventional dairy farmers across New Zealand to investigate what they see is the relative advantage behind the choice of their system and where they are heading in the future. Two common ways of increasing profit per hectare is (1) through adopting practices which lead to lower operational costs, or (2) adding value by, for instance, producing organic, grass-fed, or ethically sound products. Some of the farmers entered into organics for the movement and its principles, whereas some entered due to the offered premium but have since become convinced of the organic message. Many biological farmers state that their advantage is efficiently lowering their costs whilst improving soil and animal health without being hampered by the inflexibility of organic certification. Most conventional farmers see organics as too contentious but see biological production as a future potential possibility. Thus, biological production is often seen as a middle way between organic and conventional, and is getting increased traction.

Despite being a 'non-organic' strategy, perhaps biological production is the way for New Zealand dairy farmers to move towards organics? I will present a number of case studies and shed some light on the New Zealand perspective and illustrate the different steps that farmers are taking to improve their profitability and environmental footprint. I will also discuss how the rise of biological production as a movement might fit in with the vision of the Organic 3.0 document.

#### The driving forces of institutionalisation: the spread of organic farming in Romania

Megyesi Gergely Boldizsár, Centre for Social Sciences, Hungarian Academy of Sciences

Keywords: organic farming, institutionalisation, Romania, organic movement, organic markets, rural policy

#### Theoretical back-ground

The paper aims to explore the factors enabling the spread of organic farming, using the example of Romania. The development of the organic sector has been extensively studied in the scholarly literature (Alroe and Noe, 2008; Michelsen, 2001; Rigby et al., 2001; Stolze and Lampkin, 2009). Most of these papers focus on statistics, for example, the proportion of certified organic farms; the development of certified organic areas; the development of policies enabling the spread of organic farming. In addition, the attitudes and characteristics of farmers are frequently discussed issues. Michelsen (2001) offers an institutional analysis to describe the co-evolution of organic agriculture, agricultural and rural policies together with the food market in Europe. Moschitz et al (2015) analyse the institutional development of organic farming in Czechia (2015), and compare the Polish and Czech organic sector (Moschitz and Stolze, 2010).

The literature also includes a focus on the farming sector, including farmers' motivation to convert to organic principles (Fairweather, 2004; Kerselaers et al., 2007; Lamine and Bellon, 2009) and on attitudes toward organic methods (Padel, 2001; Storstad and Bjørkhaug, 2003; Sullivan et al., 1996; Zagata, 2009).

#### Methods

The research in this paper has made use of qualitative methods: document-analysis and semi-structured interviews (Gerring, 2006; Kvale, 1994; Yin, 2009) conducted with organic producers, decision-makers, members of control bodies and civic associations between 2014 and 2016.

#### Results

Based on our analysis we argue that there are three main driving forces behind the institutionalization of organic farming. The first point to be discussed is that organic farming originally had a strong (social) movement character (Kaltoft, 2001; Padel, 2001; Tovey, 1997) in Western-Europe. The second driving force under discussion is the market. The third driving force of the institutionalization of organic farming, according to the literature, is linked to agricultural and rural policies (Michelsen, 2001; Rigby et al., 2001; Sutherland et al., 2012). The analysis of the Romanian case also showed the direct and short term influences of rural policies. It will be argued that the three driving forces are present simultaneously, thus it is worth analysing them together to understand the contemporary development of the organic sector.

#### A relational perspective of the trajectory of the organic sector in Austria

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Keywords: organic farming, relational sociology

In Austria, 24% of the UAA is certified organic. A number of explanations have been advanced to explain why organic farming was so successful in Austria, including supportive public policies, the early cooperation with supermarkets, and the high share of mountainous areas that are not amenable to 'modernization'. However, these explanations are only partly satisfactory as e.g. Switzerland or Bavaria have a broadly comparable topography, organic farming has also been supported by agricultural policies, and the demand for organic foods in supermarkets is similarly high. Taking a relational perspective allows to overcome the limitations of seeking simple causal relationships, especially when the various influencing factors are considered in isolation. Indeed, the trajectory of the organic sector in Austria over the last 25 years may be better understood as a complex and evolving intertwining of relations over time. These dynamics are unpredictable, as they depend on whether and how a range of actors can build and maintain relations between organic agriculture and broader issues in the agrifood system, such as the maintenance of family farms or environmental protection. It also depends on the ability of organic actors to be able to build relations between issues in the public discourse such as food scares and the qualities specific to organic food. A relational perspective allows to highlight the national situatedness and the influence of complex historical contingencies on the trajectory of the organic sector. It shows how the trajectory depends on the creativity of organic actors in engaging with various societal actors, including their ability to make organic farming relevant to emerging public discourses, their ability to recognize and seize windows of opportunity, and their ability to navigate between cooperation and co-optation by conventional structures. A relational perspective can thus contribute to the theorisation of the organic sector, by showing that its trajectory is not a field of invariant logic or automatic unfoldings, but an ensemble of emergent social practices.

### **Bounding Quality: Convention and the Qualification of Organic Production in Southern France**

Kenneth Lain MacDonald, Scott Prudham

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"The organic" is brought into being through boundary-work, the process of delineating and distinguishing not only practices of production but also the qualities of actors and the resulting products. This boundary work entails a process of qualification whereby the extrinsic and intrinsic qualities of wine are reified as forms of singularization. And yet the formation of boundaries through establishment of regulatory, social, ecological and sensory norms results from processes that are contested. And, like all boundaries, these are fluid — negotiated at the intersection of a politics of production, distribution and consumption. In this context, we argue for an understanding of the uptake of organic production (and consumption) that emphasizes process and context, situated within complex historical and institutional geographies. Understanding the emergence of "the organic" as a stable signifier requires substantive attention to these geographies as they constitute broader agronomic, regulatory and aesthetic norms. In this paper, we explore the process of bounding 'the organic' through a close study of the region of Occitanie in southern France. This region has undergone significant agrarian transition and wine sector restructuring in recent decades, including a dynamic articulation of independent wine making at the household level and collective or cooperative vinification at the village scale that is refracted through a broader so-called "shift to quality" in regional wine production. We situate an understanding of the emergence of a powerful organic movement within this regional context through ethnographic and qualitative research at various sites of qualification, including cellars, vineyards, cooperatives, trade shows, wine tastings, and retail outlets. In doing so, we reveal how the extension of organic production and boundaries around "the organic" are stabilized in relation to complex socio-regional histories within specific locales.

### The next step for organic production and consumption in Sweden: actors' views on organic 3.0

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Keywords: Sweden, organic production and consumption, focus groups, Organic 3.0

How can Organic 3.0 be operationalised in a national setting? How is Organic 3.0 and the challenges defined by IFOAM received by organic actors? These questions are discussed in this paper. The national setting is Sweden, which has seen a large growth of the organic market during the last few years, but also where numerous challenges for the future development of organic production can be identified. During Spring 2017, six focus group discussions were carried out with actors representing different parts of the organic value chain in Sweden: authorities, certification bodies, organic farmers, environmental NGOs and processors/end-consumers. In addition, a seminar with researchers knowledgeable in the field was held as well as a follow-up workshop with a broader group. The focus groups discussed how IFOAM's vision could be related to the Swedish context, and what challenges and opportunities actors could see for Organic 3.0 in Sweden. The discussions were unstructured in the sense that participants could bring up issues they thought were important. The outcome was 12 identified themes, all pertaining to the overall questions. These include a number of specific challenges for the Swedish organic production and market. For example, participants identified a tension between striving for larger yields and increased efficiency with the use of external inputs on the one hand, and a more agroecological multi-functional approach to organic production on the other hand. They also saw a need for new approaches for supporting a nutrient recycling from society – in general there was a positive attitude for nutrients from biogas production among participants. Further, focus group participants thought that it would be worthwhile to focus on problems common to organic and conventional agriculture, such as the quest for a fossil fuel free production. They also thought that challenges could be tackled in other ways than through the organic regulation. Rather, the regulation was seen as an obstacle for organic innovation by many participants. A major challenge participants identified was the need to increase vegetable and cereal production for human consumption in organic production. Currently, 90% of Swedish organic arable land is used for animal feed. This will have to change as diets need to develop in a more sustainable direction. Organic actors were happy about the Organic 3.0 initiative, arguing that it has brought forward relevant issues for the future development of organic production. The next step is to mobilise in order to deal with the identified challenges.

#### Framing of organic farming in Finland

Tuija Mononen, University of Eastern Finland

Keywords: organic farming, development, meanings, social actors, framing

In April 1997, in Trondheim Norway, I gave one of my first presentations about organic farming, it's social actors and construction in Finland. I also explored meanings and definitions of organic farming in agricultural and rural policy. Presentation was based on analysis of articles about organic farming. Results indicated, that there were as many definitions as there were actors in organic farming networks.

In my presentation I will briefly look to pre-1997 situation, but mainly concentrate the post 1997 development of organic farming in Finland. That time has been of a great significance to Finnish organic farming. Earlier, in agriculture and rural development strategies organic farming played a subsidiary role. In 1996, however, the official meaning of organic farming changed significantly. While ten years earlier it was not seen to have noteworthy social importance, in the 2nd national rural policy program organic farming became a rural development strategy and a survival method for farming families. EU agricultural policy was deemed to have eliminated the problem of national overproduction and global competition was believed to have increased. In these circumstances organic farming was viewed as a competitive factor and a goal of the extensive expansion of organic farming was officially set.

But what has happened since those days? Statistically, Finnish organic farming is doing well. The cultivated area is increasing and totals almost 13 %. There are more than 5000 organic farms in Finland and the share of all farms is almost 11 %. Organic farms are large; their average size is about 58 hectares. (Evira 2018.) Considered globally, these figures are high. Finnish organic food has, however, not found its way to consumers' tables or even grocery shelves, as the market share is about 2%. Why is this the case and what needs to be done? In my presentation I will look behind the statistics. How organic farming has been framed in agricultural, rural and food policy? Is organic farming still framed as rural development strategy, or survival method of Finnish farms? In my presentation I will examine the development and framing of Finnish organic farming, its significance and the problems facing its promotion.

### Organic fruit and vegetable production in Norway: Is local marketing a lifestyle or a job?

Anna Milford, Norwegian Institute of Bioeconomy Research

The majority of the food in Norway is, as in most industrialised countries, sold through supply chains run by large wholesalers and supermarket chains. This is also true for organic fruits and vegetables. However, over the last years there has been a growth in the sales of food in Norway through local marketing sales channels such as speciality stores, food box schemes, farmers markets and community supported agriculture (CSA). This paper seeks to discover what differences there are between the organic farmers who either sell through mainstream or local marketing channels, and what can explain these differences. Qualitative interviews with organic fruit and vegetable farmers reveal that market requirements for certain quantities and qualities, as well as distance to the market, will affect which farmers will choose which type of marketing. But our quantitative survey also reveals that attitudes to the potential benefits organic farming is a potential driver for choice of sales channel. One explanation could be that local marketing facilitates a type of cultivation which is closer to what for some farmers is a more "ideal" form of organic agriculture. This type of knowledge is important to understand how the different sales channels are working, what are their implications and what are the adjustments that both policy makers and the farmers themselves can make in order to benefit the most from the different marketing systems.

#### Rethinking Organic Farming in the Post-Socialist Context: Lessons from Bulgaria

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Keywords: organic farming policy, policy transposition, organic sector development, Bulgaria

On the basis of an in-depth qualitative study covering the period between 1990-2015, this article discusses the case of Bulgaria as an example of a new EU Member State that implemented EU organic farming policies in a top-down process during EU accession. We explore the difficulties in transposing a concept originating in Western Europe to post-Socialist countries, and particularly ask what this transposing of an alien concept means for long-term development of the organic sector. We found that the top-down agenda-setting for organic farming in Bulgaria resulted in inefficient policies that inhibited an orientation of producers towards the market's needs. Tacit assumptions underlying the

concept of organic farming in Western Europe, such as the relevance of social capital could not be sustained in Bulgaria, which added to the challenges of policy implementation. To increase policy efficiency, we recommend a policy process that involves the expertise of all organic sector actors, including organic operators, but also policymakers, organic organisations, consumers and academic experts. Expertise and knowledge requirements are diverse, touching policy, market, collective action and practice-oriented skills. Integrating these skills could maximise success in finding the best solution for implementing – and adjusting – a foreign concept meaningfully in a particular local context.

### Organic Critical Mass: An initial investigation.

<u>Karlheinz Knickel<sup>1</sup></u>, Nicholas Parrott<sup>2</sup>, Gunnar Rundgren<sup>4</sup>, Paul Swagemakers<sup>3</sup>, Lola Dominguez<sup>3</sup>, Flaminia Ventura<sup>4</sup>, Pierluigi Milone<sup>4</sup>

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There are now 15 countries in the world that have achieved a 'critical organic mass', of having >10% of their agricultural land organically certified, and another five that are close to meeting this target. They fall into five distinct geographical clusters:

- The Alpine 'organic heartlands': Liechtenstein, Austria, Switzerland and Slovenia
- Tiny island states: French Polynesia, Samoa, São Tomé and Principe, The Dominican Republic, the Falkland Islands (Malvinas) and the Faroe Islands
- 'The Baltic Circle': Estonia, Sweden, Latvia and Finland
- 'Mitteleuropa': The Czech Republic, Slovakia.
- Mediterranean 'agricultural powerhouses': Spain and Italy.
- Plus two 'outliers': Uruguay and French Guyana

This paper explores competing hypotheses about the motivations and mechanisms that have contributed to these countries becoming 'organic trendsetters'. While 80% of these countries are members of (or regulatory closely aligned to) the EU, the remaining 20% (Samoa, São Tomé and Principe, The Dominican Republic and Uruguay) are not beneficiaries of the EU's pro-organic policies. This paper will explore the different incentives that create these organic constellations both within and outside of the EU.

An initial statistical analysis of the common features of these organic trendsetters shows that many are micro states and that the vast majority are 'small countries' (in terms of either/or land mass or population). Spain and Italy are the two major exceptions to this trend, but in both countries agricultural policy (including towards the organic sector) is largely determined at the regional, rather than the national level. In this paper we explore the roles of, and interplay between, high-level policy goals, strategic considerations within the agricultural/organic sector, food system governance and social capital in developing a thriving organic sector atopic of relevance to this workshop and the future development of the organic sector.

### The future is participation. Charting the waves of the global organic movement

Matthew Reed, University of Gloustershire, England

In 1970 the President of the Soil Association, Fritz Schumacher, signalled a shift in strategy in the movement's strategy from scientific proofs towards standards and consumer-driven change. Over 40 years later the International Federation of Organic Movements (IFOAM) a body in part-founded by the Soil Association, signalled another shift in strategy with the 'Organic 3.0' document. The Organic 3.0 paper was the product of a global discussion within a federation of movements bringing towards organic agriculture even higher ambitions for social justice, environmental and climate change goals.

Recently elements of the organic movement have been re-imagined by some in the term 'agro-ecology', whilst in urban agriculture, for many practitioners' organic methods are the default, although they are often only loosely linked with the burgeoning rural organic farming sector and new industries such as cosmetics and textiles have risen with only limited scholarly attention. Nearly two decades ago many social science scholars had dismissed the oppositional potential of this cultural movement. But currently, we find it prominent in campaigns to ban pesticides across the EU, defending animal production against the arguments of vegans, encouraging farmer-led scientific innovations, shortening food chains and adding new areas of debate such as textiles to its scope of concern. Often it is doing so not by advancing consumer but forms of participation with the products of agriculture that open new possibilities of citizenship.

This paper sets out to explore the 'waves' of the organic movement, starting from its emergence in the late nineteenth century through to its latest configuration around the 'Organic 3.0' document. In doing so, it starts with an account of how scholars have understood the development of social movements, including periods of repeated mobilisation and contestation. While there is a consideration of the history of the

movement, sufficient to characterise the earlier waves of the movement the focus of this work is on the current wave and how that may develop.

### Is Czech organic sector fit for the new framework Organic 3.0?

Lukas Zagata, Jiří Hrabák

Czech University of Life Sciences Prague

Czech organic sector has been established right after the collapse of the communist regime in 1990. During the three decades of its existence it has gone through several stages of development. Our study presumes that the historical development as such has been imprinted in current state and functioning of the organic agriculture.

Main aim of this work is to identify and describe development stages, milestones and key factors that have shaped the origins and further growth of the organic sector in the Czech Republic. The findings draw on a long-term research project investigating history (1990-2015) of the organic sector from the diachronic perspective. The basic periodization shows the following.

In the first stage (1990-1992) the organic sector originated as a negative response to socialist agriculture and sought a new "alternative" approach to farming. This radical transitional stage was followed by a transformation period (1993-1998), during which the government ceased support for organic farms and the sector stalled. In the third period (1998-2004) the organic sector started to grow again, with development of the sector mainly driven by changes in public policies that started to follow European trends. During this period, national subsidies for organic farmers were renewed. An important milestone for the new development of the sector was the year 2004, when the Czech Republic joined the EU and the CAP started to be implemented, which resulted in continuous growth of the sector in the following period (2004-2009). After the year 2010, the rapid quantitative growth of the sector stops. Development of the sector has been mainly driven by consumer interest in food quality, therefore we talk about the period of stabilization.

Organic sector in the Czech Republic has grown into the state that it includes strongly competitive relationship with conventional/large scale farming, high regional differentiation, low support of general public for organic quality, high sensitivity of farmers to financial subsidies, difficult cooperation between the proponents of organic sector and other alternative food networks' initiatives, and a lack of unifying vision for a future development of the sector. Findings of the study are supposed to facilitate

understanding the limits and potentials for further transformation of the Czech organic sector – towards the framework Organic 3.0.

## Working Group 8: Embodied practices and embodied transformations in the rural

Taking part of rural life: disability and participation

Cecilia Bygdell, Uppsala University, Sweden

Keywords: disability, disability narratives, participation, bodily variations

Full participation in society is one of the overall rights in the UN Convention on the Rights of Persons with Disabilities. In this presentation I discuss participation in a rural society based on an ongoing study of living with physical or cognitive impairments in Swedish rural areas.

In line with Hammel et al (2008) participation is regarded as a subjective experience. Thus taking part in activities in itself cannot determine whether the individual is an active participant in society. Rather it requires feelings of inclusion and meaningfulness, and must be valued from the individuals perspective.

Participation in society is exemplified by individual experiences of being part of social networks, the labor force and taking part of political dialogues in the local. Participation can take place in contexts open for all inhabitants in the community, but takes for some place in arenas open for individuals with an impairment. Thus participation might be more or less integrated in society as a whole.

Crucial for both social networks and political advocacy are disability associations. Through an impairment, disability association become available and can give access to context where disabilities are the expected. The associations offer social activities, continuing education about disabilities and also political conversations with official and politicians in the local community.

Participation in the labor force is not necessarily the same as being employed in the open labor market. As much employments on the open labor market assumes an abled body, we must include various forms of work targets, wage forms and variations in working hours when considering experiences of participation in working life.

The overall conclusion is that bodily variations create different opportunities, abilities and expectations for how participation is understood and valued. We cannot have the same measure of participation for all individuals but must allow the content in participation to vary for different individuals according to prerequisites without being hierarchical.

### **Gender Inequalities Among Farm Operators in Poland**

Krzysztof Gorlach, Zbigniew Drąg

Jagiellonian University, Poland

This paper has been focused on the gender aspect of rural inequalities. In the international literature has been stressed that the situation of women in society has been changed significantly in the last forty years. However, basic changes in agriculture and rural communities has not gone fully in this direction. According to many authors the agriculture has been the area where male domination seems to be quite preserved resulting from the patriarchal tradition in many European societies. It might be seen in various a few areas, namely: a/ female activities traditionally focused on household and not on field work seem to be invisible, b/ women mostly join particular family farms via becoming partners of male successors of farms; c/ women have been also underrepresentative in agricultural organizations; d/ training programs for agriculture have been mostly focused on males` activities.

In such a context the authors want to analyze some important aspects of females' roles in Polish agriculture. Because of its traditional and peasant character it seems to be an eager and possibly fruitful area of such investigations. Therefore the authors have decided to focus on farm operators in order to grasp the role of women at the very heart of the agricultural activities. In order to analyze the role of women one have been focused on several aspects situation of women as farming operators: 1/ economic capital of run farms; 2/ embedded form of cultural capital of run farms; 3/ institutionalized form of cultural capital of run farms; 4/ general preferred strategies of the development of run farms; 5/ some particular strategies of development of run farms; 6/ general three years plans of development of run farms; 7/ types of farms run by males and females; 8/ general attitudes of farm operators according to gender. All data have been collected under the research project focused on national sample of Polish farm operators in 2017 with the financial support of Narodowe Centrum Nauki (National Science Center of Poland – UMO-2015/18/A/HS6/00114). Moreover, in order to show some time change the authors have been used also some data collected in 1994 under the project: KBN 1/1628/92/03. The general conclusion seems to be pessimistic: operated by women farms won't be able to

achieve the level of economic effectiveness comparing with the farms operated by males (at least in Poland).

### The establishment of a centre for young persons with slight disabilities and its impact on social life in a rural context: the example of Höch, Austria

Sigrid Kroismayr, Club of Vienna

Keywords: Persons with disabilities, second labour market, integration, rural community, Austria

In 2012 the former school building in the Austrian village of Höch (population 330) was sold to a pharmacist couple. A local municipal councillor, who was also the head of the local tourist agency, persuaded them to open a small cafe' in the building, and to hire him as manager. He also developed a concept called

"Inclusive Work", and was able to get the "Lebenshilfe" (an organisation which supports people with disabilities) to come on board in 2015. Since then, a multi-purpose centre was established with different learning and working environments such as a café, a farmer's shop where local products are sold, a workshop where natural products are made and sold, e.g., soaps, yoga cushions, and organic herbs. The centre is run by two women with the help and support of nine young people with slight disabilities.

My talk will highlight how this concept enabled the young people, who were unable to find work in the "first" labour market, were integrated into community life. The talk will present the different kind of activities that were established over time to strengthen the contacts between the local and the wider population and the centre. Here, particular emphasis is put on different forms of co-operation (renting land for the production of herbs, buying products from local producers for further processing) and interactions (visits from different groups within and external to the municipality, selling the products produced in the centre at local events, etc.) that has been established between the (local) community and the centre. This has also contributed to changes in the mutual perception and narratives between the population and the young people alike.

The study uses an ethnographic approach including participant observation and interviews with key persons involved in this process, some of the local families as well as the young people working in the centre, so to get a broader picture from all sides. The interviews were conducted during several visits to the region between 2017 and 2018.

### Immobility under the busy surface of 'micromobilities': Embodied survival practices and mobility trajectories in a multiply marginalised place in Hungary

Krisztina Németh', Hungarian Academy of Sciences

Keywords: rural marginalization, use of space, bodily practices, habitus, social and spatial (im)mobility

The presentation summarizes the first empirical results of a postdoctoral research, Marginality and (Im)mobility: the dynamic of habitus, which examines patterns of social and spatial mobility in different marginalized micro-localities in four Hungarian 'rural' towns throughout life and family history interviews. One of the micro-localities in a town of 50,000 inhabitants called 'Orange groove', which is an ironical nickname used by the locals. It refers for the old glory of the historical monument, which served first as a garrison, than a social housing unit. Now it gives shelter for various marginalized groups including some formal residents (tenants of social housing program), residents of the homeless shelter, and informal residents living in the already closed, run-down dwellings within the complex of building. This place is a shelter, but its shady corners also give rise to various informal practices, which invite residents to play with (in)visibility.

A sociological fieldwork based on semi-structured interviews and observation aimed to scrutinize residents' life and habitation trajectories, and lived experiences of marginalization. Observations unfolded how different dispositions and feelings organize people's everyday practices, mode of operations; how they become interiorized, embodied and how people's use of space tell about their lives. The fieldwork revealed that 'Orange groove' was a kind of 'buffer zone' over the last decades between this town of the Hungarian countryside and the nearby villages. This 'buffer zone' consequently forms of a stable 'rurban marginality', which is reproduced and maintained by informal relations and institutional practices.

The presentation aims to look behind the busy surface of the observed movements, embodied practices, 'micromobilities' and to reveal the overwhelming social immobility and increasing marginalization of its residents. The explanation also tries to shed a light on how these movements constitute this specific place and how the local representation of 'Orange groove' shapes life chances of its residents.

#### 'Blood in the soil': farming men's embodied 'farmscapes' in the UK

Linda Price, University of Worcester, England

Keywords: Farming Men, Embodiment, Farmscape, Identity, Suicide

Across the Developed World suicide amongst farming men over fifty continues to rise; farming communities are no longer anchored in agrarianism and the family farm has become a more technologically driven and isolated arena. The places to enact an identity as a farming man, therefore, have become fewer. The gender relations underpinning farm survival and patrilineal succession has seen considerable focus (Price and Evans, 2009; Price, 2012). However, the embodied identities of farming men in this new cultural arena requires deeper understanding 'if' both positive and negative understandings of their 'blood in the soil' are to be more fully understood and addressed. Thus, the 'farmscape' conceptual framing is shown to derive from men's embodiment 'in the land'. Further, it is shown to extend beyond 'medicalised' and risk factor approaches to decimation of life/identity via firearm availability which is 'fragmented, reductive and circumscribed' (Bryant and Garnham, 2014, p.304). Building on the 'lifescape' approach of Convery et al (2005), 'farmscape' foregrounds both the importance of temporal dynamicity and how farming is consubstantive with being in a locality with lifecourse 'scripts' that are embodied (Setten, 2004). Thus, five thematic and spatial scales drawing on ideas of 'dwelling' and 'rootedness' are outlined (Jones, 2013). Here dissipation of the mind/body dualism within ideas of self, home, belonging and entrapment, senses, family, nature (Caralan, 2008) are intertwined as follows: 1) the sensorial, subjective and internal male farming identity emotionally embodied in the land, soil, nature and weather as farmers 'who I am' rather than 'what I do' 2) men's roles as part of the past, present and future family story, often responsible for keeping the blood in the soil through marriage, succession, retirement and farm survival, 3) men's linking of farming practices i.e. management, animal husbandry/breeding to family heritage, 4) men's changing roles within rural communities as an increasingly isolated minority with agrarian, social hierarchies, community rhythms and seasonal rituals in decline and 5) the impacts of global agri-economic/environmental policies with increased bureaucracy and pressure on historical traditions of farming. Thus, it will be suggested that the embodied patrilineal life-course 'farmscape' can develop greater understanding of both positive and negative aspects of farming men's 'blood in the soil' within a changing agri-culture from where suicide 'may' emerge.

### Disability, welfare and supportive structures in a rural context

Susanne Stenbacka, Uppsala University

Keywords: disability, welfare, individual resilience, environmental-social context

In this paper I explore the environmental—social interface of sustainable development, in particular how capabilities, social networks, institutions and the physical environment interact and constitute a basis for individual resilience. This approach locates those

processes that are active in the everyday lives of individuals, and investigate how such processes might be supportive or enabling versus obstructive or disabling.

In the center of this study are embodied experiences of individuals living in rural places, facing contemporary rural challenges and societal transformations including the experiences of diverse disabilities. The study is based on qualitative methods, in-depth interviews, with 12 men and women experiencing either a physical or a neuropsychiatric impairment.

The stories shared by the informants illuminate how local institutions and context; for example, public social services, civil society and social networks, together constitute a basis from where individual practices and personal development take shape and depart. In relation to this it also becomes visible how individuals value these contexts and that threatening circumstances such as withdrawal of resources will cause reactions and encourage coping strategies. This study thus supports earlier findings emphasizing the impact of a presence of criticism (Buzzanell 2010), anger as well as applying a sense of humor (Coutu 2002, Earvolino-Ramirez 2007) in resilience processes.

Another important finding is that the interviewed individuals define rural life from where they speak and act, meaning that the rural is not separated from the own embodied practices. While an understanding of the rural often builds upon its peculiarities with reference to their urban counterpart and what the rural is not, such expressions do come through but they are not dominating the narratives.

#### **Facilitating Voice and Supporting Choices in Rural Areas**

Liz Bickerton, Jill Venus

University of Wales Trinity Saint David

Citizen participation in the design and delivery of services is increasingly framed within a narrative based on concepts such as co-production. Such concepts go beyond constructs of "partnership" to embrace what the New Economics Foundation has defined as the delivery of," public services in an equal and reciprocal relationship between professionals, people using services, their families and their neighbours". Geographical constraints, lack of infrastructure and low critical mass create barriers for all rural residents but for people with a disability or long-term health condition these barriers can be exacerbated. These people rarely have a voice nor influence over how embodied practices can be changed to fit citizen needs.

The University of Wales Trinity Saint David led an evaluation of a portfolio of initiatives called Co-Creating Healthy Change aimed at providing voice to marginalised people across both urban and rural spaces. The research reflected on the barriers to engagement, the challenges of finding voice and the reality of choices for people with diverse life experiences within a rural space including those with learning disabilities, mental health conditions and age-related health issues. How rural people from these target groups are engaged in co-producing services is particularly pertinent.

This paper uses the findings of the South Wales research alongside data from other work with rural and marginalised groups across Rural Wales (and more widely with evidence from trans-European project work on rural vibrancy and community engagement) to draw observations on the strengths and shortcomings of practice and the policy implications. The value of providing a platform for the voices of people with lived experience to influence service delivery is central to the learning derived from the evaluations.

The Welsh Government has committed to putting sustainability at the centre of policy. The Well-being of Future Generations (2015) Act places a duty on public bodies to ensure the well-being of citizens. Involvement is one of the five key ways of working within the legislation.

Civil society organisations provide essential support structures which go beyond contracted services funded from the public purse. These organisations have the potential to underpin embodied transformations in rural space. In Wales, as elsewhere in the UK, the move away from the core funding of community organisations to a focus on the procurement of services with specified outputs has resulted in a contraction in the ability to undertake developmental work. This poses a threat to the capacity to enact embodied transformations.

### Effects of Variables on Social Capital and the Social Capital on the Life Satisfaction Perceived by Married Immigrant Women in Rural Areas

Soon Mi Yang, National Institute of Agricultural Science in Rural Development Administration, Korea

Keywords: social capital, life satisfaction, support, married immigrant women

Social capital is recognized as a resource determining the integration into mainstream society and quality of life of married immigrant women. This study was focused on identifying the effects of the related-variables on social capital and its sub-items, such as trust, reciprocity, civic participation consciousness, and social connection network,

determining the effects of the sub-factors of social capital on life satisfaction and subareas, such as closeness between ideal and reality, excellence of life condition, satisfaction with life, accomplishment in life, and acceptance of life revival, using the scale reported by Diener et al.(1985). For this purpose, the data of 401 people from rural multicultural households were analyzed. The major findings were as follows. First, family support and local society support variable had separately the greatest effect on the total social capital and its four sub-items. Above this, the age variable affected negatively the civic participation consciousness and social connection network sub-items. The bridging social tie variable had a positive effect on the civic participation consciousness sub-item. Second, both the trust and social connection network sub-item of social capital had significant effect on the total life satisfaction and its four sub-areas except for accomplishment in the life sub-area. The accomplishment in life sub-area was affected by only the trust sub-item of social capital. Based on the results, this study proposed plans to improve the social capital and life satisfaction of the women and a plan for follow-up studies was suggested.

# Working Group 9: Changing roles of fisheries, recreation and conservation in European Coastal Communities – New cultures by blue policies?

Contested coastal zone governance - ensure legitimacy in the face of disagreement/conflict

Aase Kristine Lundberg, Maiken Bjørkan

Nordland Research Institute, Norway

In the coastal zone, a growing number of interests from a variety of sectors are competing for the same space, generating challenges for participatory planners and stakeholders. Participatory processes focusing on consensus are often promoted as desirable to enduring the legitimacy of coastal zone governance/planning/management. In practice, however, the legitimacy of coastal zone governance/planning/management is both constructed and contested by stakeholders with divergent interests, values and world-views. In this paper, our point of departure is how legitimacy and unity can be ensured in situations where disagreement and conflict rather than consensus dominate the context. We take a critical approach towards the deliberative turn in environmental management, and an active approach towards dealing with conflict. We argue that it is necessary with better insights about how consensus involves exclusion and power struggles and narrows the range of issues that gets to the table, to design a more legitimate governance system.

Understanding how different stakeholders, planners and decision-makers make and assess legitimacy claims regarding coastal zone governance can contribute to a deeper understanding of how to deal with disagreement and conflict in a field with increased conflict levels.

### Aquaculture attitudes at northern latitudes

Margrethe Aanesen<sup>1</sup>, Trude Borch<sup>2</sup>

<sup>1</sup>UiT the Arctic University of Norway, <sup>2</sup>Akvaplan-niva, Norway

The Norwegian coastal zone has changed from its traditional focus on fisheries to an increasing number of conservational, recreational and commercial activities like tourism and aquaculture. The new industries bring new economic revenues to local communities but they also contribute to increased stakeholder conflicts. Aquaculture development if for the time being one of the most contested industries in the Norwegian coastal zone. In our talk we will present results from a project on the attitude towards aquaculture operations among inhabitants in 5 municipalities in Arctic Norway. The methodology for this study has been Choice Experiment. In the survey, we asked our informants about their willingness to pay to avoid negative effects from aquaculture on wild salmon, the seabed, coastal cod and coastal landscape experiences (view and sound). Before they filled in the survey we provided the informants with two different information videos on the environmental effects from aquaculture. In one we presented the effects as scientifically proven ("certain information") in the other we laid out the present scientific uncertainties related to environmental risk from aquaculture operations ("uncertain information"). We find differences in willingness to pay to avoid aquaculture growth between the informants. These differences are related to differences in the information on environmental effects that was provided to the informants prior to them filling in the survey questionnaire. We found that persons that received "certain information" on environmental effects are willing to pay NOK 2468 per household per year to halve the environmental effects of aquaculture. Persons that were presented with "Uncertain information" (not scientific agreement on environmental effects) are only willing to pay NOK 1830 per household per year.

#### Resilience strategy of a fisherman community

Maria Assunta D'Oronzio, Gianluca Gariuolo and Maria Carmela Suanno

Research Centre for Agricultural Policies and Bioeconomy, CREA, Italy

Keywords: coastal rural communities, Multifunctionality ad Diversification of fisheries activities, strengthening resilience, FLAG

The proposed analysis refers to the action and the resiliences strategies implemented by the small fishermen communities in the Italian coastal areas based on the experience of the Lucanian coasts.

Coastal areas are characterized by two macro local economic systems. On the one hand, development policies and natural resources characterized by intensive agriculture; beyond, tourist systems characterized by a strong anthropization. In the middle a small community of fishermen, increasingly marginal and small in the number of workers and operators in the supply chain.

Latterly, there has been a reawakening by fishermen with an awareness of the seafaring identity. Lore, knowledge, ancient crafts and practices are again the focus of attention thanks to the involvement of other operators belonging to different worlds. A really bottom-up approach of construction and concertation path has led, starting from 2012, some fishermen, previously strongly individual and "marginalized" by local market, to build a co-designing action and governance of development processes increasing:

- The associative capacity of the sector: establishment of two associations for the promotion and enhancement of small-scale artisanal fishing;
- Participation in decision-making processes: agreement with public-private partnerships for carry out structural investments for the fisheries sector and cooperation in the definition of Local Development Strategy;
- Widespread knowledge of development policies and active participation in representative private bodies of the fishing sector (Fishermen network and FLAG's board)

A path, therefore, that allowed to activate a new way of recognizing and working that set up a collective project that was an active part in addressing the territorial policies of the sector.

The fishing community has put in place some strategies and actions of resilience towards the tourist economic and agricultural system of the coastal area transforming, in its favor, the critical issues of the local productive system through the planning of diversification actions of its activity (fishing tourism), the experimentation of forms of inter-sectorial cooperation with other rural operators (food and wine and short food supply chains) and local concertation for the definition of development policies (creation of a network between fishermen and the public for the management of fishing landings and participation in environmental protection activities).

### Gender roles in small-scale fisheries and the impact of Fisheries Local Action Groups: a comparative case study of three EU countries

Richard Freeman, FARNET/Newcastle University, UK

Keywords: small-scale fisheries, women, gender, fisheries local action groups

Many researchers have noted that there is an under-representation of gender approaches in both fisheries policy and academic literature. While fisheries are widely considered a male-dominated industry, in many small-scale fisheries' areas, women play a significant and vital role in the survival of small-scale businesses and are frequently the driving force of innovation, diversification, and the development of new markets. However, these roles are often unseen – with the fishing men of family businesses being the registered beneficiary and performer of more visible tasks. Although fisheries studies have focused on gender, no study has yet considered or contextualised the impact of Fisheries Local Action Groups (FLAGs) on both the role and visibility of women in smallscale fisheries. Drawing on the case study of Hiiumaa (Estonia), Dalmatia (Croatia), and the Costa da Morte (Spain), this paper explores changing gender roles in small-scale fisheries and how women have been impacted by FLAGs. We find that women are central to the innovation and diversification of many small family-run businesses and that FLAGs are instrumental to developing these roles – that FLAGs support and empower women in fisheries communities, shedding light on their contribution to the industry. We explore how these factors may have a significant impact on the future long-term success and survival of many small-scale family-run fisheries and their local communities. While this paper focuses on the qualitative findings from three FLAG area case studies, it also draws on the quantitative study of 113 FLAG areas across the EU.

### Coastal fishery communities of the Baltic sea in front of new challenges: a case study of the Izhorian people of Russia

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Keywords: Natural resources, socio-ecological system, fishery communities, property rights, sustainable development

In the current geopolitical situation, oil and gas production is of a strategic importance. Oil and gas giants are operating in sensitive regions, developing a pipeline systems and putting pressures on sustainable development of the environment. However, not only environmental issues should be taken into account when considering an impact of the

industries. Local communities are facing new challenges regarding potential impacts of the industry on their livelihoods. Constant development of the industry and an increasing demands for energy supply threaten sustainability of socio-ecological systems (SES).

The main focus of the article on social component of SES and an impact that gas production might have on local fishery communities in sensitive coastal regions. Thus, the principal aim of the research is to address social and political issues and analyse an impact of gas pipelines on the livelihoods of local communities. The following research applies an interdisciplinary approach. The article presents an integrated view on fishery communities from a sociological and political point of view in order to address participatory practices of decision - making, and to study relations between local fishery communities, government and industrial developers.

The aim is to propose an impact analysis on the livelihoods of indigenous fishery communities of Izhorians of the western part of the Leningrad Oblast (region) in Russia. Construction of a gas pipeline Nord Stream 2 transporting gas to Europe might put in danger an extinction of the local populations of the region, whose livelihoods depend considerably on fishing activities. This approach involves analysing the relationships between science, policy making, management, civil society, and economy. It also helps to identify the tensions between exploration and conservation and to plan economic activities in the region for the sustainable development of socio-ecosystems.

The article proposes to take a critical look at the sustainable development of natural resources and to discuss the question of the legitimacy of the decision-making process concerning the exploitation of oil and gas in the Baltic sea regions while taking into account the relations between governments, industry and local communities. The goal is to bring a new understanding of the dynamics and distribution of power at the interface between traditional and indigenous knowledge and public policy.

### Contentious Politics and Coastal Erosion: A Critical Examination of Sustainable Fisheries Management in Southeast Louisiana, USA

Jacob E. Lipsman, University of Kansas, USA

Coastal Louisiana, USA is in the midst of a land loss crisis that threatens the viability of local fisheries that sustain the local economy. The State has been proactive toward this crisis by developing an ambitious coastal master plan designed to sustain land and protect local infrastructure, communities, and fisheries through a fifty-year series of structural protection projects, infrastructure projects, and nonstructural initiatives. As climate change continues to impact coastal areas through sea level rise, ocean acidification, and

coastal erosion, Louisiana has the opportunity to take on a leadership role in local fisheries management.

This study investigates the impact of coastal planning and management decisions on the sustainability of fisheries in southeast Louisiana. While the coastal master plan has been well received in the science and policy communities, one particular project type sediment diversions—has created fierce controversy among coastal communities who argue that introducing fresh water from the Mississippi River into surrounding marshes will cripple the fisheries that are critical to the economic prosperity of the coastal zone and the State itself. While the State is determined to proceed with sediment diversions, local residents—particularly within the commercial fishing industry—have raised significant concerns about the impact of these diversions on local fisheries. Despite objections from local residents and industries, the mainstream framing of diversion projects emphasizes the resiliency of coastal stakeholders. The State argues coastal residents' ability to adapt to changes in the ecosystem makes diverting sediment the best plan for Louisiana as a whole despite the potential consequences. This study investigates the political process around determining coastal restoration priorities and the impact of this process on the long-term sustainability of local fisheries and the communities that depend upon them economically. This study contributes to an important literature on local knowledge and sustainable management of natural resources.

### Tradition as an Innovation (fishery between the past and future: the Czech case)?

Michal Lostak, Lukas Zagata, Jiri Hrabak

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Keywords: freshwater fish, traditions, discourse analysis

Fishery for a landlocked country might be seen as an uninteresting segment of the society, moreover if this sector in the case of Czechia employs less than 1,000 people and fish consumption does not exceed more than 5 kg per capita/year (domestic freshwater fish consumption is only 1 kg). However, a fish plays an important role in the Czech tradition during Christmas ("the must" dish for Christmas is deep fired carp with potato salad; the carps are sold a week before Christmas on streets directly slaughtered from vats; the carps are harvested from ponds in late autumn during festive events with hundreds or thousands of visitors). Fishery also shaped the landscape in the history (since medieval times) through building (and latter closing) the fishponds. Hence, traditional Czech landscape includes ponds. It influences traditional images of the Czech landscape. Under such ambiguous situation (neglected sector with seasonal Christmas peak and high

importance to landscape), the paper questions the concept of tradition when related to fish. Through discourse analysis of more than 50 interviews with stakeholders operating in the localities with freshwater fish production (fishpond owners, fish producers, fish restaurants managers, schools with fishery programmes, fish tourism actors, environmental and landscape protection bodies) the text investigates how fish tradition is constructed. It means the text analyses the discourse about the role played by events like autumn carp drag netting, fish gastronomy, fish related tourism and fish related landscape protection in the construction of this tradition. These findings are confronted with the results of Q methodology conducted among these stakeholders. Preliminary results suggest that fish is considered to have a potential to be an innovation paradoxically due to its tradition – it means as a sort of retro-innovation.

### Fragile livelihoods: the challenges and contradictions of tourism, conservation and fish farming in coastal crofting communities in North-West Scotland

Lydia Martens, Keele University, UK

The Scottish North-West coast is bordered to the West by the Minch and to the North by the Atlantic Ocean. The coast itself is demarcated by deep inland reaching sea lochs and hamlets of small islands. These parts of the Scottish Highlands are well known for crofting as the way in which people traditionally made their living. With the clearances of the 19th Century, the rural population was moved into coastal crofting communities where livelihoods were tougher, and where work on the land and the sea became intertwined. When listening into the livelihood narratives of coastal crofters today, one gets a sense of the challenges of maintaining a reasonable standard of living, and the shifts and changes that have been necessary in income generating activities over time in order to achieve this. Tourism, nature conservation, heritage and aquaculture feature in the mix of important contemporary sources of income pursued by the local population, whilst the story of fishing is one of decline.

In this paper, I consider the fragility of livelihoods in this coastal area from a human and more-than-human perspective and explore how these relate to the challenges and contradictions that are apparent in relation to this mix. I draw on research that was funded by the British Academy and that involved ethnographic immersion in a coastal holiday crofting community in North-West Scotland during the summers of 2012 and 2013. Talking with local people about the area following the recession that started in 2008, and that has seen the shrinking of budgets for regional development, there is a sense of decline expressed through the loss of families with young children in the locale. The school in a village about three miles away now educates only 40 children, when in times before the area started to become popular with summer visitors (from the 1950s

onwards), the crofting community itself was able to maintain a local school with in excess of 100 children. These fragile local worlds stand in stark contrast to the worlds and realities of visitors, who are drawn to the location for its outstanding natural beauty and for the opportunity to pursue leisure activities that frequently connect the land with the sea. The decline in fishing, and indeed, the methods of modern high technology fishing that preceded it, along with contemporary trawler fishing in the North Atlantic and aquaculture, also give rise to conservation concerns of a more-than-human kind. During my research, concern about more-than-human fragility and decline was expressed especially through narratives of sea mammals and sea birds that was shared by nature conservationists, local people and visitors.

### «Keeping it in the family» – ownership and succession in family business in fisheries and fish farming

Liv Toril Pettersen, Nord University, Norway

The purpose of the paper is to highlight ownership and succession in family business in fisheries and fish farming in northern Norway the last decades. Fisheries in Norway, as in many other countries in Europe and in other parts of the world, have undergone great changes in recent decades, and processes of modernisation, globalisation, deregulation, and restructuring have taken place. Great changes in industrial conditions have had impacts on the organisation of the fishing- and fish farming businesses, from privately owned small-scale household-based production to larger shareholding companies. The household is no longer the productive unit, with some exceptions in small-scale fishing. However, family ownership is still important in both industries, and the family influences decisions of the business in different ways. The paper examines changes in ownership and succession in family business in both industries. I address the following questions: How do intergenerational changes take place, and how affect succession family business? The paper is based upon several qualitative studies conducted in Nordland county in Northern Norway during a period of 20 years.

### Small-scale fishers' social struggle for survival: Collaboration in addressing the seal and cormorant conflicts along the Baltic Sea coast

Pekka Salmi, Kristina Svels

Natural Resources Institute, Finland

In Europe, fishing has been undergoing a continuous process of contraction and concentration in terms of vessel numbers and employment. Fisheries policies have rarely addressed the social issues associated with reduction of fishing activity and its effects on wider fishing community. In many locations, however, small-scale fisheries have survived due to the robustness of the social institutions that have helped them adapt throughout periods of economic and social upheaval. It has been argued that social struggle within and over fisheries is intensifying globally. This is also the case along the Baltic Sea coast where small-scale fisheries have been challenged by trends conveyed by industrial and post-productivist transition.

Our paper adds a northern dimension to the discussion about the future of small-scale fisheries in Europe. We illustrate the core challenges for the Baltic Sea coastal fishing: the seal- and cormorant-induced economic and social problems, which have hampered coastal livelihoods for decades – in spite of attempts to develop technical and economic governance tools. As a consequence of wide frustration among local and regional fishery stakeholders along the Baltic Sea coast, transnational collaboration for addressing the conflict was initiated in 2017. For this purpose they used a community-led local development tool under the European Maritime and Fisheries Fund, operated by the Fisheries Local Action Groups (FLAGs). The resulted project aimed at producing new knowledge about the extent of the seal- and cormorant-induced problems, and at raising public awareness about the troubled situation.

In our paper we present results from an interview survey of 22 FLAGs in 6 countries (Finland, Sweden, Denmark, Germany, Poland and Estonia) conducted in the transnational project, and study the role of the project as a facilitator of political and social struggle.

### "Migrantkollektivet" -the migrant worker community in the fishing industry of Norway

Hillevi Strand, NTNU, Norway

Keywords: fisheries, workmigration, community, embeddedness, interactions

The EU-enlargement in 2004 and 2007 made it easy for Norwegian salmon- and fishingindustry plants through the EEA-agreement, to recruit necessary workforce into rural areas of our coast.

For maintaining stable production, through the seasonal- or the whole-year production of fresh fish and salmon, there has been an import of labour that now counts for more than half of employees in many fishingindustry companies. In this study I find that almost

80% of workers has an eastern European origin. Expansion in the salmon farming industry will provide a double up of willing work force. This kind of work is not much popular in Norway, so it is expected that a potential sixfold of the industry (Sintef 2017) will demand more stable workforce- maybe from the east.

It is also important for companies and communities to take good care of their guestworkers. They need to provide accommodation to newcomers, and to make sure they will settle down. Integration is good for tax-income and good for embeddedness and sustainable coastal communities.

Suitable arenas for integration has been called upon to make the integration smooth, and some municipalities offers language training in companies as well as in local communities. May be good examples of how migrant workers has a chance to integrate in their new communities- both in work and in private life.

In this paper I study multicultural work-environment in 3 fishing-industryplants located from the north to the south of coastal Norway. I will try to reveal the potential interactions among the working migrants that creates a community, at work but also in the municipality. Actions and interactions makes communities, and social processes creates integration. Can we identify a collective consciousness in a multicultural work-environment that these 3 plants consists of? I will try to view the "Migrantkollektivet" through the angles of symbolic interactionism. Do interaction orders (Goffman 1983) make migrant workers evolve or maintain in a solidaric community, and is community created in this interaction? Are the actions of the migrant-workers shaping a migrant-collective or are their actions and negotiations a part of the community-interaction or the workplace-culture (company identity)?

In the study I am inspired by Arbeiderkollektivet, an industrial study of a working community where Lysgaard (1961, 1991) identified horizontal solidarity and loyalty among production workers, and where a collective spirit among the workers made them feel embedded and connected in the "fight" against the leadership pressure. Presence of organic or mechanical solidarity in groups might be a tool for understanding social integration.

#### Coastal knowledge transformation in the making

Bente Sundsvold, the Norwegain Arctic Univsersity, Norway

The coastal zone and marine resources are becoming increasingly important for national economic development (Hersoug and Johnsen 2012, Jentoft 2017). Aquaculture is one of

the promising businesses for 'Blue Growth', and aquaculture is the core issue of the municipal and inter-municipal coastal zone planning processes along the coast in contemporary Norway. This has contributed to highlight and enhance conflicting values of concerns in many municipalities and communities. Based on research from two intermunicipal coastal zone planning processes, I will discuss the possibilities for connecting diverse knowledge systems through a muliple evidence base approach (Tengö 2014) in such processes and their potentials for mitigating conflicts.

### Can Stakeholders Cope with Fisheries Regulation? A Case Study of Co-management in Certain Territorial Waters of Italy

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Keywords: Fisheries governance, Fisheries co-management, Management plan, Boat seines, Transparent goby

According to the CFP Mediterranean fisheries are governed using an ecosystem approach that fully integrates the environmental dimension. The Mediterranean Regulation prohibits the use of boat seines, in relation to mesh size, depth and distance from the coast, but provides derogation on condition the fishery is justified by geographical constraints, has no significant impact on the marine environment, affects a limited number of vessels, cannot be undertaken with another gear and is subject to a comprehensive management plan, based on adequate scientific monitoring.

In March 2010 Italy requested a derogation for the use of boat seines fishing for transparent goby (Aphia minuta) in the territorial waters of Liguria and Tuscany, identified as Geographical Sub-Area 9, and such derogation was established by the EC in October 2011. The management plan for transparent goby fishing continues to operate today, thanks to two subsequent renewals of the derogation, the first adopted in December 2015 and the second in October 2018.

The functioning of the management plan required the introduction of new operating methods: direct and active involvement of fishermen, implementation of biological and socio-economic monitoring and the acceptance of a different approach with the introduction of a fishery co-management system. Within the plan, a surveillance and control system was defined and a management body was set up, made up of representatives of Ministry of Agriculture and Fisheries, Maritime authorities, Regions,

fishermen, fishermen's associations and research institutions. This paper explores how the management plan works and examines the objective weaknesses and difficulties that have been faced and overcome, including the lack of operational methods, the absence of dedicated financial resources, the multiplicity of actors involved at different levels and territories, the occasional difficulty to correctly interpret and apply the relevant legislation, and the necessity to design an innovative governance system.

The analysis is mainly based on field data, mixed with the direct experience gained in the active participation to the management body of the plan.

The findings indicate that the introduction of new rules for the sustainable exploitation of fishery resources required a change in the role of fishermen, who had to establish and share, with other stakeholders, appropriate co-management rules, based on defined objectives, and co-management tools to implement the rules, put in place by a system of monitoring, control and surveillance.

### Blue wellbeing services as new means of income for fisheries: experiences from pilot projects

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Natural Resources Institute Finland (Luke)

Keywords: Blue Care, recreational activities, rehabilitative work activities, environmental education, social wellbeing

Water environments i.e. blue spaces offer multi-sensory experiences and can have versatile positive impacts on the physical, mental and social wellbeing and health of humans throughout the year. Concept of 'blue wellbeing' covers all the services generated in blue spaces ranging from activities in everyday life, tourism, education, and health and social services. Possibilities of fishing as a blue wellbeing service in cooperation of entrepreneurs, associations and schools were studied in pilot projects in the Unesco World Heritage area of the Kvarken Archipelago and in the lake district of Central Finland.

In the experimental learning project, teachers, fishermen and wilderness guides designed customised educational programmes for children in the natural blue environment. Depending on the school curriculum and age of the children themes were chosen to represent fish species and anatomy, the everyday life of fishermen, aquatic ecosystems and sustainability, and cooking. Older pupils focused on more difficult topics such as

ethics, animal welfare and health. Lessons provided a natural way to discuss complex and abstract topics such as sustainable development and climate change.

Another pilot project was organised in co-operation with Save the Children association. A group of primary school aged children, whose families receive social support actions, took part in fishing teaching by professional fishing guides. Concentration on the task at hand, the independency of the participants and cohesion among the children increased after each lesson. The role of guide was found to be important to maintain the attention and excitement of the children. The fishing lessons provided a positive topic for discussion and increased communication between the children and their parents.

Fishing was explored as rehabilitative work in the co-operative project. Natural blue space was to support the young men's mental wellbeing, and to motivate them to take up a new hobby or try a new career. Participants could leave their everyday environment to try fishing and processing of catch in practice. Three-hour sessions with mentoring fisherman included a coffee break that proved to be important moments for reflection and questions.

All the pilot experiments showed increased communication and social association among the participants. Fishing activities were found meaningful, and time spend outdoors was mentioned to be significant part of the events. Participants enjoyed physical activity and felt better mood. Learning outdoors improved concentration, and facilitated the combining of different subjects. Overall, the experienced wellbeing increased. The entrepreneurs saw potential in new business opportunities in social fishing.

### **Working Group 10: Rural public health – Place matters**

Footprints from school to work? Or not engaged in education, employment or training (NEET) in an Arctic sociocultural context

Elisabeth Valmyr Bania, NTNU, Norway

Objectives

The overview article aims to explore the education, training and work footprints of multicultural adolescents and young adults in northern Norway.

Design and setting

The Norwegian Arctic Adolescent Health Study (NAAHS), a cross-sectional, school-based survey conducted in 2003–2005, linked with registry data from the National Education Database (NUDB) and the National Insurance Registry (FD-Trygd) (2008-2012).

### **Participants**

4,881 tenth graders participated in the survey, of whom 3987 gave their follow-up consent.

#### Outcome measures

Several outcome measures as educational aspirations, completion/non-completion of upper secondary school (age 18-21), completion/non-completion of tertiary education (age 19-23) and not in education, employment or training (NEET) (age 23-25).

#### Methods

Logistic regression for the multivariable analyses of tendencies and associations.

#### Results

Gender differences in the educational trajectories, and further in training and employment were associated with residency, socio-economic status and health.

#### Conclusions

To address outcomes in an educational, work and welfare perspective, which can add new and extended understanding and knowledge of multicultural youth in Arctic Norway.

### The healthy island. A case study about involving small-island citizens in the evaluation of local healthcare in Italy

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Keywords: qualitative research, small island, health risk factors, empowerment, theory of change

In 2016, the regional administration of Tuscany (Italy) has implemented a project aimed at improving healthcare in difficult-to-reach areas throughout the regional territory. In particular, the project, named Optimisation of health care in smaller islands and in places

with exceptional difficulties, which was funded by the regional administration and implemented by the local health system, has improved the level of assistance and territorial healthcare while aiming to increase population empowerment.

This paper describes the results of the evaluative process for the research focusing on the main actions implemented at Giglio Island, a small island populated by about 1400 inhabitants located in the Tuscan Archipelago. This work analyses the main aspects of the outcomes of the project. In particular, the paper analyses the evidence of the explorative process in the light of the theories of change and stability about how the population of the island perceives the health care services.

The qualitative approach adopted, based on a series of focus groups, observations and questionnaires, and the use of computer-assisted qualitative data analysis has allowed to analyse the data collected and to focus on key aspects such as the health risk factors and the sense of community as perceived by the inhabitants.

### Farming stress beyond the numbers: a health conjuncture approach

Author: Duška Knežević Hočevar, Sociomedical institute ZRC SAZU, Slovenia

Keywords: health conjuncture approach, farming stress, social suffering, moral economy, Slovenia

Farming in Slovenia has been dramatically changed since the proclamation of independence from socialist Yugoslavia in 1991. In 2004, when Slovenia joined the EU and the CAP, the farmer-entrepreneur became a role-model of multifunctional developmental orientation and gradually, after the 2008 global food crisis, the developmental vision was defined towards sustainable agriculture. Yet the newly defined 'moral economy' expected from farmers to follow conflicting imperatives of pursuing both constant economic growth and practicing environmental and social sustainability propagated through the 'normative person', who should be simultaneously a productive, efficient, innovative and competitive but also a collaborative, just, healthy and satisfied farmer-entrepreneur.

However, health evidence in Slovenia and worldwide conveys that in the last two decades, farmers have belonged to the most hazardous occupational group in terms of work-related health. Scholars explain such evidence in line with their respective epistemologies; however, statistically informed explanations of the phenomenon still prevail in designing health-related policies. Since the 1990s, however, critical medical anthropologists have addressed global inequalities that might impact health. Studying

individual suffering thus becomes inseparable from studying social suffering to better understand how large-scale social forces come to be translated into personal distress and disease. However, the issue of how this 'translation' occurs among contemporary farmers remains under-researched.

The objective of this paper is to suggest a systematic approach to understanding how historically and economically driven agricultural change comes to be translated into farmers' work-related distress and suffering. In so doing, this approach draws on methodologies which examine both the contingent social dynamics and farmers' agency that underlie the statistical regularities. The theoretical framework follows a theorization of 'moral economy' to provide a framework for examining ways in which the observed farming economy intersects with 'moral economy' that has implications for farmers' wellbeing, and the intellectual tradition of critical medical anthropologists, who consider social suffering to be a response to a drastically changed situation in one's life. In order to move beyond 'methodological individualism' of health statistics, an anthropological health conjuncture approach is suggested to refer only to certain elements of socially structured and temporarily situated contexts, which are relevant for farmers' experience of stress and farming-related health outcomes. Employing such an analytical perspective, it is expected that one may observe 'the translation' of various social pressures brought by changing agricultural developmental imperatives and farmers' perceptions of conflicting moral economies into their suffering and illness.

### Children's views of how living in a rural community affect children's public health

Ellen M. I. Ersfjord, Regional centre for obesity research, St. Olavs Hospital

In Norway, children are seldom involved in health promotion, even though they are about 25 % of the Norwegian population. In this paper I will present findings from a project called "KOMPASS" - Municipal customized prevention and treatment — overweight and obesity amongst children in rural areas, where we involved children as co-researchers in order to get insight into their perspectives on how living in a rural area affects their health. Based on The HUNT Study - a longitudinal population health study in Norway, we know that the prevalence of overweight and obesity is much higher in rural areas. Research also shows that living in a rural area is an independent risk factor for being or becoming overweight or obese. In order to get more insight into these risk factors, we involved children as co-researchers in order to investigated their perspectives on public health, more specifically within the themes of diet, physical and activity.

My work is localized within the framework of social studies of children and childhood, which means that childhood is understood as a socially constructed phenomenon within

different local, cultural, and generational contexts. Within this framework, children are seen as competent social actors with agency.

### Cross-sectoral public health work in rural municipalities

Gudveig Gjøsund, NTNU, Norway

Keywords: Public health, rural municipalities, cross-sectoral organization

Even if the municipalities in Norway vary widely in terms of geography, demography and organization, they all have to adhere to the same national guidelines and laws. This also applies to the Public Health Act, which was introduced in 2012 and is one of the most important policy instruments for dealing with environmental, social and structural factors that affect public health in Norway. The main responsibility for implementing public health measures is placed at regional and local level, and it involves all sectors in the municipalities. The extreme variation in size, geography, competence and resources among the municipalities in Norway results in different ways of operationalizing The Public Health Act. In 2016 the Office of the Auditor General concluded in their investigation that the lack of anchoring public health work across sectors in a municipality is the largest barrier to succeed with public health work.

This presentation will look at how rural municipalities work across sectors with public health. It is based on the Program for public health work in Trøndelag which is a national initiative, Trøndelag county is the program owner, while the municipalities themselves are local project owners. Most of the municipalities participating in the program are from rural areas. The overall goal of the program is to integrate mental health and drug preventive work among children and young people into in the municipalities in a way that strengthens the systematic and knowledge-based public health work. Some of the activity in this program is to map the cross-sectoral public health work in municipalities participating in this program. Through this mapping we hope to gain better researchbased knowledge about how the organization of public health work in different kind of municipalities can prevent and promote implementation and give desired effects of public health measures with a special focus on the rural municipalities challenges. We will talk to 3-4 carefully selected people from approx. 15 municipalities who are familiar with the cross-sectoral public health work. We will do a mix of personal interviews and telephone interviews. When the conference is held we will be in the middle of this data collection, and the presentation will provide preliminary findings in addition to presenting the Public Health Program.

#### **Rural Health and Social Care Services**

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Keywords: Rural health, rural aging, care services, policy

Rural health and social care services are important for the health of older people in rural areas of English-speaking countries of North America, the UK, Ireland, Australia and New Zealand. This is often attributed to known age effects from rural populations being older on average than urban populations, lower incomes, higher poverty rates and greater geographic and social isolation in rural compared to urban locales. Larger shares of rural residents are also in farming and extractive industry occupations that pose greater risks for disability. Many rural areas are disadvantaged in access to, availability and quality of acute health care services. This rural disadvantage may also extend to long-term and respite care services. We use a multi-scalar theoretical perspective to examine facilitators and constraints on rural aging care services. Recent research found that interrelationships between organizations within a community and linkages to organizations and institutions in other, often larger places are important for the provision of services in rural communities. Local governments interact with state and national-level policies that can diminish or enhance rural care services, e.g., in the UK and other European countries austerity had a significant impact on service provision. We will systematically examine the literature on policies that effect services and consequently effect health outcomes.

#### Potential causes of overweight and obesity in rural areas

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The increasing prevalence of overweight and obesity is recognized as a major public health challenge nationally and internationally. There is emerging evidence of geographical inequalities in overweight and obesity in Norway, as well as in many other high-income countries. Both national and international research shows that rural residency increases the risk of overweight and obesity. For instance, results from The Nord-Trøndelag Health Study (HUNT) show that the prevalence of obesity among young people seems to be higher in municipalities defined as less central.

Related to this, studies have investigated the effects of demographic and socioeconomic factors on overweight and obesity, and studies point to the fact that people living in rural

areas often have lower income and educational level than people in urban areas. Even though level of income and education are negatively correlated with unhealthy lifestyle, studies show that rural residency in itself is an independent risk factor for being overweight or obese as well.

We use an explorative method, qualitative interviews, with relevant actors as public health nurses and teachers in three rural communities and one urban community, to reveal possible reasons for the uneven distribution of overweight and obesity between rural and urban areas. The analyses shows several potential causes for the rural-urban inequality in weight status. In the study, they point out challenges for rural areas, connected to both contextual and compositional factors. For instance, i) maintaining diet habits established by previous generations, often based on tradition, in combination with changed activity patterns, ii) rural parents' perception of children's' ideal weight, and iii) scattered settlement and longer distances which requiring usage of passive transportations (e.g. car and bus). A basic underlying perception the study revealed was a feeling that overweight is a theme that is defined, handled and communicated from an urban perspective and through urban glasses. This might create a foundation for a general, cultural resistance in rural areas, against health authorities and official expert knowledge.

### The Roles of Socioeconomic and Opioid Supply Factors in U.S. Drug Mortality: Urban-Rural and Within-Rural Differences

Shannon M. Monnat, Syracuse University, USA

Keywords: health, mortality, urban-rural continuum, economic disadvantage, opioids

Over the past two decades deaths from opioids and other drugs have grown to be a major U.S. public health problem, but the severity of the crisis varies across the U.S., and explanations for widespread geographic variation in the severity of the drug crisis are limited. An emerging debate is whether geographic differences in drug mortality are driven mostly by opioid supply factors or socioeconomic despair factors. To explore this topic, I examined relationships between county-level drug mortality rates for 2000-02 and 2014-16 and several socioeconomic and opioid supply measures across the urban-rural continuum and within different rural labor markets. Net of county demographic composition, average drug mortality rates are highest and increased the most in large metro counties. In 2014-16, the most rural counties had an average of 6.2 fewer deaths per 100,000 population than large metro counties. Economic distress, family distress, persistent population loss, and opioid supply factors (exposure to prescription opioids and fentanyl) are all associated with significantly higher drug mortality rates. However,

the magnitude of associations varies across the urban-rural continuum and across different types of rural labor markets. In rural counties, economic distress is a stronger predictor than opioid supply measures of drug mortality rates, but in urban counties, opioid supply factors are more strongly associated with drug mortality rates than is economic distress. Ultimately, drug mortality rates are the highest in economically-distressed mining and service sector dependent counties with high exposure to prescription opioids and fentanyl.

### Civilization diseases. Can the rural area protect? Methodological problems regarding the collection and interpretation of data

Elwira Piszczek, Nicolaus Copernicus University in Toruń, Poland

Different types of statistical data, analysis show "rural areas" usually as underdeveloped areas, as a place of life worse than "urban areas". Such a picture emerges, among others, from public health data both at the local (regional) level as in the global perspective (eg WHO data). At the same time, the same data shows us differences in the intensity (and dynamics) of the apperance of many different so-called civilization diseases, which seems to concern urban residents rather than villages.

In my paper, I would like to try to answer the question whether the "rural area" and "rural lifestyle" can play a protective role in relation to mental and physical health? To what extent? I would like to raise the question of the relationship between man and Nature as a (still dominant) element of rural life, which is crucial in the interpretation of so-called Nature Deficit Disorder.

This is directly related to the methodological problems that I would like to address. Public health is an extremely interesting but at the same time extremely difficult research area. On the one hand, we have extensive surveys. Due to the type of collected material, the benefits of a large range of research (often representative) are sometimes eclipsed by the limited possibilities of correlation analysis (cause-and-effect relationship). Research on a small scale (local and regional) usually gives better opportunities for in-depth analysis (dependencies). Unfortunately, they are often accused of being unable to generalize. Similarly, experimental studies, despite statistically significant results, are often accused of being unable to generalize conclusions. Additional difficulties are the ethical aspects of constructing experiments. These problems are connected with the unresolved disputes about the nature of "urbanity" and "rurality". This is obviously a big simplification, but showing important problems related to the collection, analysis and interpretation of data.

### Burnout in Agriculture before the Context of Finance, Health and Interconnection of Family and Farm

Linda Reissig, Agroscope, Switzerland

Burnout among farmers is an increasingly frequent topic of discussion in the Swiss agricultural press, although there have been no empirical studies on the phenomenon to date. In 2016, 4000 Swiss Farmers were invited to complete a questionnaire, 1352 usable questionnaires were returned. The aim of which was to investigate the frequency and causes of burnout in the Swiss farming sector. The study shows that burnout affects around 12% of the surveyed farmers. Influencing factors were analysed by applying a multivariate regression analysis. The study is the first to deliver data on the frequency of burnout in farming, and at the same time highlights the need for action – especially the need to recognise burnout at a sufficiently early stage. In conclusion, the predictors of burnout among Swiss farmers appeared to be a bad financial situation, time pressure and lack of free time, work-family-conflict, bad health and bad life satisfaction. The consideration of predicting factors both from private and from professional life succeeds in explaining a really large share of the variance. This shows the multifaceted causes of burnout. It could be confirmed that both the prevalence of relational conflicts, a bad financial situation and a high workload that exerts pressure and prevents breaks remain core predictors of burnout.

### Migrant farm workers' quality of life, welfare and health in Norway's agricultural industries

Johan Fredrik Rye, NTNU, Norway

Keywords: Migrant workers, living conditions, public health, welfare state

Around the world, migrant farm workers generally experiences precarious work and wage conditions, often including hazardious work environments with serious health implication. This paper investigates the case of migrant workers in the Norwegian horticultural industries, which is interesting both due to the generally highly regulated character of the Norwegian labour market, including strong control mechanisms by state authority and trade union presence, and the country's social democratic welfare state model, in which universal provision of free health care — also to immigrants — is an essential measure. Interestingly, there is little existing knowledge on the health situation for migrant workers in the horticultural industries, possibly reflecting a general ignorance of migrant work stock life conditions among key actors in the Norwegian agricultural industry (such as farmers and their organisation, state agencies, and rural public

channels). However, the evidence that exist suggest that Norwegian migrant farm workers share the precarious and often health damaging working life conditions in many other countries. The inherent marginal position of migrants, due to their often non-permanent presence in the community, language barriers and lacking knowledge of the health system, further adds to their problematic relationship to the public health providers. This raises important questions for the furture of public health provision in rural regions: How can health actors better acknowledge and address the health needs of migrant farm workers?

### 'Coincidental plan-making: The missed integration of rural and health policies in Danish village planning'

Annette Aagaard Thuesen, Pernille Tangaard Andersen

University of Southern Denmark

Keywords: Rural health, citizen participation, village plans, municipal health policies, municipal rural policies

Studies have shown that people in Danish rural areas practice less sports and move less than people in the cities and that citizens in rural-dominated municipalities on several parameters have a poorer health status than citizens in urban municipalities. This paper aims to investigate whether there is a potential for co-creation of a shared health effort between rural village communities and municipalities to solve the challenge with the poorer health of the rural population. It takes its point of departure in three case study areas where villages have prepared village plans with a health focus. By use of document studies of village plans and municipal health and rural policies and interviews with villagers, public administrators and politicians in the municipalities, the paper analyses the extent to which coordination of village plans and municipal rural policies and health policies has taken place and addresses the local's and the municipalities' views on opportunities and barriers of further integration of health initiatives. Theoretically, the article builds on literature dealing with bridging between and integration of communityled planning and planning at higher tiers of governance. The results show that there is room for a better coordination and that municipalities can support the local efforts but must not infect or trump local energies. There is still a long way before that is a danger, as there is not much contact between the municipalities and the local communities in relation to their health efforts. The results also show, that including health in village plans is not only about health, but also about rural development. Health can be used as a rural development motivation if a village succeed in twisting what the community focus is about.

### Why do rural areas lag in age friendly planning for public health?

Zue Zhang and Mildred Warner

Cornell University, USA

In the US, rural communities face more challenges to meet the public health needs of elders and children than urban and suburban places. Rising rates of obesity among children and elders have led to calls for increased attention to opportunities for physical activity in streetscape design and park development. However, age-friendly planning and design guidelines are decidedly urban-focused. New Urbanist principles of density, walkability, and mixed-use are difficult to achieve in rural communities. In addition, rural communities typically provide lower levels of services. Scholars need to develop a rural lens for community planning that addresses physical design and service provision, and promotes civic engagement to help rural governments advance public health.

Sociologists as well as planners are giving greater attention to building age friendly communities to promote better public health. In 2014, the US based AARP (agency focused on aging) developed a Livability Index based on WHO's eight domains of agefriendly communities. The index includes livability indicator scores on health, housing, neighborhood, transportation, environment, engagement, and opportunity. In 2017, we worked with AARP and the American Planning Association to conduct a survey of planners and local governments' actions to build age-friendly communities. In this paper, we link the unique AARP livability indicators and the planners' survey to determine which factors drive age-friendly communities which advance public health. We find that rural areas lag in health indicator, compared to urban and suburb (based on Scheffe test by metro status). We run OLS regression to examine the relation between the seven livability indicators and local government actions to build age-friendly environments. We find that places with more engagement rank higher on the AARP health outcome indicator. Local government actions to build age-friendly communities also play an important role in increasing the access and quality of healthcare. Planning has a key role to play in helping move rural communities forward in addressing public health challenges and create livable communities for all ages.

# Working Group 11: Social innovation and social farming as a driver of transformations and changes in rural areas

### **Facilitating Trust for Collaboration in Smallholder Value Chains**

Christopher Agyekomhene, Wageningen University and Research

Organizing collaboration between value chain actors is seen as offering a means of addressing existing institutional failures in smallholder contexts. This is because the complex challenges faced often require a harnessing of the capacities of multiple actors through collaboration. Various value chain governance mechanisms (VCGMs) have been explored as approaches to enabling new institutions needed for such collaboration in smallholder value chains. These institutional changes have however often been unsustainable in informal contexts where trust is often the key condition for collaborative relationships. Understanding the functioning of such VCGMs from a trust perspective could therefore provide key insights on the process of facilitating sustainable institutional change for collaborative relations within smallholder value chain contexts. Thus we explore how trust influences institutional change, in the context of VCGMs, for collaborative interdependent relations in smallholder value chains. The study is conducted through a case study of an interdependent smallholder maize farming arrangement in Ghana, West Africa.

Our study shows that different forms of trust are present and combine in various ways in relations between interdependent actors within a value chain network. Trust should therefore not be perceived as one dimensional but a spectrum with relational, calculative and institutional trust playing key roles in facilitating collaboration between network actors. It is therefore important to determine the form of trust which dominate at different points in the network so as to better understand the key conditions which need to be supported in order to sustain trust between actors collaborating at that point. In facilitating institutional change in the maize farming context in Ghana, we argue that VCGMs should aim to facilitate supportive conditions for calculative trust in particular in order to build sustainable collaboration in the highly uncertain context. Enabling calculative trust requires information on actor performance as well as quick evidence of failure or emerging problems in the short term. We argue that facilitating this form of trust would likely require and presents a key opportunity for adoption of new forms of digital communication in value chain collaboration in the rural smallholder context.

### Social innovation and social farming in Italy: designing innovative paths in the welfare system toward a territorial platform for social inclusion

Francesco Di Lacovo, Università di Pisa, Italy

Keywords: social farming, welfare, social innovation

At EU level welfare systems are rather diverse although they are facing similar challenges and organising converging paths (Esping Andersen, 2013). Pro-activity, collective knowledge, new shared visions, subsidiarity and transition management are becoming key elements in designing social innovation paths able to facilitate innovative solutions based on community alliances, social investments and resource mobilisation (Vision-European-Summit, 2015). In both urban and rural areas the crisis of the welfare system is negatively affecting living conditions, health and social mobility and generating both social inequalities and unfair economic processes (Stiglitz, 2013; Picketty, 2014). This is particularly true when the provision of health/social services is more difficult due to the scale economy limits and the flexible needs of local population. The ability to innovate the welfare system is becoming crucial in order to ensure the European capitalism and stability (Barr, 2012; Morel et al., 2012) and is demanding in terms of innovative solutions and principles (Andrews and Evans, 2008). Co-design, co-production, core economy, civic economy, economy of care, are new entry point for the re-organisation of public services. This is also the case in social farming where local resources from agriculture are mobilised in order to reinforce the social protection net towards co-production (Cahn, 2001; Boyle and Harris, 2009; Ostrom, 1996) subsidiarity and new economic models (Di Jacovo et al., 2014). The design of social innovation paths in social farming is based on innovative principles and is institutionally and culturally embedded also in relation with diverse welfare systems (Di lacovo et al., 2017). Starting form a research action carried out in the province of Pisa in 2016-2018 a social innovation path in social farming was designed in order to organise a territorial platform for social inclusion in agriculture. In the project a mix of bottom-up activities (pilot actions, scouting) and top-down activities (support policies, support for animation and evaluation activity) supported the organisation of new social farming services in the area. The paper will analyse the key element in the definition and the organisation of a social innovation path especially focusing on the role and interactions between institutional levels present in the project, the positioning and the reference culture of the public and private actors involved and the way they interact, the levels of collaboration/competition practiced, the relationship between system objectives and specific objectives, the ways to monitor and evaluate the outcomes of the inclusion activity started.

# Providing childcare services as a driver of socio-cultural changes for women farmers – A case study of social farming in South Tyrol, Italy

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Keywords: social farming, South Tyrol, women in agriculture, female entrepreneurship

In recent years, the provision of social services on the farm developed into an opportunity for income diversification in the South Tyrolean agricultural sector (Hoffmann and Streifeneder, 2013). In the past, especially women farmers had little access to financial resources. In comparison to male farmers, their possibilities to earn a personal income and to create their own field of action on the farm were limited. At the same time, the provision of childcare services in remote rural areas was insufficient. Consequently, in 2006, some South Tyrolean women farmers founded a social cooperative and started to offer childcare services on their farms. Today, the social cooperative "Learning, growing, living with women farmers" has more than 100 female members. As a case study of social innovation of the H2020 project SIMRA, the social cooperative stands at the focus of our investigation.

Starting from rural gender studies (Little and Morris, 2005; Buller and Hoggart, 2004) and women empowerment-literature (Kabeer, 1999; Alkire et al., 2013; Wright and Annes, 2016), we hypothesize female entrepreneurship to promote a more balanced power structure between men and women in agriculture and to enhance the improvement of women farmers' social status in the rural context. By increasing their access to resources and improving their agency, having an on-farm business opens the possibility for achieving a valuable way of being and doing. Accordingly, this study investigates the recognized effects and outcomes that the activity as childminder on the farm had on women farmers' working and living conditions.

We applied a qualitative approach, interviewing 7 women farmers that provide childcare services. Additionally, we interviewed 4 experts. The structuring content analysis of the interviews, characterized by a mix of deductive and inductive category building, resulted in 2 domains of motivations and 15 domains of effects. The results of the data analysis showed that the provision of childcare services enhanced the autonomy of women farmers and had positive impacts on their skills and competences. This activity changed their social role in the community by revalorizing rural lifestyles and by enabling the reconciliation of work and life for working mothers. Nevertheless, women farmers recognized both positive and negative effects on their own workload, on their interfamilial- and other social relations. Furthermore, the results of our study suggest that

the perceived effects of childcare provision on women farmers' working and living conditions depend on their former situation as on- or off- farm employee.

### The sustainable agricultural social system. A social science framework to grasp the diversity of farming systems for sustainability assessment

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Keywords: Social sustainability, social systems, needs, rights

Sustainability assessment in farming is a new development that attempts to estimate the quality of farming. While a social dimension is mostly foreseen, based on an extensive review of sustainability assessments in agriculture (Janker & Mann 2018), we found that a coherent understanding what the social dimension of sustainability means is still missing in agriculture. The only widespread commonality of the assessments was the utilization of human rights and labour rights frameworks. Arguing that human and labour rights might not be the adequate standard to call any social system sustainable, we develop a novel framework that can guide the development of the social dimension of sustainability assessments. By utilizing an existing social science framework, Parsons' (1991) social system of change, we support the identification of key actors, interactions and institutions. Based on these social system actors, we can then determine which needs are actually important to the respective local actors and which institutional changes are needed to implement them. We establish the needs based on Maslow's (1943) categories of needs and utilize the rights approach (Gasper 2007) as a bottom threshold that cannot be undercut. This 'sustainability scale' can then give indications on how well the needs of the social actors are fulfilled and which further steps are necessary. We call the conceptual framework the 'sustainable agricultural social system'. This general framework promises a way to grasp the complexity and diversity of local farming systems while still producing comparable results in the future. We therefore believe that it is suitable for the session on 'Social innovation and social farming as a driver of transformations and changes in rural areas'.

#### First experience of care farming in Poland

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Keywords: care farms, green care, social farming, farm diversification, vocational reorientation

The text describes research results and evaluation of the first successful experiment in care farming in Poland which provides day care for elderly and dependent people. By the end of 2018, in the Kuyavian-Pomeranian region, it participated in a different dimension of more than 20 farm-care farms, and about 250 people were covered by the care. In 2019, another 15 carers enter other places in the region (for next over 200 beneficiaries). In this case, the key is the use of the competence of members of traditional families multigenerational farms. On the one hand, undertaking caring activities is a form of diversification of economic activity for farms, while farm owners make a professional reorientation. In this way, elderly and dependent people from increasingly depopulated rural areas find an alternative and cheaper form of care than in the classical public system. The aging process of the Polish society is progressing so fast that every form of support for care for the elderly helps to solve this problem, but a number of formal problems arise. Care farms do not have a formal status and can not use public funds. They also do not have legal regulations for public social assistance. The provision of care services by farmers gives undeniable benefits to both farmers and beneficiaries of assistance and their families. Lack of legal regulations and lack of experience in Poland are today the main barriers to their development. The text presents both a description of the problems of social farming in Poland, including mainly care farms and over two years of experience of farm owners and their beneficiaries. The text also includes the position of the representatives of Ministries responsible for health and agriculture as well as local and regional social care services.

#### Social farming in the context of community-based social farming (CSF)

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Key words: Social farming, Community-based Social Farming (CSF)

Social agriculture connects rural and municipal environments thanks to utilising the potential of agricultural farms to provide social services for local communities. This type of agriculture fosters social integration; as a business activity and a method of farm management in rural areas, it contributes to strengthening the relations between rural inhabitants, while at the same time allowing for strengthening of the relationships among

various entities involved in social agriculture. This is where new social relations – bonding and bridging – are formed, connecting farmers, rural area inhabitants and beneficiaries of social services.

One of the possibilities of farm diversification is to provide care services. In Polish farms, the new form of diversification is not very popular. Social agriculture can operate in symbiosis with the primary purpose of the existence of small farms – ensuring the farmer and his family members the supply of basic food products, and generating additional revenues from the implementation of various social tasks. This challenge causes need of entrepreneurship which is an inherent characteristic of the market economy. Entrepreneurship also entails a preparedness to bear risk. Developed countries, with deeply rooted democratic and free market structures that are economically and politically stable are characterized by a high level of social trust also show entrepreneurship. An entrepreneurial economy above all is created by people who operate in conditions that encourage taking on new challenges that are always associated with a certain degree of risk. It is difficult to create a clear psychosocial sketch of Polish people regarding their willingness to take on tasks that demand a certain talent, courage and certain models established over generations.

The article presents the ideas of the Community-based Social Farming project, which is based on cooperation, uses local capital, and implements education focused on such values as: health, history of the region, culture, recreation, healthy food. The primary goal of those actions is to create new social bonds, based on intergenerational and cross-environmental integration. It is an opportunity to obtain additional sources of income for farming families and an alternative way of rural area management in the Małopolskie Voivodeship, characterised by agricultural fragmentation.

#### Social farming - new challenge for extension services in rural areas

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Keywords: social farming, innovative knowledge, extension services

The example of social innovation for Polish agriculture is social farming which might be a new objective for rural development policy related to the social sphere. Therefore the public extension system in Poland, as an policy implementer, may play a huge role as a driver of social changes in rural areas.

Therefore the public extension system needs to be reoriented to new technical skills as well as to a knowledge exchange attitude. The different aspects of social innovation such

as social farming, causes the need for supporting advisors' ability to change and close the gap between science and practice.

As the complexity of challenges in extension increases, advisors need to be aware of the evolution of systems and prepare for changes. Therefore, the specific research questions are: how the role of agricultural advisors has been changing and what skills and capabilities regarding social farming are needed for agricultural advisors? Social farming should be developed, especially in rural areas because of the negative effects of the ageing of the population, searching for new sources of farm income as well as a serious problem with migration (it causes the interruption of traditional, local and family, social ties and support networks).

The paper uses an expert interview methodology. The interviews show the dilemma for agricultural advisors regarding the extension process in the social farming theme. The data is collected by interviewing agricultural advisors in 4 different regions in Poland. The interviews are made by using the scenario for individual in-depth interview (IDI).

Social farming as a new theme is a challenge for public extension in Poland. Therefore, it should be prepared in the methodology of advising and working with various actors involved in the social farms creation process. It is necessary to develop and implement new training methods and materials (detailed issues), including education in the working environment and the use of open educational resources.

# The interest and competence of farmers in the region of Kainuu to implement Green Care activities in addition to their basic production

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The farm environment generally provides a beautiful and functional framework for organizing Green Care activities. There are meaningful ways to work with a variety of target groups and Green Care can be implemented in several ways. The purpose of this study was to examine the interest and competence of farmers in the region of Kainuu to implement Green Care activities in addition to their basic production.

The study was a quantitative research. The research material was collected using the Webropol questionnaire. The questionnaire was answered by 36 respondents (n=36). The survey was started in the autumn of 2017 and the survey was conducted in November 2017. About one third of the respondents implemented or wanted to implement Green Care methods on their own farms. The survey also revealed that the motivation to

produce Green Care services correlates to the individual values of farmers. The respondents were willing to make use of their farms in versatile ways and to create new business activities in the countryside. The farmers in Kainuu are well educated in various ways in addition to traditional agriculture. Thus it is possible to produce services for specific target groups.

Farmers tended to be willing to get more information about Green Care through practical examples. Their responses also showed that the farmers have to be supported to start Green Care activities. They also showed an interest in becoming educated in the social sector. Green Care is not yet a well-known concept in Kainuu, and it was evident that more information about it was essential in order to make the activities lucrative business on the farms in Kainuu.

# Tackling depopulation trough social innovation: diversity of topics and types of expertise

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Rural development in general, and particularly depopulation, are complex, multifaceted processes which call for an interdisciplinary approach. Nowadays, rural studies is an interdisciplinary and post-disciplinary field of study which encompasses a wide range of social, economic and environmental issues, as well as relevant public policy. Contributions from sociology, geography, anthropology, political science, ecology and more all have a place in this field (Shucksmith and Brown, 2016; Moyano 2009). It is necessary to tackle study in this area from an interdisciplinary perspective which integrates different factors and offers analysis frameworks capable of accounting for the complexity of events in rural areas when dealing with depopulation.

Social innovation in rural areas is currently one of the most powerful paradigms for fostering rural development and confronting the challenges of depopulation. Despite being a controversial concept (Ayob, Teasdale y Fagan, 2009; Sinclair y Baglioni, 2014), it is widely used in political discourse, particularly in the context of the European Union (Sinclair y Baglioni, 2014). Social innovation has been put forward as the ideal solution to achieve positive social changes in societies experiencing societal challenges, becoming the predominant discursive framework of social development.

The proposed paper explores social innovation initiatives from the perspective of the interdisciplinary involvement in them. The aim of the paper is to study social innovation initiatives in rural areas facing depopulation from the perspective of the diversity of types of knowledge involved in them. For this purpose, we develop a qualitative analysis of the diversity of topics and actors involved in the social innovation initiatives trying to face depopulation processes in marginalised rural areas in Europa that are recorded in the database of the European research project "Social Innovation in Marginalised Rural Areas –SIMRA<sup>1</sup>". The results of this analysis allow us to help to identify some of the key elements involved in those experiences, linking them to inputs from different types of knowledge and discipline fields.

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#### Policies for social innovation: The example of social farming

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Keywords: Institutions, regulations, participation, policy impact directions

Policy impacts on social innovation can have two directions: one is the implication and impact that a policy has on the Social Innovation, and the other is vice-versa and concerns the impact that Social Innovation can have on policies. The paper outines implications, impacts and roles that policies can have for specific cases of Social Innovation with the example of social farming. Interesting, social farming shows how impacts from a Social Innovation to Policy become prevalent i) when a new/specific policy gets triggered by the Social Innovation, defined as a direct policy implication; and ii) the policy implications of Social Innovation for other policies and for the political framework. Both is found in the case of new social farming regulations in Europe which were created after the social farming movement emerged and sought recognition. The first initiative for coherent policy frames was the "Witzenhausen Position paper on the Added Value of Social Farming" in 2017 that had an impact on EU level. Today, there are different versions and stages of implementation of social farming across Europe and the paper will assess and discuss their particular relevance.

#### Social farming in rural development in the face of demographic challenges in Poland

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Jagiellonian University, Poland

Keywords: social farming, social service, rural areas, family farms

The care farm is an innovative solution of demographical problems which are connected with social ageing and other issues regarding care services in rural areas. The idea of care farm consists in the combination of the multifunctional agriculture with social services on the local level. The aim of the GROWID project is to develop and implement a model of "care farm", which would be acceptable in polish specific legal, demographic, social and cultural conditions. It will be accomplished thanks to completing five research tasks and two implementation tasks. The research tasks are: Searching for informal types of care services for seniors within cooperation networks in rural areas. Diagnosis of social attitudes towards elderly people and demands for care services. Costs analysis and defining the potential of local authorities and local farmhouses to implement the idea of care farm. Identification and evaluation of previous initiatives regarding care farms in Poland. Development of the model of care farm in Poland. The implementation tasks are: Preparation for the implementation of the model of care farms Development of essential legal regulations and promotion of the model of care farms.

#### Social Innovation and the agri-food system: a literature review

Eugenia Petropoulou<sup>1</sup>, Constantine Iliopoulos, Irini Theodorakopoulou, Theo Benos, Annarita Antonelli, Damiano, Petruzzella, Alessandra Catellini

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This presentation will discuss social innovation conceptualised as the process through which it can contribute to a transformative agri-food system. Research on social innovation in the agri-food system is mainly carried out through case studies. This is due to the unique character of innovations, at least when they emerge, and the fact that the concept of social innovation in the agri-food system is still poorly understood. As a consequence, information on social innovation often remains isolated, restricting the sociological analysis of the social transformations that accompany these innovations while limiting the generalization of results. In order to fill this gap, an extensive literature review through different databases can shed light on the links between different forms of social innovation in the agri-food system (i.e. short food supply chains) and their configurations, evolution and distribution in time and space. The working hypothesis is

that an extensive literature review of a large number of cases will reveal aspects of social innovation that had not been observed to date while also informing about the relationship between social innovation and social transformation in the agri-food system. With a focus on the methodological, theoretical and epistemological challenges of such an undertaking, this presentation will also discuss the potential scientific contribution that such an initiative will provide to the study of social innovation and social transformation in the current agriculture and food debate.

#### Care farming – who is the entrepreneur?

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Care farming for patients suffering from dementia is considered an innovative way of exploiting farm resources to provide social services. Services seem to function well for all stakeholders, from local authorities being responsible for welfare services provision to patients and their relatives.

The number of green care services providers in Norway is nevertheless quite limited and stagnant while municipalities in general search intensively for effective ways to manage the growing number of elderly and thus increasing prevalence of dementia in the population. There is reason to ask whether innovation system deficiencies may hinder more rapid growth of green dementia care.

The paper "Care farming – who is the entrepeneur?" will review theories of innovation, with particular emphasis on demand and supply side constraints and interaction. In-depth interviews with municipalities performed by fellow researchers on the Green Dementia Care – project, will be used to assess the relevance of alternative explanatory factors. Results are used to formulate tentative avenues towards effective utilization for farm resources in meeting the needs of a growing need for effective dementia care in Norway

#### Working from the heart – Care Farming in a Gender Perspective

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Keywords: care farming, gender, Sweden

Sweden has experienced an agrarian transformation where the role of agriculture is diminishing in terms of employment, GDP and land coverage, since the post-war period. At the same time the productivity and production performance of the sector is improving. The current emerging agricultural landscape includes the development of large scale, work-extensive, specialised farms, integrated into a global trade of food, but also various movements for sustainable food production with strong attachments to place. In addition, farmers diversify through developing services based on various resources of the farm, for example 'green care'.

Green care can be defined as: "the utilisation of agricultural farms – the animals, the plants, the garden, the forest, and the landscape – as a base for promoting human mental and physical health, as well as quality of life, for a variety of client groups" (Dessein and Bock, 2010:12). The literature on green care has focused on the range of benefits for various groups of clients (see: Hassink, et al., 2010; Sempik et al., 2010; Steigen, et al. 2015). Fewer studies have investigated green care with a focus on the 'doers' – for example the farmers and farm families. Those that do view green care as part of changing farming; as multi-functionality (Hassink, et al., 2007), as an entrepreneurial strategy (Hassink et al., 2016), but also as 'connective agriculture' (Leck et al., 2014), whereas 'humane' jobs for humans and other animals are emerging (cf. Coulter, 2016). However, research has not paid heed to how gender influence the green care farms and care-givers.

In this paper we analyze green care as part of agrarian transformations. Since the transformations are inextricably bound up in social and gendered structures and processes, it is crucial to understand how they affect women and men's engagement, motives, opportunities and outcomes in relation to green care. Hence, we study green care from a gender perspective, with a focus on the emergence and development of new relations and identities — and the use of bodily work. We also discuss how care-givers in green care, in different ways, seek to resist the socio-political 'rationality' they must work within, being part of welfare provisioning. Empirically, the paper builds on 21 in-depth interviews, and participatory observations, on 12 green care farms in Sweden.

# A new framework for evaluating social innovation and its impacts in marginalised rural areas

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Keywords: social innovation, indicators, evaluation framework, rural areas, qualitativequantitative methods

An agreed and well-consolidated evaluation framework for the assessment of social innovation (SI) and its impacts has not been developed yet, despite initial tentative made by scholars (e.g., Nicholls et al. 2015, Bock 2016). Social Innovation in Marginalised Rural Areas — SIMRA (www.simra-h2020.eu.) is a EU funded H2020 project which aims to conceptualize and propose an evaluation framework, based on qualitative-quantitative methods to evaluate SI in disadvantaged rural areas of Europe and non-EU Mediterranean countries. Within SIMRA, SI is defined as "the reconfiguring of social practices, in response to societal challenges, which seeks to enhance outcomes on societal well-being and necessarily includes the engagement of civil society actors" (Polman et al., 2017). The aim of this paper is to illustrate the framework and the related tools for data collection and analysis that we propose for evaluating SI and its impacts in rural contexts.

The evaluation framework has been co-constructed with project partners and a panel of international stakeholders in the fields of agriculture, forestry and rural development (Nijnik et al. 2019). It is structured into dimensions and sub-dimensions. It follows the phases of a SI initiative, from the trigger that generates the idea, to the reconfiguring process to its impacts. The framework envisages several interconnected quantitative and qualitative variables. Eight tools for variables collection have been developed, tested in two pilot cases, and applied in 11 case studies in the target regions. Empirical results allowed to set 166 indicators: 73 indicators describe all the dimensions of SI (e.g., idea, agency, new networks, outputs, outcomes, learning processes); 63 indicators analyse the process, the project and the whole SI initiative by following relevance, efficiency, effectiveness, impact and sustainability evaluation criteria (OECD, 1991 and 2010); 30 indicators focus on the key descriptive of the SI SIMRA definition. The approach integrates qualitative-pure methods (e.g., focus group) with quantitative ones (e.g., Social Network Analysis). The empirically tested evaluation framework proposed in this paper would like to contribute to current debates, both within the scientific and practitioners' communities, on evidence-based policy, future strategies to support communities' creativity mobilization, and self evaluation by rural development agencies.

#### Care farms as an innovation linking different social systems

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Keywords: social system theory, care farms

The proposed paper is connected with the sub-theme "The type of rural transformations driven by social innovation". It is based on results of the research projects conducted by the Agriculture Advisory Centre in Cracow in years 2016-2017.

Public institutions and rural dwellers in Poland are taking many actions in order to develop social farming. In recent years the attention has been focused in particular on care farms, that can help to solve problems associated with the aging society. The development of social farming in Poland is a good example of how social innovations trigger changes in rural areas in Europe.

Family farms in Poland have always had caring functions. Is the development of social farming really a social innovation then? Yes, because the innovativeness of the care farms lies in a fact, that they combine agriculture with social security services. This phenomenon can be explained by using Niklas Luhmann's social systems theory.

Traditionally, rural households used to combine both food production and care functions. Modernization, however, led to the progressive separation of their various functions. "The agriculture" and "the care" have become separate areas (social systems) managed by different state agencies. In simplification we can identify them as the Ministry of Agriculture and the Ministry of Social Policy. They have separate functions, logic of operation and "languages" codified in the law. These systems are rationalized, but they do not function perfectly. They solve some social problems, but at the same time they generate new problems. These problems arise from internal system contradictions and from globalization. The production of food on family farms in Poland is becoming less and less profitable. Many rural families are also unable to provide care to people in need. This problem is also not solved by the existing social security system. Modernization and rationalization, which once led to the creation of separate systems of food production and care, now start to demand their reconnection. This aspiration is revealed on two levels. On the one hand, there are grassroots initiatives related to social farming, undertaken by scientists, social activists, NGOs and farmers. On the other hand, these are also actions initiated by state agencies that result from the internal needs of the social systems they manage. The innovativeness of the care farms is exposed in the places, where once separated social systems are reconnecting. The nature of these connections will have great significance for the rural future.

#### Social Innovation and Learning in Direct Marketing

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Keywords: Social innovation, Retro-innovation, Learning, Direct marketing

In this paper, we explore retro-innovation of direct marketing as applied in the domain of agricultural goods, and the accompanying processes of learning that influence the nature, scope, and spread of these practices. We explore retro-innovation as a social innovation meaning that it offers systemic social change in the dominant conventional food chains – their configuration, relationships and values. Based on the conceptualisation of social innovation as pertaining to innovative collaboration models and practices and novel partnerships between individuals and/or organisations aimed at meeting social needs the paper analyses social innovations as improvements in human interaction, and we refer to learning as a multi-actor and multi-directional exchange of knowledge. The focus on learning helps to understand how social innovation is shaped by multiple forms and sources of knowledge. Social innovation might happen in a non-teleological way, i.e. its outcomes often are not intended from the beginning and innovation unfolds in a constructivist way as through evolution of relationships and values. Time is an important dimension in any innovation, but the case of direct marketing as a retro-innovation gives this aspect a particular relevance. The prolonged historical evolution and transformations of this practice over the last 20-30 years allows to view it in an extended time-frame. Subsequently, we identify varied institutional set-ups for exploring the cumulative nature of social innovation, i.e. building-up and change in relationships and values.

<u>Methods</u>: Our analysis is based on a case study of direct marketing in agriculture carried out within the framework of the H2020 project AgriLink. The data was collected during 30 semi-structured interviews carried out in 2018-2019 with farmers engaged in direct marketing in Latvia. In addition, five expert interviews have been conducted with specialists from agricultural advisory services and consultants from private companies and NGOs who provide knowledge support to farmers in this specific domain. The primary case study area is Pierīga region.

#### Findings: Our study has several findings:

(i) There is a great diversity of both established and novel forms of direct marketing (farmer markets, on-farm sales, supplies to workplaces and neighbourhoods in cities, marketing via the internet and social media, direct purchasing groups, coordinated box schemes, selling through personal social networks, and other). Farmers combine these forms to develop marketing and business models which best fit the farm's profile. The farmers' effort in combining different forms of direct marketing is made through the processes of learning-by-doing, peer-to-peer learning, experimentation, and introduction of (retro)innovations, or returning to old/traditional practices in new social contexts. Routinisation of these selected

- forms and their combinations leads to the establishment of particular composite arrangements of direct marketing (e.g. internet sales to distant consumers & onfarm sales to dedicated local customers).
- (ii) Every individual form and the chosen arrangement of direct marketing requires specific knowledge which is gained from a variety of internal and external as well as formal and informal sources historical, personal and social sources.
- (iii) Retro-innovation is based on specific pool of knowledge. Intergenerational learning from parents, grandparents, extended family members and farmer-to-farmer learning dominate in retro-innovation. In the meantime, new social context of practices mean that farmers learn also in relationships with consumers and other market actors.
- (iv) Despite implicit demand for knowledge to support retro and social innovation in direct marketing, there is practically no proactive, ready-made and tailored advisory services available from the formal agricultural knowledge and innovation system (advisory services, universities, research institutes, agricultural colleges, etc.). This deficit is being compensated by intensive informal learning.
- (v) In the meantime, novel forms of advice emerge at the interface between farmers, consumers, small processors, civic food activists, organisers of short food supply chains and other parties who, in addition to new technical forms of marketing or organisation of the supply chain (e.g. marketing apps, mutual certification), also introduce a novel set of values to be communicated in the food system, such as healthy diets, trust in food, and social responsibility.
- (vi) There is a need for much stronger facilitation and knowledge brokering in direct marketing to enable farmers to effectively assess and make appropriate use of the best-fit forms and arrangements in building new partnerships for both private and public good. This represents a whole new niche and opportunity for advisory services and organisational assistance to farmers and civic food networks engaged in direct marketing, for example to organise training, assist farmers to set up collective internet marketing platforms. In particular, the skills of farmers could be strengthened to support their efficiency in and contribution to short value chains. Consumers also often lack knowledge and organisational support to coordinate their interaction with producers.
- (vii) Digitalisation of direct marketing is a growing trend. Use of social media and individual and collective internet platforms among farmers to market their produce is growing. The digital means ease communication and access to new,

often distant groups of consumers, notably – the younger generation, urban middle-class, and the health-conscious individuals. Digitalisation in direct marketing allows to accelerate the penetration of the new value sets in food production and consumption, including health-, nutrition- and wellbeing-related ones. The spread of digital marketing is supported by improvements in physical infrastructure (roads) and communication services (mobile postal and parcel services).

<u>Discussion</u>: Social innovation in direct marketing develops gradually and often unexpectedly links producers and consumers through novel or redesigned social relations, new meanings of food, or improved and sustainable production and consumption practices. However, social innovation could bring about more beneficial results in terms of individual and community wellbeing around food, had it been more facilitated and supported by advice. This is a potential niche for both old and new advisory services. Retro-innovation can be empowered by social innovation and it is a resource towards food systems sustainability, in particular in the segment of small and medium-size farms and small food producers.

# Social innovation in marginalised rural areas: exploring diversity in the reconfiguration of social practices

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This paper explores the diversity of social innovation in relation to societal challenges in rural areas regarding the type of reconfiguration of social practices. Building on the data gathered and theoretical and analytical work done within the H2020 project 'Social Innovation in Marginalised Rural Areas' (SIMRA), it describes the existing diversity of social innovation in rural areas in terms of types of social change and involvement of civil society.

Social innovation remains an imprecise concept despite the development of numerous definitions and while it has been already studied in detail in urban contexts, there is a need for exploring in depth their characterisation in rural areas and communities. The SIMRA project understands social innovation from a transdisciplinary approach as the reconfiguration of social practices in response to societal challenges, which seeks to

enhance outcomes on societal well-being and necessarily includes the engagement of civil society actors (Polman et al 2017).

Our study draws on the more than 300 initiatives identified as examples of social innovation in rural areas by scholars and stakeholders, with expertise on the topic, as part of SIMRA. We present the findings of a qualitative analysis of the initiatives included in the database to assess their diversity (Bryce et al., 2017). Hence, this paper contributes the ongoing literature debate about the traits that distinguish social innovations illustrating the diversity of social innovation in rural areas. In concrete, the analysis of types of reconfiguration of social practices in this article looks at the involvement of civil society in terms of the targeted participants, and the type of systemic change sought by the social innovation

Hence, this paper contributes the ongoing literature debate about the traits that distinguish social innovations from other types of social processes with which common features are shared while illustrating the diversity of social innovations in rural areas.

#### A broad idea of Green Care as a conceptual innovation

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In Finland Social Farming type of services are included under the umbrella concept Green Care. Since its introduction 2006 the concept of Green Care emerged interest among a variety of stakeholders, whereas Social Farming term alone is rarely used. The term Social Farming did not resonate as largely among rural developers or promoters of farm-related new livelihoods, probably due to its' connotations in Finnish language among other reasons. Consequently in Finland nature-based services delivered on farm environments are developed side by side those services delivered on forests, gardens or water environments – under the term Green Care.

Although nature-based services as such have been existed for very long time, apparently the very term Green Care was something, which gathered together different actors for joint development actions. Green Care concept inspired multi-professional and multi-sectoral cooperation for further development of nature-based practices and service selections. Currently the term Green Care is understood as a wide umbrella concept for the services using diversity of nature-related methods and utilizing diverse natural environments in the social, health and wellbeing services and education for varied client groups, targeting for different aims (care/ rehabilitation/ empowerment/ education).

Although the Green Care concept seemed to capture broad acceptance, it has not been without problems either. Problems have been caused by usage of foreign language as well as both the connotations of the word green and also its' actual meaning as a color: the great importance of blue water environments of Finland and especially white (or gray) winter spaces seemed to be left out. The development of the Finnish terms (LuontoHoiva and LuontoVoima) and the quality label criterions build for them have been mitigated these problems to some extent. On the other hand the strict definitions have been caused some resentment, when some types of services have not fitted inside the build concept frame.

In this paper, we argue that broad concept of Green Care is a conceptual innovation, which has boosted the social innovation of the green care activities. This suggest that the conceptual innovations may be (pre)-condition for social innovations. Furthermore, we discuss the advantages and disadvantages of various conceptualisations for the growth of nature-based service selection and for institutional arrangements. The paper is based on the results of a survey questionnaire targeted to multi-professional actors of the sector, and on the qualitative study made of the discursive spheres concerning the concept Green Care in Finland.

# Even the best concepts could fail – The role of local social capital for the success of care farming

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Keywords: social farming, social capital, social networks

Whenever care farms are implemented much more attention is given to economic and organisational topics than to the surrounding social and natural environment. This point appears quite astonishing since care farms work with human beings some of them belonging to fringe groups which run the risk to be socially excluded or treated with hostility by the local community, notably drug addicts, ex-convicts, refugees etc. A negative response could lead to a failure while on the other hand care farms could also better thrive under dense and supportive local social networks. Social capital theory, which was initially introduced by Bourdieu (1986) and further elaborated by Coleman (1988), Putnam (1993, 2000) and others, refers to connections among individuals, i.e. social networks and the norms of reciprocity and trustworthiness that arise from these. In that sense social capital is closely related to what some have called civic virtue. The amount of social capital revealed in networks of reciprocity, honesty, trust and tolerance

relies on interdependencies between socioeconomic development and traditions of civic involvement. Social capital allows citizens to resolve collective problems more easily. Joiners also become more tolerant, less cynical and more empathetic towards those who are less fortunate, and thus also more tolerant of vulnerable social groups. Thus, social capital might prove to be a key success factor for social farms.

The presentation will discuss the results from an Austrian study exemplified by a care project for elderly people on family farms. Causes and mechanisms accountable for success and failure are analysed. The findings suggest that actors should recognise local social capital more clearly when establishing new care farms. After all, even the best idea could fail if carried out in the wrong place at a wrong time.

# Working Group 12: Imagining better food futures': ethics, responsibility and accountability in food systems

Reconfiguring European soy systems. Dynamics, multiple effects, and long-term visions

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Keywords: Soybeans, European agriculture, reconfiguration

Less than a decade ago, the vision for a Europe less dependent on soy supplies from other continents brought about not only plans to upscale soy production in Europe but also the realization that raising the level of soy self-sufficiency in Europe is intimately connected with and strongly dependent upon having a more encompassing plan for plant proteins for Europe.

A central actor that came to make visible this interdependence is the non-profit transnational European organisation DonauSoya (DS). DS frames European soybeans both as a target in itself and as a tool for wider-reaching transformation in European agricultural systems. In this sense, DS designed a standard, a certification and a labelling system to attest the European origin and non-gmo quality of soybeans and pursued, at the same time, a series of measures at the level of the European Union aimed to birth policies in favour of protein plants.

The multiple meanings and socio-material attributes of soy markedly shape the forms of governance used to intervene in European agricultural systems, by prompting actors to experiment with instruments ready at hand. This led to innovation at the level of standard-making, at the level of the implementation of the certification, and certainly also in respect to the actors assembled. The results were not just adjustments at the level of

agricultural practices, the value chain, and consumer patterns but also the reconfiguration of certain practices, such as seed breeding, crop rotation, livestock feeding, meat eating, and nongmo-labelling. These multiple emergent reconfigurations mobilize new understandings of what actually counts as sustainable soy and, at the same, time also shift the gravity points of accountability and responsibility away from producers and end consumers towards mid-chain consumption and processors, and, counterintuitively, away from soy consumption and more towards meat consumption and production

# Implementing Responsible Research and Innovation through Ethical Codes: an application to digitisation

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Digitisation brings deep repercussions on people's lives and generates winners (who benefit from the change), losers (who are marginalized by the changes), opponents (who resist and elaborate alternative rules of the game). In the current debate on digitisation in agriculture and in rural areas, opportunities are by far more mentioned than threats. Threats are generally associated with unequal distribution of physical, social and human capital necessary to get access to digital opportunities. We identify two other threats of digitisation: design-related risks and system complexity. Design-related risks refer to changes (work, consumption, house life, care) technology design aims purposedly to generate. In this category fall obsolescence of human skills (and consequent losses of jobs), threat to privacy, surveillance, discrimination based on profiling, and concentration of data ownership. System complexity refers to the integration between technologies and social organization. The more that data, digital platforms, applications, tools and controls permeate our lives, the more legal and organizational skills, as well as leadership and social adaptation are required. The more the system is ready for adaptation, the better the outcomes of innovation. Failure of adaptation may generate unintended socioeconomic consequences, which we will call digital traps. Examples of this are information overload, digital addiction, virality of fake news, cyberbullying, cybercrime, and loss of human control over machines.

To reap the benefits of digitisation while minimizing its costs, these conditions need to be governed. The key to success in this endeavor is to understand the mutual influences between technological systems and social organization. Technological systems can be designed having already an awareness of possible unintended consequences, and legal and social systems can anticipate them and improve their adaptive capacity. Research

and Innovation are keys to this challenge. With this paper we want to discuss the implications of the concept of Responsible Research and Innovation (RRI) with regard to digitisation of agriculture and rural areas. RRI implies "anticipating and assessing potential implications and societal expectations with regard to research and innovation". Within the strategies to embody RRI principles into current research and innovation organizations, Ethical Codes, sets of principles that guide members of organizations in taking the right decisions, are here discussed as a tool - to be adopted on voluntary basis - that would help enterprises and researchers to identify technological solutions coherent with their social responsibility profile. The paper will provide a literature review and will identify the critical points of the food system and of rural areas that may deserve attention in the code.

#### Spatial food justice: a blind topic in the local food networks agenda for transition

Catherine Darrot, Agrocampus Ouest, France

Within the French research project FRUGAL (Formes Urbaines et Gouvernance Alimentaire) were studied the evolution of the food governance in 4 large cities (Caen, Rennes, Angers, Poitiers) and their hinterland in Western France.

Inspired by a now classical mix of the MLP (Multi-Level Perspective) framework and the ANT (Actors Network Theory), the analytical framework put in evidence three levels involved in the transition: the global context, the innovation niches and the local food system understood as a place-based socio-technical regime. The evolution of the composition of the networks involved in the local food system and its governance were described and compared, as well as the evolution of the key-topics federating first the innovation niches then the whole local food system (Cormery, 2017; Rol, 2017; Licary, 2018).

Similarities were observed: the pioneer niches were progressively enriched until reaching the scale of a varied networks representing different categories of private and public actors characterizing a food system. Along this process, the key-topics federating those networks strongly evolved, under the influence of both the global context and the local specificities and histories of actors and places.

On the other hand, differences were put in evidence depending on the cities, concerning the year and rhythm of structuration of those networks, the composition of those networks, as well as the key-topics federating them. Though this variety, the improvement of the spatial food justice was not identified as a key-topic for the structuration of those place-based food governance, though the evident public issue and ethical dimension of this potentially very federative topic. In two of those cities (Caen and Rennes), maps were elaborated to identify the quantity and variety of the food shops as two indicators of the food access and food quality in each small district of those two metropoles. Strong variabilities were put in evidence: the main result being the lower variety and quality of the food offer in remote and rural districts, the offer being higher when the districts are closer to the city center. Face to this situation, four idealtypes of consumers strategies were put in evidence thanks to qualitative in-deep interviews: "Almost everything near my home", "As much as possible in my territory of life", "Forced to leave my daily territory of life"," I expand my territory of life". Among them, a significant category of consumers with high ethic food values was identified, looking for fresh, varied, locally produced and/or organic products as a guarantee of food quality. This large category of consumers is partially independent of the income level and of the professional and family situation, and rather based on ethical values and cultural capital (Guillorel-Obregon, 2018; Braun, 2018). In the districts were a higher scarcity of the food offer was observed (variety, quality), this category of consumers had to either abandon some of their food preferences, either to undertake increased efforts to fulfill their food expectations: their respective strategies being summarized by the ideal-types above.

The question of food justice and food solidarity is partially present in the recently constituted food governance issues put in evidence in this study, but understood only under the economic and social perspective (income levels, economic inclusion of all the population in local food systems based on quality-values). The spatial inequity is not identified in the local food governance agenda yet. The values of food social equity and food justice are not connected yet to urban planification issues and policies. In a prospective point of view, this issue might be expected as emerging for the coming years in the local food networks and place-based food governance.

#### Reframing responsibility and accountability through assemblage

Jérémie Forney, University of Neuchâtel, Switzerland

Accountability generally implies an individualised understanding of actions that are organised in a linear chain. Specific actors are then responsible for their direct actions in the system, which is clearly bounded to a given time and space. Those actions are documented and registered, in order to build traceability and, in case of failure, to find back the guilty element of the system. This system is well exemplified by certification

schemes, and has often proven efficient, if not to avoid all failures, at least to distribute blame and sanctions through value chains.

However, in this paper, I want to question this way of constructing responsibility in food systems by reframing responsibility and accountability as core elements of the governance of food systems. The literature on governance often emphasised the unescapable complexity of systems and the need of innovative and adjusted theoretical framing to get a grasp on this complexity. In this paper I apply an assemblage approach to agri-food systems governance in order to discuss how accountability is produced and enacted, and how these usual enactments shape our understanding of responsibility in food systems. Such an approach opens to less linear understanding of responsibility, notably defining agency as produced by and distributed through the assemblage and not restrain to individual actors.

My paper will build on concrete examples of accountability making (certification, agrienvironmental policies, etc.) in the food systems and I will argue that a reframing in terms of assemblage would lead to fairer and more accurate applications of accountability in food systems, where responsibilities are understood as distributed in a complex set of connections and shaped by power relations.

### Comparative analysis of global and local Non-timber forest products supply chains in Latvia and Brazil

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Keywords: NTFPs, Supply chains, wild bilberry, açaí

Modern food supply chains have become extremely globalised and often there are very little local peculiarities remaining in them. These global supply arrangements are putting pressure on primary producers (farmers) reducing their bargaining power, forcing them to expand and to intensify their production models, to specialise and to become even more entangled with financial markets. The globalisation of markets can be observed in the trade of non-timber forest products as well. However, in their nature, primary producers operating in these chains are completely different from farmers — in case of Non-timber forest products (NTFP), there might be contested or communal land ownership rights, there might be limits to the use of mechanic equipment, it might be close to impossible or difficult to control the production and — it will take significantly

more effort to connect production to the global food system. Despite this, there are cases of particular NTFPs being effectively incorporated in global food systems.

The paper questions the ways how NTFP are integrated into the global food systems, how the connection to global markets transforms the traditional wild product foraging and how these connections as well as the transformation is affected by contextual processes. To do this, paper relays on four case studies - two sets of supply chains (local and global) from two very different contexts — Latvia (Northern Europe) and Brazilian Amazon. The paper explores the evidence representing two highly commercialised NTFPs — wild bilberry in Latvia and açaí in Brazil. The paper is based on secondary analysis of several studies conducted by the authors since year 2013.

The study concludes that the socio-economic context has a substantial effect on the way how NTFPs are integrated into global food systems. In the case of açaí supply chain in Brazil, the therapeutic/nutraceutical properties of the fruit, as well as the structural changes in the stages of flow (and even of the production system) allowed its insertion in global chains. Meanwhile, wild bilberries have been integrated in the global markets due to the nutritional properties of the product and the sudden economic shock experienced by rural communities. There are many overall similarities regarding the effects global food systems have on the foraging practice and local communities as well.

#### Managing Biological Threats to Food Production: An Institutional Logics Approach

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Keywords: Biosecurity, Shared Responsibility, Food Production, Institutional Logics

Invasive pests and diseases present a global biological threat to human, animal and plant health, as well as to future food security. Scholars and policy makers have engaged in lengthy debate about how to manage the myriad of problems associated with these threats. However, limited research has been conducted focusing specifically on the national and sub-national agencies and organisations involved in the implementation of biosecurity and the responsibility that each of these have both individually and collectively for preventing and managing biological threats. This is a particularly significant issue in countries such as the United Kingdom, Australia and New Zealand where governments have sought to enhance responsiveness to biological threats by devolving responsibility for biosecurity governance to a wider range of public and private institutions. Our focus in this paper is on utilising the theory of institutional logics as a way

of developing sociological insights into the organisational challenges and opportunities in achieving cost and responsibility sharing of biosecurity governance. An institutional logic is defined as a 'set of material practices and symbolic constructions' (Friedland and Alford, 1991: 248) that draws upon 'socially constructed, historical patterns of ... practices, assumptions, values, beliefs and rules' (Thornton and Ocasio, 1999: 804). Using Australian biosecurity as an example, we argue that there are three key ways in which an institutional logics framework provides insights into the efficacy of a shared responsibility approach to biosecurity. First, it draws attention to trade liberalisation as a dominant regulatory logic at an international scale that imposes significant constraints for the national implementation of a shared responsibility approach. At the same time, this approach highlights the significance of multiple logics – particularly the tension between trade liberalisation and precautionary logics – which can lead to disagreement, tensions and different interpretations among national and sub-national biosecurity stakeholders. Finally, we show how overlapping and blended logics may provide a way of making shared responsibility workable. Work on overlapping and blended logics highlights how organisational actors find creative ways in practice of negotiating the demands of different logics and balancing or managing the tensions imposed by multiple logics.

#### Moral premises of sustainability in agriculture

Judith Janker, Agroscope, University Bern, Switzerland

Keywords: Sustainable agriculture, moral premises, ethical theory, conflict

Sustainability in agriculture or sustainable agriculture have increasingly been promoted as ideals for food production. The notion of sustainability contains both analytical and normative dimensions (Omann & Spangenberg 2002). For this reason, it is not clear what 'sustainable agriculture' actually means. Norms are perceived differently over several regions and by individuals and are often not made explicit. Our work represents a first attempt of making underlying moral premises explicit that constitute the basis for the notion of sustainable agriculture. Various contradicting ideas have been voiced in the international political and scientific communities (Janker et al. 2018). These have different moral foundations – which we aim to highlight in our paper.

Based on talks with experts, we could identify several reappearing conflicting argumentation patterns of stakeholders, directly and indirectly involved in everyday farming businesses. These often uncover moral conflicts which influence the viability of a social system and thus impact its long-term viability, often understood as central component of sustainability. The application of the ethical decision-making framework by Bleisch & Huppenbauer (2011) helped identify diverging argumentation patterns of

involved stakeholders and moral philosophical schools. Argumentation patterns were then compared in relation to the moral theories. Underlying moral premises could be identified that seem to be central for the social dynamics of a farming system. While the results cannot be seen as exhaustive, we can propose some moral premises that need to be considered when speaking of sustainable agriculture. Also, we can propose a way to make implicit moral premises of sustainability visible. Therefore, we believe that our work would be a valuable contribution for presentation in the Working groups session 'Imagining better food futures: ethics, responsibility and accountability in food systems'.

#### Theorizing Agriculture-society Tensions: An Ordonomic Approach to the Agrarian Vision

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Keywords: Agrarian Vision, Industrial Vision, Business Ethics, CSR

Agriculture is increasingly becoming the subject of public moral concerns. Some the moral controversies between agricultural industry and the public eye constitute the subject matter of the debate between the so-called "agrarian vision" and "industrial vision". At a first glance it seems that the farmers' side adheres to the ideals of the "industrial vision", whereas the public adheres to ideals of the "agrarian vision". Yet, the "agrarian vision" can fall prey to instrumentalization from both sides: farmers may use it as a moral narrative in order to legitimate rent-seeking activities, while some activists may appeal to it in order to press for an excessive ecologization of agriculture. To overcome this conflict in a sustainable manner, we propose a reorientation from a win-lose towards a win-win conceptualization. In this line of thought both vision no longer contradict each other, but rather relate to each other in a means-ends relationship. On the societal level, the industrial vision is a means to reach agrarian ideals because efficient production can help reducing environmental impacts and enables farmers to be profitable and independent from subsidies. On the firm level, the agrarian vision can be used to reach industrial goals by doing business in a way that is sensitive to stakeholder interests. This new approach to analyzing tensions between agriculture and society can lead to a better mutual understanding among the parties involved and thus can enable good governance.

#### **Auditing Halal: Ethical Negotiations of GMOs in Italy**

Gregory Kohler, University of California, USA

According to a recent report by Thomson Reuters, the market for halal food in Italy is estimated to value around 70 billion dollars globally. Further, there are an estimated 1.8 billion Muslims in the world, 50 million of whom live in Europe and 1.7 million of whom live in Italy. The report concluded by estimating that halal certified Italian food is worth about 4 to 5 billion Euros. The value of the halal market—and to a lesser extent the kosher market—has led to an increase in Italian food producers in certifying their food with these religious designations. In this paper, I will focus on a halal certification audit at my fieldsite, a dairy cooperative in Sardinia, Italy. The data I analyze stem from 24 months of ethnographic research in Italy, focusing on the everyday bureaucratic practices surrounding food traceability regulation at the dairy cooperative Latte Arborea and its constitutive member farms during various periods from 2013 to 2018. More specifically, I will focus on a conflict that arose during the audit over the use of GMO feed by the farmers producing Latte Arborea's milk. While some aspects of sharia law are fairly well established, such as the prohibition on eating pig products, other regulations around food are constantly in flux and open to debate depending on new food consumption and production trends. This example of GMOs unveils competing ideologies and values around the food system. National accreditation bodies in Muslim-majority countries interpret the Qur'an differently, with the UAE banning all use of GMOs in food. I will pay special attention to the broader legal and ethical infrastructures that negotiate concerns around the use of new technology in food production, such as GMOs, and religious value systems for understanding food ethics.

### Ethical Concerns and Responsibility Issues in the Discourse of Local Food System – a Hungarian Example

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Keywords: ethical practice, socially responsible innovation, local food system, rural tourism

Our paper explores the ethical concerns and socio-cultural controversies (environmental, social, health, quality) in the framework of local food system (LFS) and its role in rural tourism and local socio-economic development. LFS can be defined as a "set of agri-food sectors located in a regional geographic space and coordinated by a territorial

governance" (Rastoin 2015). It is dependent on the relationship between the social, cultural, ecological and economic diversity, important for the vitality of the region, and the desired regionalism of food provision. Other socio-economic benefits of LFS's are: increased social networks, local innovation, co-operation and the reconfiguration of local resources, or the growing demand for local/ecological products and the incredible growth in rural/ecotourism.

Nevertheless, local food systems can be understood in different ways, implying very different costs and benefits for the locality raising serious ethical concerns, too. When LFS is understood as 'local food for local people', (Slow Food, or CSA movements), it is associated with low food miles, environmental protection (Jones 2002), enhanced social networks and revitalised local community (Feenstra 1997). However, in local economic development discourse, LFS tends to produce high quality, pricy products, sold to rich tourists and city dwellers, transported to urban centres, or attracting flows of tourists into remote rural areas. Here effects on local economic development is obvious, but social and environmental benefits are equivocal. Other controversies of LFS' are: social, economic, and environmental degradation, not occurring multiplier effects, resources, profit, and power overtaken by incomers or external investors, damaged local resource base. Still, products of local food systems are produced and marketed with the added value of environmental and social responsibility, representing confusion and/or an inherent contradiction within the discourse.

This paper will give the first results of a three years' multidisciplinary research project based in Hungary. We study how and what kind of socially responsible innovations, accountability relations and ethical concerns are shaping rural stakeholders' (local policy makers, entrepreneurs and members of LFS's) practice and narrative identities, when their livelihood is largely based on the local food system and the connected rural tourism.

#### Meaty ethics: the problematisation of meat eating and sustainable diets

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Keywords: Ethics and meat eating; Sustainable diets, EAT-Lancet report, Problematisation, Social media and public discourse

Discourses, knowledges, representations and norms related to ethics in food chains are contested and involve complex patterns of politicisation and governance (Maye et al, in

press). This paper examines the recent debate about meat eating and sustainable diets. More specifically, we consider meat eating as a 'hot topic' debated in public discourse in response to the publication of the EAT-Lancet Commission (2019) 'Food in the Anthropocene' report. This report called for a radical shift and reduction in the amount of meat, particularly red meat, we consume as a society to reverse negative food system impacts on the planet. The report sparked significant public debate. Using Twitter data and analysis of newspaper articles, we analyse the report and the response its recommendations generated. As well as examining this specific moment of meat eating problematisation, we consider also strategies of responsibilisation proposed to address the problem, including counter-strategies that contest the science behind the publication, differentiating, for example, between different systems of meat production or challenging the nutritional logic of reduced meat diets. The 'sustainable diets' concept (Mason and Lang, 2017) raises important questions regarding the ethics of food production consumption, including entanglements with humans and nonhumans and the social and political implications of transitioning to food choices where we eat less meat and more plant-based alternatives. More generally, the case study shows how a focus on hot topics reveals wider questions about morals, ethics, politics and accountability in agrifood governance, including the way ethical strategies of responsibilisation enable reflexivity in food chains. This includes consideration of the way food politics is evolving in the public sphere, particularly the role of social media as an arena of interaction that generates debate and in some cases leads to direct confrontation between ethical values, social norms and sustainability choices.

Going for Growth: A smoke screen for clientelism?

Ruth McAreavey, Adrienne Attorp

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Governance is well recognised as shifting boundaries of responsibilities for doing things among key partners. What is less clear is how power relations are altered as new forms of governance emerge, and who becomes accountable in emerging relations. In our paper we use theories of governance to critically assess 'Going for Growth', a strategic action plan that, until the recent past, underpinned the Northern Ireland agri-food industry. The agri-food sector has an important and prominent role in the Northern Ireland economy. A strong lobby group supports the sector, and has the ear of government. Consequently, significant funding supports have been devised to help shore up the sector, including the Renewable Heat Initiative that led to the collapse of the power-sharing government in 2016. We argue that the Going for Growth strategy raises important ethical questions for society in Northern Ireland, not least because of its implications for the environment, but

also, in an era of austerity, relating to the way in which public funds are spent. We show how the strategy is the manifestation of a clientelist relationship that has left little space in the public arena for meaningful debate. Given that it is now effectively 'dead in the water', we evaluate options for future strategies.

# The future of the Common Agricultural Policy: discourse analysis on a paradigm shift towards a sustainable European food system

Bianca Minotti, Czech University of Life Science

Keywords: Common Agricultural Policy, Sustainability, Paradigm shift, Food system, Common Food Policy

This paper performed a discourse analysis on the future of the Common Agricultural Policy, analysing two documents, one from the European Commission, one from the International Panel of Experts for Sustainable Food systems. Indeed, a reform of the CAP is now being negotiated by the EU Commission while IPES is advocating for a shift towards a Common Food Policy for Europe. Both stakeholders share the idea of a transition to sustainability, with, however, very different backgrounds and goals.

The inductive thematic analysis highlighted nine themes, recurrent in both texts with different languages and narratives: environment, social issues, health, food security, technology and innovation, policy effectiveness, integration, economy and governance.

Throughout the analysis of keywords and macropropositions, framings of key concepts have been identified, helping outline EC and IPES discourses on the future of food and farming in Europe. The discourses that appeared from the analysis where fundamentally different in focus and goal of the policy, change required, solutions presented, actions needed and framings of the concept of sustainability - in particular of the link between sustainable production and consumption. EC discourse appeared to rotate around agriculture and rural development, with the aim to improve the efficiency of the system; while IPES one, to focus on a more systemic vision aiming at improving the integration of the entire food system.

This analysis highlighted the differences between the two stakeholders' discourse but also some similarities. Indeed, the analysis helped confirm that, although the differences between the two discourse are still very strong, there are some features of IPES discourse which are starting to become part of EC one. Moreover, the comparison with the existing literature on the topic helped reconduct those discourses to broader paradigms. Indeed, the analysis showed that EC discourse is layered and follow multiple contrasting

paradigms, depending on the theme. This last part of the analysis has been helpful to determine whether or not EC discourse represents a paradigm shift from the unsustainable "business as usual".

#### Social innovation in rural areas for sustainable and inclusive food chains: a case of socioeconomic 'restorative agriculture and justice' in Puglia (Italy)

Lucia Palmioli, University of Pisa, Italy

Keywords: accountability, decent growth, migration, rural areas, social inclusion

Inequality is rampant in the global economy and the agri-food sector is not an exception. At the top of the pyramid supermarkets and food giants dominate the global food market by squeezing production chains to make profit; at the base we have a constant erosion of the bargaining power of small-scale producers and workers in many of the countries where the products grow. Moreover, in the last decades, in various rural areas of Italy, farming sector has grown increasingly dependent on a steady supply of workers who have entered the country illegally, ending up for feeding exploited labour rows and influencing the socio-economic and rural-urban aspects of several societies.

By providing a case study from Cerignola, rural area of Foggia, Puglia (Italy), this article investigates about the phenomenon of labour exploitation in agriculture and offers insights into the adoption of innovative processes in rural contexts, by reflecting on the acquisition of practices aimed at ensuring more sustainable and inclusive paths. In line with a deep and pertinent analysis of the existing literature, information have been directly collected from a range of farmers and farm labourers, key stakeholders and experts, through semi-structured interviews and field visits. In particular, we look at the role that social innovation and small farmers cooperation can play in providing a distinctive and innovative contribution to the food system of a reality whose socioeconomic context is partly affected by an overall passive attitude and from a deep-rooted mafia fabric and whose farming production is strongly dependent on outside-region processing industries, which unavoidably compromise the real valorisation of local products and potential farmers' income, making them vulnerable and dependent on price fluctuations. By networking, some local farmers tried to reverse this stuck environment, by offering a legal alternative to the traditional modus operandi, basically founded on environmentally and socially unsustainable productions, and by contributing to a local decent economic growth. By producing, processing on site and selling directly, they aim to counteract the phenomenon of 'caporalato' and downward auctions: organic and highquality products sold at fair prices which give an ideal proof of how labour exploitation can be fought with agriculture itself.

The creation and dissemination of knowledge of innovation phenomena and virtuous processes can be a useful tool for the realization of new models of conscious development, production and consumption, which pay attention to sustainability and social dynamics.

#### Let's Eat Them Together'.

#### Food procurement practices of domination and resistance in the city of Athens

Nafsika Papacharalampous, University of London, UK

This paper discusses how food procurement practices at times of crisis become political acts. Athenian market spaces today are transforming and we witness the rising of everyday urban politics of negotiations, resistance and insurgency in unexpected class strata. More specifically, of the various grassroots solidarity initiatives in the city of Athens, this paper focuses on those relating to sourcing food, namely no-middle-men markets and middle-class delis that reshape political foodways.

The no-middle men markets operating around the city challenge pre-existing capitalist structures. At the same time, they bring Athenians closer to nature and to the Greek rural, by restoring the broken foodways between the country and the city. At times of crisis Athenians go back to practices of the past and to the comfort of rurality. This way of understanding and dealing with the crisis manifests as well in the middle-upper class Athenians. These Athenians create their own political foodways forming networks of small neighbourhood clusters shops, in a new rising shopping model of sourcing food directly from/closer to nature which resembles the old ways of shopping. These become part of exonerating the rural and reaffirming Athenians' rural identities. In essence, these shops operate in the same way the no middle-men markets operate, but in a different class sphere.

Across class divides, the crisis has affected Athenians in similar ways: they tap into past practices and exonerate and celebrate the rural, by creating a moral economy and reembedding sociability in the markets. By researching all these movements described here this paper illustrates how across class divides, food becomes a trope of resistance in a city in crisis.

#### A Role for Ethics in International Agricultural Development Programming

Elizabeth Ransom, The Pennsylvania State University

Keywords: Agriculture, Development, Ethics, Philanthrocapitalist

In recent years there has been a resurgence in funding of and focus on agriculture in 'developing' countries, with several new private development actors engaged in programming. The Bill and Melinda Gates Foundation (BMGF) being the largest one currently active in agriculture, having committed an estimated \$4.9 billion to agricultural development. This has led to a growing literature focused on these private development actors, or what many have dubbed "philanthrocapitalists" because of their belief in the importance of individuals, the market, and societal progress through technological innovation. In other words, many of these private donors bring their business philosophy to the development sector. More broadly, scholars (Fejerskov 2017; Ostrander 2007; Schurman 2018) studying the rise of private foundations in development have noted that these organizations have increased top-down donor control, as opposed to supporting groups active on the ground in specific locations, who offer a more bottom-up approach to development.

The aims of this paper are twofold. First, using a case study of a privately funded agricultural program in Uganda focused on dairy intensification among smallholders, this paper argues that ethical approaches to development must be integrated not only into the conceptualization, but for the duration of the implementation of the agricultural development program. Second, the paper explores how three separate literatures that focus on ethics—science and technology studies, development ethics, and agricultural ethics—can inform development programming, while also calling attention to possible contradictions or tensions that exists between these different approaches. Finally, while not fully addressed in this paper, this paper calls attention to the need to think about a role for ethics in increasingly privatized, and non-transparent development assistance programs.

### Seeking the Policy Synergies: Building Shared Responsibility for Local Food Contingency in Queensland, Australia

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Keywords: Disaster resilience, Local food contingency, Community of practice, Shared responsibility, Policy synergies

Internationally it is acknowledged that empowered communities are the ones that are enabled to share responsibility for their resilience to disaster events. In Australia, the Queensland Government has long-supported a clear research agenda to mobilise local, community-led initiatives as envisioned by the release of its National Strategy for Disaster Resilience in 2011. The State of Queensland — and Australia as a country — is increasingly experiencing severe weather events and with more frequency, with food supply chains reliant upon emergency re-supply from other Australian States. Queensland has experienced a host of recent flood and cyclone disasters over the last decade, where in just a few days residents resorted to panic buying.

In 2013 the Australian Government announced its National Food Plan White Paper, which situated communities as passive consumers of industry-government-led food provision. Although the White Paper is now inactive due to a change in national government, its view and associated perceptions of risk continue to shape and drive the food agenda. Within this context there is a significant opportunity to develop food policy that enables local community activation and participation, in line with the country's existing national Shared Responsibility Framework, as embodied within the disaster resilience sector.

This research paper will report on the unique challenges and opportunities emergent from research within the food policy environment. In collaboration the Queensland Government (Office of the Inspector-General Emergency Management "IGEM") the authors acknowledge that ensuring such activities are coordinated and led efficiently requires the employment of effective communication. Utilising smart technology and geospatially referenced information sits at the heart of this imperative for leveraging social norms to generate a more equitable and accountable change in the food system.

The authors focus on a unique opportunity to identify and discuss key policy synergies required to enhance the existing Shared Responsibility Framework, to focus on food. The paper uses an example of community spirit to form the backbone of food-related disaster resilience through the application of an effective and efficient platform — Basecamp — a community of practice comprising government and community groups. The discussion and recommendations draw on consultation workshops undertaken in August 2018 with Government and community leaders. The paper has immediate implications for state and federal government in planning and implementing effective community engagement. More broadly it has the potential to inform international food policy for normalising local food procurement tailored to local needs and wants, with contingency-planning based on those normalised interactions.

# The ethics of grazing: An analysis of empirical and philosophical arguments around dairy cow welfare within fully housed and grazing systems in the UK and Ireland

Orla Shortall, James Hutton Institute, UK

Keywords: animal welfare, dairy, indoor farming, grazing, pasture

Grazing of dairy cows has becoming increasingly politicised in recent years. Many farms across Europe have moved from a system of grazing and housing cows alternately for parts of the year to housing cows all year round. Research shows consumers associate year round housing of cows with negative animal welfare and are not in favour of it.

Interviews with key stakeholders in the UK and Ireland and document analysis reveals very different constructions of dairy cow welfare in grazed and year round housed systems between and within both countries. Analysis of the types of arguments made shows empirical arguments based on scientific research and personal experience about the welfare of cows in different systems — with welfare defined in different ways. There are also philosophical arguments about the naturalness of dairy cows in different systems, their rights to integrity and autonomy, as well as human connection with the landscape and agricultural heritage.

The change in dairy systems in the UK and Ireland is being governed primarily through market mechanisms. There is a burgeoning market for 'free range' and other pasture based labels in the UK. The empirical and philosophical arguments for higher cow welfare in grazed systems are hotly contested in the UK, and most key stakeholders are opposed to differentiation in terms of access to grazing. In Ireland where the vast majority of dairy cows graze and supply chains are much more consolidated, industry bodies are looking to brand all Irish dairy products as pasture based. In contrast to the UK, key stakeholders in Ireland whole heartedly embrace the empirical and philosophical arguments for grazing and the main challenge is seen as how to capitalise on their market advantage. Empirical arguments based on experience and scientific evidence will be difficult to resolve because of the many competing scientific definitions of 'animal welfare' and the challenges in measuring and demonstrating the concept. Philosophical arguments are at times framed as 'anti-science', or a-scientific but should be subordinate to scientific arguments. Market mechanisms appear to open up a space for discussion of philosophical aspects of the grazing through consumers' 'right to choose'.

# Social justice-oriented ambitions in urban food strategies of European medium-sized cities: Fair objectives or just aspirations?

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Keywords: urban food strategies, social justice, policy discourse, European medium-sized cities

Whereas in the past food has long been regarded as a rural, agricultural or (supra)national issue, cities are now gradually (re-)entering the food governance field. International platforms and networks, such as the Milan Urban Food Policy Pact (MUFPP) and the EUROCITIES working group food, are encouraging cities to acknowledge their position and responsibilities within the food system, to reconnect with their inner and outer city agricultural areas and to implement food as a cross-cutting theme within their policy frameworks. To guide these efforts and practices, cities often develop urban food strategies (UFSs): comprehensive vision documents which outline desirable urban foodscapes for the future, create synergies between different policy domains and objectives and map existing and recommended initiatives, measures and courses of action that are (in)directly linked to food. One emerging but highly complex theme shaping these urban food governance efforts concerns social justice within the food system. In this paper, we will discuss the findings of a systematic content analysis of the social justice-oriented ambitions and action steps formulated in the UFSs of European medium-sized cities (100.000-500.000 inhabitants) that participate in the MUFPP and/or EUROCITIES working group food. Through this exploratory document analysis, we aim to capture the policy discourse and explore similarities and discrepancies in addressing issues of social justice within a European urban food governance context. Distinct attention is given to direct and indirect references to prominent social justice-oriented perspectives in food systems literature - i.e. food justice, food sovereignty, food democracy and (community) food security – and to provided arguments and motivations for including a social justice perspective in the UFS. This initial study will form the starting point for a more in-depth investigation examining the dissemination and implementation trajectories of social justice-oriented UFS ambitions, which will also consider the needs, experiences and views of groups that feel excluded from or not represented in their cities' food policies.

# Implementation and performance of multi-stakeholder sustainability metrics in US agriculture

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Keywords: multi-stakeholder initiatives, sustainable agriculture, governance, sustainability transitions, standards and metrics

The governance of sustainable agriculture is increasingly moving from standards and certifications towards metrics as the main regulatory instruments and from the state to private multi-stakeholder initiatives as the main drivers behind them. Although these initiatives hold the potential to improve sustainability in agriculture, their implementation poses questions regarding the social consequences of this shift in commodity chain governance. Who gets to decide how sustainability is defined and operationalized? How are the costs for measures and new technologies distributed? What changes in farming practices do these metrics stimulate? Finally, can these metrics be effective in advancing sustainability? We begin to unpack these and other questions through qualitative interviews with key stakeholders and participating farmers of Field to Market and the Stewardship Index of Specialty Crops, two US-based multi-stakeholder initiatives. Our preliminary analysis suggests that the two metrics as they are currently conceived predominantly serve retailers and brands to verify claims on sustainable production with little change of practices on the farm level. Where new production methods and technologies are adopted, this is largely triggered by the accompanying measures with which metrics are implemented rather than by the metrics themselves.

# The Emergence of Norms and Accountability in Food Consumption: Experimentation of New Consumption Practices within a Public Program

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Keywords: food practices, sustainable consumption, public policies

This paper provides an analysis of an experimental action about sustainable consumption and discusses its learning and normative effects based on a case study in France. At the national level (EGalim law, 2018, Territorial Food Projects, 2014) and at the local level, public policies are part of a process of greening food production and consumption. These processes are pushed by societal expectations that are expressed in national and

transnational initiatives and networks. Previous analyses have shown how sustainable consumption has become a new object of the "governability" of consumption (Rumpala, 2009) and that the empowerment of individuals requires a reflexive capacity that can be supported through different instruments (Dubuisson-Quellier, 2016). Our hypothesis is that some social experimentation programs set up by public policies can provide a support for collective learning of new norms and practices among consumers. Therefore, these programmes would provide a tool to support sustainable consumption but also to manage the related learning processes. How are these new food consumption norms coconstructed or rather imposed in this kind of experimentation? What relationship to responsibility is established between public institutions and citizens? We explore this topic by studying an initiative promoted by public policies to test new consumption practices aimed at making food consumption more responsible. The experience, called Positive Food Families, was first tested in 2012 by a civil society organisation in Lyon and in our case set up by a municipality in the south of France. It involves 17 families over a period of a school year through practical workshops and becomes a place for direct experimentation with new normative expectations. Our approach, based on a ethnographic study combined with the analysis of individuals' food trajectories, aims to question the normative scope of public policies pursued with this action as well as the learning and empowerment processes that it allows (or not).

## People's Food Policy: What can the state policies learn from Food Sovereignty and Agroecology?

Tomas Uhnak, Czech University of Life Sciences

For the working group 12 - Imagining better food futures': Ethics, responsibility and Accountability in Food Systems I suggest a contribution with the title Feeding the nation: Food policy in an age of competing paradigms. It is based upon a MSc dissertation of the Food Policy programme at the City University London, from the year 2018.

The presentation will outline ways in which the state, interest groups, and alternative food movements in the Czech Republic frame narratives of food sufficiency, competitiveness, food sovereignty and agroecology. It argues, that the food policies are determined not only by their material and social conditions, but also by the prevailing patterns of values and beliefs which form larger consistent narratives, ideologies and paradigms. By interviewing 27 respondents and reviewing official government and social movement's materials, the presentation will identify main features of the predominant narratives of food sufficiency and competitiveness in the past several decades. Apart from this dominant state-led paradigm, the presentation will outline an emerging narratives of food sovereignty and agroecology. The presentation will suggest preconditions necessary

for a paradigm shift in the Czech Republic and will tackle the question whether and how is it possible to adopt radical (avantgarde) narratives that originate from the social movements into the state policies.

Studying the paradigms enables us to understand deeper implications of the government's and alternative's food system approaches, its social and environmental role. The presentation will cover mainly following questions suggested by the convenors of the WG:

Expertise and policy: How are emerging ethical issues becoming part of food and agriculture policy agendas? How can policies leverage social norms to generate change in the food system? How and in what form is expertise convened and problematised to shape responsibility and accountability relations?

Policy and accountability: What are policy levers – law, standards, and incentives – relevant to the accountability of innovations and how do they mediate accountability constellations? What role does democratic accountability play in the governance of innovation and the problematisation and responsibilisation of policies?

Author of the presentation is a PhD student at the Czech University of Life Sciences, works as a food systems advisor in the Czech Pirate Party at the Parliament of the Czech Republic and is a member and co-founder of the food sovereignty movement in the Czech Republic.

### Food quality schemes and practices of consumer: Use of textometry for data analysis on consumer's discourses

Pierre Wavresky, Matthieu Duboy de Labarre

Umr Cesaer Inra-Agrosup Dijon, France

Food quality schemes and short food supply chains are more and more taken into account in the public debate, for example by specific questions in the French Farming Census (on the presence on the farm of organic farming, PGI, PDO, short supply chains...).

A survey of semi-structured interviews of consumers on food quality schemes (what quality means for them, what is important in the choice of food, what are their practices in planning, buying, cooking, disposing food), linked with short food supply chains was carried out in seven different countries (Norway, United Kingdom, Italy, Germany, Hungary, Serbia and France) under the European project H2020 "Strength2food". Six households were interviewed three times, each time in a different season.

We will present here in this paper the French results of a quantitative text analysis (thanks to the Iramuteq software).

The discourses of the interviewees, revealed by the different clusters of a descending hierarchical clustering, show the importance of different factors on the practices, such as environment and heath, proximity or authenticity, but also price. The importance of the personal network is also highlighted.

A second step of this work concerning this quantitative method will be to extend the analysis to other countries (Norway and Italy) in order to compare them.

# Working Group 13: Justice and (dis)empowerment in diversifying rural landscapes of food and conservation

Integrating agrobiodiversity conservation and valorisation: opportunities and risks based on Tuscany case studies

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Keywords: agrobiodiversity, valorisation strategies, conservation policies

The loss of biodiversity results from a combination of changes and impacts, including land use change, pollution, climate change. The industrial food system and particularly high-input and intensive agriculture underpinning it, are well known to seriously affect the resources base which they are reliant upon (IPES-Food, 2016). At the same time, the conservation of biodiversity across the agricultural landscape is regarded as potential solution for the transition towards more sustainable food systems, reducing vulnerability to climate change and ensuring food security (Pascual et al., 2011).

Agrobiodiversity is the variety and variability of living organisms that contribute to food and agriculture and the knowledge associated with them (Jackson et al., 2007). Nonetheless, the complex nature and values of agrobiodiversity make it difficult to both recognise and evaluate the goods and services it provides as well as to implement measures for its conservation and valorisation (Brunori et al., 2018).

In Italy, policy makers have acknowledged the relevance of agrobiodiversity conservation and recently put forth normative tools and financial resources for this purpose. However,

efforts to enhance agrobiodiversity are likely to give rise to both synergies and trade-offs between conservation measures and market valorisation of products based on local genetic resources.

This contribution aims at understanding whether and to what extent recent policy interventions enable the enhancement of agrobiodiversity. To this aim, case studies have been carried out in Tuscany (Italy) on landraces identified among those protected through in-situ, on farm and ex-situ conservation in a local gene bank. Local supply chains of the products have been mapped through semi-structured interviews with a varied range of stakeholders – seed savers, local distributors, public institutions.

Results highlight how policies for agrobiodiversity conservation engender opportunities for enabling valorisation strategies both at the farm and local networks level. On the other hand, however, major limitations to upscaling such valorisation strategies are pointed out.

### Principles of common governance for innovations in case of privately owned forests in Latvia

Renars Felcis, University of Latvia

Keywords: common governance, collaborative networks, practical cooperation, private forests, forest ecosystems

Due to the inclusion of forest resources in the wider ecosystem, there is a challenge of the fragmented forest ownership in Latvia, because there are many forest owners who own small areas. The situation of fragmented private properties was caused by land restitution (Živojinović et al., 2015), by assigning inherited small land (including forests and forest land) territories to their former heirs after the collapse of the Soviet Union.

Changes in forest governance and management have been determined by several factors: restitution of forests and opening the markets, liberalisation of trade after accession to the European Union, short distance to paper and wood processing enterprises in Scandinavia and Poland, abolition of nature preserves in forest after the collapse of the Soviet Union (Potapov et al., 2014) (Brooke, Linkevicius, & Cing, 2009) (Lazdinis, Carver, Carlsson, Tõnisson, & Vilkriste, 2004). These indicators show a dynamic forest management environment, but do not reflect the diversity of forest management forms.

Research question can be formulated as follows. How do the principles of common governance of common resources work?

Common governance of forest resources becomes apparent in collaborative networks, in which, using theoretical perspectives of the sociology of environmental flows and actornetwork theories on common resources, the following examples can be identified:

- a. Participation in decision-making on the development of the organisation in the case of forest owner cooperatives;
- b. Internet auction platform, where small private forest owners can offer their felling sites as equal partners in the market;
- c. Helping neighbours in everyday issues.

Common governance manifest itself in different forms of cooperation between forest owners – institutions, organisations, networks. Organisation creation is a deliberate effort to promote cooperation by sharing experience, knowledge, information, good practices, thus organisations are a place where cooperation as practical cooperation can be well identified.

Practical collaboration in forest management reflect the needs of forest owners in a different cases, but the process of expressing them and interpreting them at nested levels, can be understood as an agreements on needs. Emergence of issues is taking place at different levels, but empirical material shows that they find support in bottom-up feedback. Governance, as top-down process initiates a deliberation of the relevance of certain policy regulation to the real situation at operational level on the one hand, but on the other hand, actors are mediators, expressing the opportunities that forest owners can take, they inform and educate about these opportunities.

### Exploring the potential of citizen social science for the co-production of knowledge on food and nature conservation issues

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Keywords: Participatory Action Research, community-based research, greenspace, community food growing

Embedded in discourses of citizen science, open science and transdisciplinarity, citizen social science has been developing in meaning and prevalence over the last few years. In similar ways as for citizen natural science, there are hopes that citizen social science enables access to more data and/or data that is difficult to access by conventional

scientific means. In addition, the approach is meant to bring science closer to the public and facilitate understanding of the sciences in wider society. However, most of the debate is still at the conceptual level, with strong calls for more empirical insight.

We argue that citizen social science can be more than this if we understand it as coproduced between professional and citizen researchers, from the early design stages through to knowledge sharing. We also suggest that citizen social science might be different from Participatory Action Research (PAR), which usually involves activist researchers driven by a strong motivation for change.

Here, we critically examine the opportunities and challenges of citizen social science approaches applied to questions around nature conservation and community food growing. First, we ask what the promise and potential of citizen social science may be, if we define it as distinct from PAR. Second, we examine if this promise held in the application to two small-scale, qualitative research projects in Scotland, one of them dealing with anti-social behaviour in local wildlife reserves, the other one addressing issues around community gardening and the sharing of produce.

Drawing on our observations, field notes and reflective discussions between citizen and professional researchers, we ask if involving citizen researchers does indeed (as we would hope) allow for a different and potentially more powerful representation of community voices than conventional research. We unpack the complexities around such expectations, using the very different trajectories of the two projects as an illustration. To conclude, we identify and discuss the dilemmas that result from such ambitions for the practice of knowledge co-production with citizen researchers.

#### Rewilding in hill-farming landscapes: The socio-political dimensions of human-eaglesheep entanglements in the reintroduction of white-tailed eagles on the Isle of Skye, Scotland

Thomas Fry, University College London Anthropology

Rewilding in Europe is often targeted in upland areas, and is commonly linked with large-levels of agricultural abandonment amongst traditional food-production systems. In the Scottish Highlands rewilding has been associated with an increasing prevalence of species reintroduction initiatives, and can be positioned within a broader move towards a post-productivist countryside based around tourism and conservation. However, ideas of a new Scottish 'wild' can undermine and conflict with still enduring food-production landscapes which privilege customary land-uses, most significantly crofting, a form of traditional small-scale hill farming practised in the Highlands. Taking as a case study the

reintroduction of the white-tailed eagle, this project seeks to understand the tension between these farming systems and rewilding through analysing the direct impacts of predation on crofters' livestock, and the socio-political and cultural dimensions that shape crofting communities' views of and engagement with these birds. This presentation takes as an analytical entry point the two principal animal actors in the ongoing human-wildlife conflict: the white-tailed eagle itself, and the sheep that form the bedrock of land-use on much of the island. The eagles are enrolled and represented within new discourses of a 'wild' landscape, a set of commodified images and experiences marketed by a growing eco-tourism sector. This idea of landscape, and the birds themselves, find support amongst 'incomer' residents from more urban areas, creating sites of tension and conflict within rural communities. The image of a 'wild' but benign eagle obscures both the material impacts on livestock production, and the way they are received socio-culturally by crofting communities. The bird's protected status, and its symbolic currency as a form of wider social and political marginalisation, mean that it is discursively set outside of localised conceptions of nature, wildlife and landscapes. These conceptions hinge upon the role of the sheep as the agent producing the eco-cultural landscapes central to a sense of place and identity amongst crofting communities. The non-material, social and emotional impacts of eagle predation are often centred on the embodied connections between farmers and stock. From this entanglement emerges a different conception of the eagle, a non-native and uncontrolled outsider animal within a controlled, balanced farmed socio-ecology, premised on the self-identification of crofters as managers of land and wildlife.

## De-learning to disrupt: Collective reflections on an under-theorized concept and overlooked phenomenon within agri-food studies\*

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Keywords: De-learning, agri-food systems, transition, knowledge, agroecology

This paper explores the meanings, processes and implications of de-learning, which remains an undertheorized concept and overlooked phenomenon within agri-food studies. In addition to the acquisition or adoption of new knowledge, skills, technologies, and behaviours, de-learning draws attention to parting from and potential breaking with past patterns and perceptions. De-learning therefore offers an important dialectic which

appears to be equally important for understanding ruptures with dominant regimes, as well as the adoption of innovations, practices and values which may lead to more sustainable agri-food systems. Empirically the paper engages with different examples of de-learning (and de-learners) to highlight the relevance of this phenomenon from farm to fork. Our cases range from conventional and agroecological approaches to farming through to civic food networks, food procurement innovations, and collaborative governance. In our examples, de-learning becomes visible in manifold ways: it includes reflexivity and symbolic actions, but also expresses itself through the longing for alternatives that have grown out of disillusionment and counter beliefs. De-learning affords active engagement in alternative social and technical networks, which enable individuals, social groups and organisations to de-learn what they no longer (fully) believe in. While these acts and engagements can be disrupting and may evolve incrementally or more rapidly, they do not necessarily result in fundamental change. However, they help people along a transition path by providing guidance and creating social belonging. We contend that more attention to de-learning and its different forms, contexts and scales, may help us to address the emotional, cognitive and practical challenges that are inherent in accommodating the new with the old, and to uphold societal support systems that make more sustainable transitions possible.

\*The idea for this paper emerged during several discussions between the authors at the ESRS Autumn School 2018 in Riga, Latvia.

## Agroforestry Development: Barriers to Planting Trees in the Czech Agricultural Landscape

Lukas Kala, Institute of Botany of the Czech Academy of Sciences

Czech landscapes show little cultural variation with monoclonal crop fields. Similarly to rest of the European Countries, Czech farms produce large quantities of yields together with large quantity of negative environmental impacts. Agroforestry is promoted, f.i. by European Commission, as an environmentally sound farming practice which can address current problems of our landscape (especially the drought and the soil erosion). According to experts the agroforestry can augment soil water availability to land use systems, control runoff and soil erosion, keep soil fertility, lead to reduced insect pests and associated diseases, reduce greenhouse gas emissions and provide a more diverse farm economy and stimulate the whole rural economy, leading to stable farms and ecosystems. Agroforestry can be seen as agroecological innovation as well as a return to tradition of the planting of trees in fields, however, trees in the Czech agricultural landscape are rare and farmers have not found their way to agro-forestry yet. An objective of this study was to investigate why Czech farmers do not plant trees in

agricultural landscape. Using focus-group methodology we identify some barriers to planting trees which lay in injustice legislation, property-law relations, technology, inadequate subsidy policy, stereotypes, perception of rurality and farmers' identity and mainly low level of ecological knowledge.

#### Motivations of multi-layered subsistence farming in Hungary

Imre Kovách, Boldizsar Megyesi

MTA TK

Keywords: subsistence farming, motivations for subsistence farming, definitions of subsistence farming, layers of subsistence farming

This paper aims to explore the role of subsistence farming in Central Europe by reviewing the literature, analysing the primary data from a representative survey conducted in 2015 in Hungary and two case-studies. According to European and national-level policy analysis, subsistence farming is a cornerstone of European agriculture, and a central element of a rural image, as earlier and recent research shows.

The paper is based on earlier theories on food self-provisioning and argues that it is worth analysing the layers of subsistence farming in order to better understand the motivations of participation. The paper analyses five different layers of subsistence farming: the economic, the societal, the policy, the discursive, and the sustainability layers, and argues that although all five layers are important to understand the phenomena, the economic and policy layers are the most important in this type of activity, while the sustainability layer is almost invisible.

#### Challenges of knowledge sharing networks in a European context

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Key words: networks, knowledge sharing, cross-country networks, efficiency and effectiveness

Addressing sustainability challenges requires broad and complex knowledge, which is difficult to acquire all by a single individual. Therefore, exchanging and sharing knowledge and experience in networks of different stakeholders seems a promising approach in two

ways: i) profiting from experience of others can be beneficial for developing one's own business; ii) sharing knowledge between a large variety of stakeholders increases the chances of finding best possible solutions to overarching sustainability challenges. In recent years, the European Union has put a strong emphasis on building up thematic networks with the aim to address sustainability challenges in agriculture. Yet, the processes, challenges and supporting factors for network building, in particular networks across countries are so far poorly understood.

This paper analyses the key issues in network building and management based on ten networks built up in the EU project NEFERTITI ("Networking European Farms to Enhance Cross Fertilisation and Innovation Uptake through Demonstration"). Each network team filled in a template structured according to six key factors for network establishment: Network goals, identity and values; Governance: network formation and hierarchies; Knowledge exchange and learning activities; Infrastructure and resources; Monitoring and evaluation; Network maintenance. By means of a content analysis of these documents, we identify several relevant aspects that the network teams framed as relevant and partly challenging in network development and management.

The results show the importance of the impact of the networks, their efficiency and effectiveness for raising interest of potential network members. Networking without at least the promise that practice 'on the ground' can be improved by learning from others is not attractive and such networks will soon lose momentum. Motivation of network members has to be genuine to maintain a network, as resources (such as time and budget) are usually limited. We can see a network as the result of a process bringing together individual resources in order to create (additional) resources as a team. This paper will present in more detail how the NEFERTITI networks framed these aspects: individual resources, team resources, and processes, and we will draw conclusions on how these insights can support future development and management of networks.

## Let's Eat Them Together'. Food procurement practices of domination and resistance in the city of Athens

Nafsika Papacharalampous, University of London, UK

This paper discusses how food procurement practices at times of crisis become political acts. Athenian market spaces today are transforming and we witness the rising of everyday urban politics of negotiations, resistance and insurgency in unexpected class strata. More specifically, of the various grassroots solidarity initiatives in the city of Athens, this paper focuses on those relating to sourcing food, namely no-middle-men markets and middle-class delis that reshape political foodways.

The no-middle men markets operating around the city challenge pre-existing capitalist structures. At the same time, they bring Athenians closer to nature and to the Greek rural, by restoring the broken foodways between the country and the city. At times of crisis Athenians go back to practices of the past and to the comfort of rurality. This way of understanding and dealing with the crisis manifests as well in the middle-upper class Athenians. These Athenians create their own political foodways forming networks of small neighbourhood clusters shops, in a new rising shopping model of sourcing food directly from/closer to nature which resembles the old ways of shopping. These become part of exonerating the rural and reaffirming Athenians' rural identities. In essence, these shops operate in the same way the no middle-men markets operate, but in a different class sphere.

Across class divides, the crisis has affected Athenians in similar ways: they tap into past practices and exonerate and celebrate the rural, by creating a moral economy and reembedding sociability in the markets. By researching all these movements described here this paper illustrates how across class divides, food becomes a trope of resistance in a city in crisis.

### Rewilding: Management, adaptation, and power/lessness in carnivore affected communities

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Keywords: Large carnivores, management strategies, animal husbandry, rural communities, adaptation strategies

Conservation designations protecting large carnivores have been a success in terms of a strong increase in carnivore numbers and an extension of their range in Europe after 100 years of near extinction. This conservation success raises dilemmas and challenges, involving questions of rural sustainability, indigenous and local communities' land use practices; ideologies and policies concerning the rural as wilderness and arena for rewilding processes, versus the rural as countryside, cultural and worked landscapes; the potential of developing rural economies; and power relations. Foremost it involves how conservation strategies, management and attached conflicts are played out locally, while at the same time being part of a national and international biodiversity conservation scene, and how to maintain or develop legitimacy for policies, management, and trust.

What are the experiences of living with the majority's decision making and international obligations on the local level? What adaptation strategies do various actors choose?

Norway has implemented a geographical differentiated carnivore management model, with targeted carnivore stock numbers and zonation of grazing prioritized, respectively carnivore prioritized areas. Due to limited farmland (only 3%), sheep farming has been based upon utilizing grazing rights in the outfields.

We present results from a study in Hedmark, the only county in Norway with targeted stock aims for all the four large carnivores: bears, wolves, lynx and wolverines, with interviews with some 20 sheep farmers, and supplemented with statistical analysis at national level. Within the designated carnivore zones losses to carnivores has decreased significantly, as sheep farming is more or less closed down or sheep are moved elsewhere for grazing. In adjacent grazing prioritized areas losses have been high, in spite of adaptation measures.

We identified three main strategies:

- 1) Phase-out: They have experienced big losses, heavy psychological pressures, and they see no future for outfield pasture use. Farm closure or production changes
- 2)Wait-and-see: They are waiting to see how the carnivore situation will be solved/managed. If it gets 'worse', they will not continue. Postpone decisions.
- 3) Develop the farm and fight for the continued utilization of grazing rights in the outfield pastures.

We place these strategies into a context of political and conservation ideologies, agricultural restructuring, and urban-rural, as well as production versus consumption based lifestyles and life worlds. We argue that material reality may be more relevant than a class-based or environmental values based analytical perspective to understand adaptation and resistance to large carnivores.

## Locating the analysis of environmental governance to the 'subject': Meaning and interpretation of participation in the management of large carnivores in Scandinavia

Annelie Sjölander Lindqvist, University of Gothenburg, Sweden

Until the middle of the 19th century, there were large populations of the four mammalian carnivores – brown bear, wolverine, lynx and wolf – throughout Finland, Norway and Sweden. Persistent hunting led to profound reduced populations. Today, the populations

are increasing and spreading. Their presence is highly disputed by certain stakeholder groups because of uncertain consequences for rural lifestyles, livelihoods and futures. To cope with this uncertainty, environmental collaborative measures are implemented to support the building of legitimate and sustainable management actions. This study of the meaning and interpretation of environmental collaborative governance in three countries - Finland, Norway and Sweden - draws attention to the dynamic, symbolic and intersubjective nature of collaborative institutions. The study, implemented using qualitative methods, takes departure in how governance approaches aimed at building a sense of shared responsibility for land, wildlife and human activities, act as a mode of power imposing subjective, and unique, positions. In this sense, collaborative governance can be understood, to use Foucault's terminology, as a political technology that combines what Rabinow (1984) refers to as external 'subjection' visa internal 'subjectifiction'. Approaching the collaborative process as an instrument in the organization of society, this case study probes the relationship between governance and subjectivity, analyzing the ways in which the subjects of governance policy constitute themselves, how they think, feel and act, and the actions they take on that basis.

### Science-policy interfaces to support the role of small farms in regional food systems: some evidences

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Keywords: small farms, empowerment, science-policy interface, multi-actor interactions

This paper explores science – policy interface (SPI) as an arena of interactions between researchers and policy-makers to support more vulnerable rural and food stakeholders, such as small farms (SF). European SF for a long time have been and still largely remain at "the dark side of the moon": there is growing, but still quite limited knowledge about their situation and role in food systems, and, more specifically, their contribution to food and nutritional security (FNS) remains poorly explored. The visibility of SF is reduced also by the fact that they are weakly represented in agricultural and food policy making. While bigger-scale actors and industries are well represented in respective policy-making structures, smaller ones are at a much lesser extent so.

The paper gathers researchers' experiences from an ongoing Horizon2020 project SALSA of their engaging in policy processes through a range of project-generated activities and knowledge, such as collaboration in communities of practice, with a broader set of

stakeholders, targeted dissemination activities and other. While SALSA project has been closing some knowledge gaps regarding SFs' situation and their role in FNS, it has also generated and contributed to a range of initiatives at science-policy interface. With an overall goal to empower SF and support their role in regional food systems, these initiatives have been aimed at bringing to light a reality which has become unseen in the dominant European agricultural regimes, and at influencing and contributing to policies with science-based evidences and co-created knowledge to better address SFs' needs.

The paper explores and systematizes a range of activities at SPI undertaken by the project's researchers along two dimensions: (1) the position of SPI in policy process (from problem identification, to evaluation and adaptation of policies), and (2) the degree of researchers' involvement in policy construction (from information supply to co-design). It concludes about researchers' potential to contribute to a more inclusive agricultural and food policy process by supporting there the voice of the underrepresented SF.

#### **Working Group 15: The Sociology of Rural Entrepreneurship**

#### Entrepreneurialism, scale and the resilience of rural places: an evolutionary perspective

Neil Argent, University of New England, Australia

Keywords: resilience, evolutionary change, rural place, entrepreneurialism, geographical scale

The growing scholarly interest in the application of social-ecological systems thinking to broad sustainability issues has yielded up the equally popular notion of resilience. Although not always well-defined, resilience is commonly seen as a desirable characteristic of firms, institutions, communities and the like, and is increasingly seen as providing a valuable lens for rural social scientific research endeavour. Understanding the factors that contribute to or detract from resilience at the regional and local scales is, by and large, an empirical matter. Drawing on a larger project which is investigating the longrun social, economic and demographic trajectories of Australian rural communities from a combined evolutionary economic geography and staples theory perspective, this paper explores the role of entrepreneurial agents and institutional innovation in the building and maintenance of resilient if staples-dependent rural economies. Using a case study of Kangaroo Island (South Australia), I explore the parts played local farmer/entrepreneurs and extra-local institutions in re-creating markets for the Island's comparative advantage: wool, meat and grain. In doing so, this process of 'market making' has allowed Island farmers to re-define their economic and social path (and place) dependence, providing

the Island with some form of resilience to the major 'shocks' that frequently accompany natural resource dependence and reliance on export markets.

#### Practicing 'intellectus' in rural entrepreneurship

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In this paper we turn to recent philosophical investigations to analyse stories from entrepreneurial women in rural areas. They describe a variety of social activities they are engaged in to develop their companies, products and services, but also the local community, and society. These engagements are often described in passing, and not directly connected to the company according to conventional goal-oriented logic. Rather, they are seen as taken for granted—they are just done, and someone needs to do them. They concern care for others—for the children in the community, the elderly, the infrastructure, the sustainability of the industry etc. They are neither described as sacrifice, nor as benevolence, as is often emphasized in social entrepreneurship stories. Rather, these engagements signal something else. We argue that they illustrate a reflective practice of entrepreneurship, normally suppressed by an economic logic and described as play, passion and creativity in the sociologically inspired entrepreneurship literature.

To better understand the role of reflexive practices in rural entrepreneurship, we turn to philosopher Jonna Bornemark who describes how humans in modern societies have become 'prisoners' of the measurable economic rationality ('ratio'). With inspiration from the pre-renaissance philosopher, Nicholas Cusanus (1401-1464), she describes how the calculating 'ratio' has taken precedence over 'intellectus'. Economic rationality (ratio) describes how we turn to rules of abstractions and generalization. Bornemark's argument is that too much of ratio makes us loose contact with ourselves, others and the specific situation in a way that disables us to develop judgment. Instead we rely on external parameters to objectively guide our action. Practices built on intellectus, on the contrary, emphasize the subjective, emotional, temporary and our ability to 'not know', but to learn to cope with insecurity, instability, anxiety and find ways to act in such terrains. Bornemark's point is that ratio and intellectus practices are interdependent — both are needed. But, in modern societies intellectus has been suppressed, overlooked and seen as state of lack of better knowledge.

But, what if intellectus is a practice that is nurtured in rural contexts? A practice that not only makes it possible for rural areas to survive and thrive, but which we can learn from in the contemporary calls to change global society in a more thoughtful direction. By analyzing stories from 35 women pursuing different businesses and social activities, we set eyes at the question of if, and how, intellectus is practiced by rural entrepreneurial women.

### Seeing a Future in it: Generations, Work and Business Succession in Rural Atlantic Canada

Karen Foster, Dalhousie University

In many countries, concerns are mounting around what will happen when the 'Baby Boomers' exit the labour force permanently. In rural Atlantic Canada, these concerns have crystallized around a looming crisis in the region's independent farms, fisheries, and small businesses. Scattered statistics and anecdotal evidence suggest that as large cohorts of farmers, fishers, and independent business owners approach retirement, the next generation is not poised to take their place. My research, comprised of a regional telephone survey about work values, attitudes and experiences in rural and urban Atlantic Canada, and a set of in-depth qualitative interviews with entrepreneurial rural families (farmers, fishers and small business owners), endeavors to understand the sociological underpinnings of this 'economic crisis' in succession.

Preliminary findings suggest two compelling hypotheses in need of further investigation. First, smooth or automatic succession in family businesses is problematized by a liberal commitment—embraced by individual families and social systems such as schools—to children's autonomy and self-discovery. In plain, people believe children should 'follow their dreams', and resist laying expectations on them, specifically the expectation that they will take over the family business when they grow up. Second, the discourse of entrepreneurialism animating social policy and education is narrowly focused on the business 'startup' and not the 'takeover,' such that young people with entrepreneurial ambitions and skills are trained and in some cases funded to start their own original ventures with little exposure to the possibility of taking on an existing business from a retiring businessperson. In the midst of mass retirements, this means there may be many missed opportunities for business succession.

### From Peasant Farm to Family Business: The Changing Face of Rural Entrepreneurship in the Peculiar Case of Poland

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In the first part, the authors argue that the move to entrepreneurship in rural areas has showed not only changes of rural local communities but, also, more general changes in state-nation society. While in Western Europe this process has been quite simple as moving from peasant farm to the farmer (entrepreneur) one ("the end of peasantry", as it has been called by the French sociologist Henri Mendras), quite contrary in the Central-Eastern part of the continent, this process has been quite complicated. After the World War II most of the Central-East European countries have experienced the Soviet-type collectivization. Such a process has meant that independent peasants became simply the workers in the state-owned farms. However, the case of Poland that generally resisted the Soviet-type collectivization has seemed to require a special attention. Following this line of argument and, at the same time, trying to show the results of this process in Poland, the authors have conducted two series of research basing on two national samples analyses, done in the years of 1994 (data collected under the project: KBN 1/1628/92/03) and 2017 (data collected under the project supported by Narodowe Centrum Nauki [National Science Center of Poland] – UMO-2015/18/A/HS6/00114).

The second part of the paper has been focused on the results of the research. The authors have commented on the following issues: a/ basic characteristics of the investigated farms, b/ basic characteristics of farm operators; c/ basic types and direction of the production among investigated farms; d/ major types of connections with markets among investigated farms; e/ types of labor used among investigated farms; f/ types of financial resources among investigated farms; g/ sources of incomes among investigated farms. Following the analyses of the above mentioned data the authors have pointed some basic characteristics of Polish family farms showing the increasing importance of farms with various incomes and the higher level of cultural capital of farm operators. The above analyzed processes mean that one might stress "the end of peasantry" in a different way than it has been presented by Mendras. The result of modernization and postmodernization of a peasant community of Polish farmers has resulted in the mixed picture of contemporary rural Poland, including various types of farms and various activities of their operators.

#### Farm strategy and its embedding in the socio-material context - a relational view

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Based on PhD dissertation 'Farmers' perception of opportunities for farm development', Rural Sociology, Wageningen University and Research

Promotor Prof dr ir J.S.C. Wiskerke, Co-promotors Dr ir D. Roep and Dr ir J.A.A.M. Verstegen

Keywords: Farm development, entrepreneurship, embeddedness, strategy, perception, sociology of entrepreneurship

This conceptual paper supports a sociology of entrepreneurship approach to study farm development. A unique case of 100 dairy farmers operating in a highly comparable sociomaterial context allowed to study differences in farmers' perception of opportunities. The differences found between groups of farmers were related to differences in the embedding of the farm in the socio-material context. This led to a view on the three-fold embedding of farm practices: 1) the relations on resources; 2) the relations in the value chain; and 3) the socio-cultural relations. The findings lead to the following conclusions. 1) Strategic decision-making is the process of embedding farm practices in complex and dynamic relations. 2) The farmer is an entrepreneurial actor in a socio-material context that both enables and constrains farm development and thus affects the farmer's perceived room for manoeuvre: the farmer as an entrepreneurial actor cannot be separated from the identification of opportunities. 3) A relational approach is needed as a farm and the wider context are co-shaped in complex, interrelated and dynamic relations. Boundaries between internal and external farm factors cannot be objectively defined as all factors are mediated by the perception and agency of the farmer. The family farm can be seen as the materialisation of the implicit and explicit positioning in the relations of the farm within the socio-material context; a co-construction in which the farmer aims to manage the relations. The personal views and preferences of the farmer are highly influential for the perception of opportunities for farm development. Farm development is highly affected by subjective parameters meaning which stresses the need to address the issue of famers' views and preferences for farm development in relation to regional development programmes. For farmers it is important to realize that a change in view of the situation may change the perception of opportunities. Viewing the embedding of the farm as a three-fold embedding in the socio-material context allows to discuss personal views and preferences.

### Motivations to formalise business activities for poor farmers in a mountainous region of Peru

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Keywords: informal business, mountainous areas, motivations

It is estimated that almost 90% of the farms and enterprises operating in the rural and mountainous areas of Peru are unregistered and hidden away from official systems (OECD, 2016). State actors see the formalisation and recognition of these business as vital for a growing economy and seek ways to promote the process, whilst communities regard formalisation as a mechanism to appropriate their profits, and control their outputs (Williams, 2011), and avoid the process.

Operating within a European Aid programme that supports farmers as they formalise their business activities, this paper examines the motivations for 10 Peruvian farmers as they attempt to transition their business activities from informal to formal. In doing so we identify that the reasons of acting informally are not primarily profit oriented and there is a resistant institutional framework and a number of community based prejudices that prevent the acceptance of business formalisation. The farmers involved in the programme believe that the formalisation can make them more profitable and can bring multiple benefits to their communities.

Semi-structured interviews and participant observation of business behaviours were conducted with 10 rural farmers in remote and mountainous communities in the area of Puno in Peru. An inductive approach revealed four key thematic areas of interest: institutional resistance; motivations to formalise; the over-embeddedness of social networks; and concerns over competition.

The research contributes to knowledge by exploring the factors affecting the transition of business activities from the informal to formal economy of rural farms based in peripheral mountainous communities in Peru.

#### Doing qualitative study in researching entrepreneurship in rural communities

Liga Paula, Latvia University of Life Sciences and Technologies

The author advocates the strength of qualitative approach in sociological research seeking to understand local knowledge and personal insights of the entrepreneurs in rural

communities. The paper is based on its author's qualitative research experience (interviews, focus-groups, windshield survey, etc.). The author discusses theoretical and methodological issues related to community capability approach which is useful to explain involvement of rural communities in local development through the analysis of local initiatives including their social, economic, environmental, and political dimensions. Qualitative data help to understand motives and beliefs of local people including those fostering their involvement in rural entrepreneurship. Quantitative analysis and statistical data well characterize rural businesses; however, it is not enough to explain why people choose particular economic activity, what motives, beliefs and values underline their businesses, why people move from urban areas to rural villages for settling down and running their own business. The qualitative sociological analysis is useful to explain all these aspects. A number of interviews with rural entrepreneurs (for example, producers of medical plants, horse breeders and other representatives of equine sector, entrepreneurs from rural tourism sector, farmers, social entrepreneurs) enlightens vast of social, cultural and value based motives for being involved in rural entrepreneurship.

#### Social Innovation in mountain areas: The adaptive and the transformative approach

Manfred Perlik, University of Bern/Switzerland (CDE), Université de Grenoble/France

Subsequent to changed regimes of value adding since the 1980s towards continuous technological innovation, social relations are pushed to be innovating too. Social innovations are becoming a key issue for organizations and territories to remain competitive.

There is a broad range of interpreting SI. The main difference of understanding probably consists (a) what is really "new " and it is (b) contested whether SI should have a normative component to promote emancipative development goals. In the majority of cases, especially also in the view of the European Union, SI is seen as an instrument of adaptation to achieve economic competitiveness. In this sense, mountain regions specialize according specific demands of the lowlands: In the global North mountain regions fulfill mainly functions of leisure and multilocal residences, in the global South and certain parts of North America prevails the extraction of raw materials. We estimate this development as problematic under criteria of sustainable development. Therefore, it is important to discuss definition and character of SI in mountain areas. Especially it should be differentiated between adaptive SI and transformative SI.

In this presentation, we want to show that a transformative approach is necessary to reduce territorial disparities under aspects like spatial justice, social cohesion and the UN-Sustainable Development Goals.

We present two case studies, which represent one rather adaptive and one rather transformative approach. They base on qualitative and quantitative interviews done within the European research project Horizon 2020 "Social Innovation in Marginalized Rural Areas (SIMRA) and within the research network "Foreigners in the Alps" (FORALPS).

- (a) The case study of a small tributary valley (Val Lumnezia) to the Anterior Rhine in the canton of Grisons in Switzerland is an example of an initiative of civil society, trade and crafts association, environmental NGO and political institutions. All worked together to maintain population and jobs in the valley by searching alternatives to failed investments in mass tourism in the 1980s. The protagonists of this initiative anticipated the changes in regional policy very early and found a different trajectory, oriented on agriculture and small-scaled tourism. In this sense, they can be regarded as rather adaptive to upcoming trends. Although they reached to be better visible on the national level and to slow down the process of depopulation, they could not turn their peripherality at all. Was this a failed initiative? No. The initiative reached a better cooperation among the villages in the valley. The valley has become visible on the national level and the New Regional Policy did not come out as bad as once it was expected. These achievements were more than could be expected as with its small basis the initiative did not/could not touch the global processes of economic change.
- (b) The second case study treats the welcoming practices to host new migrants in an Alpine valley in the Lombardy, Northern Italy. This example is seen as a much more transformative SI. The initiative has achieved a certain success concerning population and jobs. But in the overall trend in this case study does not differ so much compared to Val Lumnezia. So what is the difference for the qualification as a transformative SI?

We argue that it is the different context. In the Lombardy case, people who welcome migrants are acting against a new xenophobic mainstream in many European countries. In this sense, the initiative is part of a larger movement, which does not aim to build regional development on exclusion and isolationist development strategies. Implicitly or explicitly, they try to change such strategies.

As concluding remarks, the presentation draws a bundle of ideal-typical trajectories for social innovation derived within SIMRA.

#### Rural and Entrepreneurship – New Directions for Research?

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Keywords: rural entrepreneurship, material and immaterial space, spatial facets

In this paper we wish to contribute to the research on rural entrepreneurship by analysing and discussing how the concepts 'rural' and 'entrepreneurship' are theorised and defined in rural entrepreneurship research. Calls have been made for: defining 'rural entrepreneurship' (Wortman, 1990); developing theoretical frameworks to analyse rural entrepreneurship (Pato and Teixeira, 2016), and conceptualising 'the rural' (Bosworth, 2012; Dubois, 2016, Müller, 2016). To answer such calls, and to fill the apparent research gap on definitions of the rural in rural entrepreneurship research, we seek to deepen the theorisation on the rural in this research. Hence, the aim of the paper is to understand how rural (and related concepts such as rurality) and entrepreneurship are conceptualised in studies on rural entrepreneurship. We perform the analyses through, firstly, developing and applying theorisations on material and immaterial aspects of the rural in rural geography as our analytical lens, departing from Halfacree's (2007) model of three spatial facets. We supplement this by adding Ahl's (2006) categorisation of entrepreneurship research as either following an objectivist – or constructionist – epistemological perspective. Secondly, we propose how rural entrepreneurship research can become more theoretically informed, and developed, by incorporating such theorisations on the rural and entrepreneurship.

Methodologically we perform a discourse analysis, informed by an entrepreneurship perspective (Jack and Anderson, 2002; Korsgaard, Müller and Tanvig, 2015). We review peer reviewed research articles on rural entrepreneurship in (i) the leading journals on entrepreneurship (cf. Ahl, 2006), (ii) the two leading journals in rural studies (cf. Müller, 2016), and (iii) in the six leading journals in geography (cf. www.scimagojr.com/journalrank.php?category=3305, 3/3/2017).

The analyses tentatively show that rural entrepreneurship research to a large extent does not discuss theories on the rural. Besides, the rural is often (silently) defined as rural localities in a material perspective, focusing on e.g. long distances from urban centres, low population densities, or being mainly characterised by agriculture. We argue that including other facets of rural spaces, everyday lives and representations of the rural, would enrichen the rural entrepreneurship research. It would also work well together with more recent takes on context and entrepreneurship (Welter and Gartner, 2016; Gaddefors and Anderson, 2017).

#### The Role of Networks in Innovative Rural Businesses: A Case Study of Estonian Agro-Food Businesses

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Keywords: rural entrepreneurship, innovation, network relationships

Rural businesses are typically operating in considerably more challenging environment than their urban counterparts stemming from the distance, more limited access to variety of resources and infrastructure. Often rural businesses are smaller and thus the different ways to gain access to resources are especially critical to overcome the liability of smallness characterized by poor access to the financial, technological, human, information and other resources. Innovation requires resources. For a small rural business networks consisting of external actors and relationships provide crucial opportunities to get access to the external resources they need for creation and implementation of new products and practices. The aim of the present paper is to study the how the networks affect the development and implementation of innovations in rural context. The paper studies three cases of Estonian agro-food businesses. All three businesses are microenterprises that have implemented innovations in the last five years. The primary data for the analysis is collected from semi-structured interviews with the business managers and owners. This is complemented by secondary data from public written materials on the businesses, including newspaper and internet resources, annual reports and other documentation collected by desk research. Different data sources are combined to research the innovation activities of the businesses studied: type of innovation, radicalness, innovation process and its speed etc. The analysis of networks focuses on mapping the network relationships of the rural businesses with different actors and their main characteristics, the strength of the ties, type of cooperation and how the different actors have affected the access to the different types of resources and facilitated or hindered the innovation activities of the businesses.

### Innovations for a sustainable agriculture and food sector: An integrative innovation model

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Keywords: innovation processes, innovation management, small and medium enterprises (SME), sustainable land management

Despite the increased efficiency through differentiation of markets and division of labor, food systems are also confronted with large negative social and environmental impacts. Small and medium-sized enterprises (SME) in the agriculture and food sector have the potential to (further) develop innovative solutions to contribute to sustainability but are often faced with limited resources, expertise and the complexity of the context they operate in – remaining in a niche. Moreover, there are currently few instruments for SME with most models being very complex and targeted at companies, which often have their own innovation departments. In a multi-stage process within a transdisciplinary research project, we developed an integrative innovation model that connects different socioeconomic aspects with concrete challenges in innovation management practice. The model relates six themes to each other which are all key to, but so far often overlooked or difficult to manage in innovation processes in the agriculture and food sector, namely acceptance and participation, cooperation, knowledge management, marketing, and sustainability assessment. Addressing these themes contributes to co-developing sustainability, innovation and implementation targets and allows to generate knowledge to be able to assess the innovation and develop a viable operational model. Our interdisciplinary team followed a methodologically constructivist iterative approach accompanying two case studies throughout the different phases of an innovation process thus allowing us to connect the analytical with the practical level. We used a dual approach by simultaneously developing tools for innovation management challenges identified in the two case studies. We developed tools transferable to other innovation processes for each of the themes and drawing on experiences with tool tests applied in the two cases of niche innovations. The first case deals with the development of sustained value chain for ethical poultry husbandry and the second case aims at the combination of different niche innovations for cultural landscape conservation. Through continuous documentation of the tool development process, participatory observation, reflection of tool tests and team integration work, and a working group of the authors, we developed a model that allows users to reflect and work on their innovations from different angels at different degrees of depth. Furthermore, concurrently considering different themes supports actors in a coordinating role in the agriculture and food sector by making heterogeneous actor settings accessible to planning, steering and evaluating innovations. Finally, our model allows for better harnessing the potential of local actors to contribute to the sustainability of the agriculture and food sector.

#### Which practices make entrepreneurship "Rural"?

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Keywords: Entrepreneurship, Innovation, Rurality, Practice-Theories

Entrepreneurship in rural or peripheral areas has received attention both from economic geography and rural studies alike. Whereas (economic) geography sees peripheral places with "thin" institutions and infrastructure, rural studies more often adhere to the benevolent perspective of strong ties and high social capital characterizing rural economic action. Although not explicitly, both approaches convene around the fundamental sociological question of the relation between (entrepreneurial) actions and (specifically rural) structures. A definition has to integrate both dimensions and must be able to distinguish between entrepreneurship in rural areas and Rural Entrepreneurship as a social practice which itself creates rurality. These practices are understood as the assemblage of meaning, action and most importantly, materiality.

The second dimension then is the definition of the entrepreneur. I follow Schumpeter's concept of the entrepreneur as somebody who combines factors to create something new regardless of her/his function, position or employment status. This definition includes intrapreneurship of engaged administrative personnel, civil engagement etc., but excludes non-innovative rural businesses. Schumpeter provides another pivotal and purely sociological element to the definition by describing the entrepreneur as somebody "who doesn't experience limitations in the same way as other economic individuals would do" and someone who simply cannot (help) to be active and innovative. Taking this definition of entrepreneurship seriously we have to ask if the presumed characteristics (or limitations?) of rural areas are indeed relevant or rather if other limitations bear on the innovative rural entrepreneur.

To illustrate the argument I draw on Innovation Biographies conducted in a rural area of north-east Germany. Three case-studies of Rural Entrepreneurs, or so-called "Lifestyle Entrepreneurs" exemplify the difficulties they face in establishing local networks and local cooperation, and how they benefit from external knowledge. This way the case studies call into question both the close-knit local community and highlight the connectedness of rural places.

#### Working Group 16A: Land: Resource, Territory, and Relations

The boundaries of land reform: The Scottish model applied to a US context

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In 2016 the Scottish Parliament passed the Land Reform (Scotland) Act 2016. The legislation is remarkable on a number of grounds: It strengthens community rights to buy

to land; creates a new public body – the Scottish Land Commission – committed to 'radical' reform of land governance; and enables a wave of land reform (i.e. changes in ownership of land) that is both legal and peaceful. Perhaps most of all, the legislation is remarkable for offering a restructuring of the current balance between property rights and 'other' rights. - It does so by embedding the UN International Covenant on Economic, Social and Cultural Rights (UN ICESCR), and for setting economic, social and cultural rights as a priority consideration guiding the governance of land.

This paper explains the key legal and discourse manoeuvres of Scottish model, then contrasts the Scottish approach to the dominant approach of land access programs in the US context of California, where an energized constituency of new entrants and their allies attempt to resolve the challenge of a volatile and inflated land market. By comparing the features of Scotland's Land Reform to land access interventions in California, we will demonstrate the centrality of the human rights framing on which land struggles are based. - California's land access initiatives fail to challenge the core of private property relations, instead aiming to innovatively work around what is seen as an unchanging and unchangeable reality of capitalist hegemony.

By examining the striking difference in land access models between these two frameworks, we can begin to imagine what work would need to occur to replicate the Scottish model elsewhere, especially in places with a seemingly unshakeable faith in private property relations. It is hoped that the discussion will spark insights and debate into the potentialities and possibilities of land reform processes across many contexts. More generally, the discussion raises questions about the defining role and in some instances nascent 'hierarchy' of the right to property in constitutional frameworks.

### An Examination of the Methods of Resistance by Rural Communities to the Imposition of Urbanisation and the Development of HS2

**Emilybeth Davies-Smith** 

**BCU** 

Keywords: Rural Sociology, Informal Social Control, HS2

This paper explores the discursive actions and tacit practices of long-term residents towards widening social and infrastructural change within the English countryside, with a specific focus on the development of a High-Speed Rail Network (HS2) and its impact on rural communities in the East Midlands of England. Through a theoretical examination of the literature on informal social control and identity protection and management, my aim

with this paper is conceptualise how HS2 is used as a smokescreen for wider fears concerning the diversification of the English countryside. Specifically, I will explore how rural communities, through what I call the socio-spatial organisation of 'rurality'; or in other words, the ways in which long-term residents draw upon the rural landscape and social practices to denote belonging and the exclusion of the 'Other' as a way to enact a set of informal controls that establish a 'traditional' social identity based on an idealised perception of what rural life represents in order to protect against wider threats of social change that bring creeping urbanisation and suburbanisation (e.g., HS2) and the social and spatial implications inherent in them.

#### Landscapes of valuation

Alexander Dobeson, Uppsala University

Keywords: land, valuation, property, conservation, national parks

When thinking about the countryside, most people associate different values with the land and soil to which it is intimately tied. We can think of land as 'nature' that has to be conserved and protected, as farmland that needs to be utilised for food production or simply as public space of rural tranquility and beauty that should be open and accessible to everyone. In our modern society, however, these different values are often in conflict. Yet, land has become one of the most valuable and priced assets in the contemporary economy. But how can something as contested as land be valued, commodified and priced? Which land can be traded and which not? Which land is valuable and which is worthless? And what role does the commodification of rural land play in the broader context of contemporary market economies?

To answer these questions, I propose a comparative empirical case study of land valuation in two countries with two diverging histories of land use and conservation: Germany and the UK.

Working together towards 'good farming': developing community, collaboration and 'best' practice through on-farm demonstration

Sharon Flanigan, Lee-Ann Sutherland, Claire Hardy

The James Hutton Institute

Keywords: cultural norms, demonstration, collaboration, innovation, 'good farming'

In recent years, an increasing body of literature has explored how 'good farming' is conceived in terms of symbols that represent culturally appropriate practices and success in farming. The cultural significance of autonomy in farming is also recognised, whereby decision-making has been found to be highly personal and important to farmers' sense of self, and examples of collaboration which allow for that to be retained can underpin acceptable ways of working together across farm boundaries. In this paper we bring together these notions of cultural identity in farming to explore how opportunities for farming communities to interact regularly in the context of on-farm demonstration events can support new and strengthened relationships and identify acceptable ways of working together to improve land management practices at a community scale. As part of this we explore collaboration as a demonstrated social innovation and farm management strategy, which we found to complement traditional demonstration of agricultural practices in the context of on-farm demonstration events. Through participant observation and in-depth qualitative interviews undertaken with stakeholders on two 'Monitor Farms' in Scotland (where farming communities meet on a regular basis over three years to participate in a facilitated but farmer-led programme of community open days) we find support for including relationship formation at the community and farm business scales as a component of 'best' practice – or 'good farming'. The results of this study also highlight several key lessons for on-farm demonstration providers and we make suggestions of ways that on-farm demonstration can be optimised to further promote sustainability in farming and land management practices.

#### On styles of farming and sustaining land-use: the potentials of beef cattle production in the mountainous county Os Ancares (Galicia, Spain)

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Keywords: Farming style research, land management, sustainable agriculture

This paper shows the preliminary results of farming style research among 53 beef cattle farms located in the County "Os Ancares", a mountainous area in the east part of the province of Lugo (Galicia, Spain). Through farming style research we identify patterns of production, which we take as departure point for assessing actual and potential socioeconomic impact (income, and employment) and territorial and environmental impact (land use management and the provision of environmental public goods). Data analysis is done combining Principal Component Analysis (PCA) and cluster analysis with semi-structured interviews complementing those results. In doing so, we identify how farmers

have different situations and take different management decisions regarding land-use, farm scale and markets. The PCA shows production strategies represented by every component. The factor scores of every component are used as variables for running a cluster analysis which allows us to classify the farms in different farming styles. Farms in the sample show strategies linked to different degrees of land intensification, scale and market dependency. The combination of those strategies enable a classification of farming styles with different socio-economic and environmental impact. Qualitative information from interviews addresses the relation between farm management and landscape, product differentiation and productive diversification. This information combined with the quantitative data on farm size and income, results in the assessment of the potentials of every style to foster sustainable development, including the provision of ecosystem services and public goods.

## An empirically grounded theoretical framework for the analysis of small farms contribution to food and nutrition security

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Keywords: small farms, food and nutrition security, food sysyems, theoretical framework

The SALSA project aims at assessing the current and future role of small farms and related small food businesses in achieving sustainable food and nutrition security in Europe and in selected African regions,. This objective originates from two main observations: the large presence of small farms in both backward and richer regions, and the increasing attention for food and nutrition security concerns, even in supposed food-secure contexts. These observations led to investigate the contribution of small farms and related food businesses to sustainable food and nutrition security, through an approach based on the observation of small farm's connection with the territorialised food system.

The reflection process triggered by field research outcomes suggested a refinement of the initial theoretical framework. The paper presents the key elements of this empirically grounded theoretical framework, showing how the research process contributed to the grounding. In particular, the interviews conducted with small farmers gave insights into farming strategies and consumption behaviours, highlighting the differences between farms aiming at self-provisioning and market-oriented ones, and the wide range of market and extra-market flows of food and other resources in which small farms are engaged. Regional food systems have been analysed through participated mapping exercises and

the definition of food balance sheets. Besides, the satellite mapping of selected regions highlighted the diversified land occupation patterns linked to the presence of different small farms' types.

The resulting grounded framework hinges on some key elements. First, a broad definition of FNS, rooted in the current policy debate and capable to grasp the specific small farms' contribution. This definition encompasses freshness, diversity, cultural value of food, and highlights the importance of food access, beyond the mere availability. Second, a flexible definition of small farm, capable to account for the diversity of small farms' connections to the food system, through the identification of relevant typologies upon which SF contributions to FNS can be assessed. Third, a dynamic system approach, reflecting the small farms' capacity to adapt to changes in their socio-economic, technological and natural environments. Finally, the consideration of spatial elements. The spatial analysis of the food system, conducted at a regional level, allows the observation of production and consumption regional patterns and of the flows of food and other resources among regional actors (producers, distributors, retailers, consumers etc.) influenced by the geography as well as by logistics and power relations.

#### **Understanding interactive innovation**

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Keywords: Interactive innovation, multi-actor approach, thematic networks, EIP-AGRI, evaluation, impact pathways

'Interactive innovation' has become an increasingly popular approach to the delivery of projects and has driven a paradigm shift towards more sustainable and productive agricultural systems. Networking and collaboration with multiple actors, with a view to solving the most pressing agricultural challenges, has gained momentum in the EU policy frameworks. In our study we draw upon recent policy developments highlighted in the key EU agendas, such as the EIP-AGRI and Horizon 2020.

The study is based on the thorough review of relevant literature, which was supplemented by interviews with actors involved into the delivery and evaluation of interactive innovation projects. We interviewed representatives of nearly all EU countries, and specifically sought a variety of stakeholders concerned with related policies. For additional insights, we examined interactive innovation approaches practiced in the developing and transition countries around the globe.

A range of understandings of 'interactive innovation' emerged from the interviews and respondents especially emphasized their need to be actively involved as partners in projects rather than merely being consulted about them. Several consistencies of opinion became apparent, including an emphasis on multi-actor involvement, with farmers and researchers specifically referred to as the main actors. Although various terms have been used to describe it, the understanding of 'interactive innovation' is rather was found to be similar in developing and transition countries, which suggests consistency across diverse geopolitical contexts. The few inconsistent accounts that were found were mostly specific and linked to location at a macro-regional scale

'Interactive innovation' is widely acknowledged as an effective mechanism to boost innovation and improve the uptake of research results. Nevertheless, its effects and impacts are still insufficiently demonstrated and are not yet fully convincing. On the basis of the literature review and interviews, we have identified what we believe are the main impact pathways of interactive innovation projects. Moreover, we have looked at the current and most promising evaluation approaches, along with related methodological challenges and the expectations of evaluation stakeholders. The findings of this study could enable better evaluation of interactive innovation projects and thereby inform policy to improve the general performance of research and innovation for a more sustainable and productive agriculture.

This study was realized in the framework of the EU H2020 LIAISON project (currently in progress).

## Synergy and conflict between goals by multifunctional land consolidation project – a learning and democratic tool for engaging stakeholders

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In response to the increased number of stakes on land use, attention amongst planners and policymakers has been directed at the multifunctional potentials of landscapes. In Denmark this has started a debate about the need for a land reform redistributing land so that multiple stakes could be met. A Collective Impact process involving national interest groups with stakes on land use initiated the debate. The CI process lead to the start of three pilot projects on multifunctional land consolidation. An interdisciplinary group of researchers was engaged to measure the effect of multifunctional land consolidation in three pilot projects. This group developed a method for measuring the ex ante potentials and ex post impact of land consolidation, which includes five academic

disciplines. The disciplines include rural development, outdoor recreation, environment, farm economics, and biodiversity (Johansen et al. 2018). In this paper we elaborate over the synergy and conflicts between the fulfilling of the 25 different goals. We draw on the methods used for clarifying synergy and conflict between the 17 Sustainable Development goals. We found that explaining the synergy and conflict between for the multiple demands on land may serve as a learning and democratic tool for involving stakeholders in policy and planning processes at the national as well as the local level.

#### Land Rights through the Lens of Gender: A Case Study of Rana Tharu in Uttarakhand

#### Richa Joshi

The land is one of the most significant assets which determine the social status and economic prosperity in the community. The bond between the land and community developed a sense of land possession which is manifested in an emotional way associated with clan, kin and community. Hence land in the discipline of anthropology is seen as an indigenous perception of territoriality and communal ownership. In the tribal community, the land is not sold rather it is inherited from one generation to another. The present article talks about the land rights through the lens of gender illustrating the case studies from Rana Tharu in Uttararkhand. The relationship between the land and gender has been focused by underscoring the role of gender concerning asset holding and the inheritance pattern of land. The various aspects such as land allocation to women, the female-headed households and challenges faced by women in access to land are explored in the article.

## Agroforestry Development: Barriers to Planting Trees in the Czech Agricultural Landscape

Lukas Kala, Institute of Botany of the Czech Academy of Sciences

Czech landscapes show little cultural variation with monoclonal crop fields. Similarly to rest of the European Countries, Czech farms produce large quantities of yields together with large quantity of negative environmental impacts. Agroforestry is promoted, f.i. by European Commission, as an environmentally sound farming practice which can address current problems of our landscape (especially the drought and the soil erosion). According to experts the agroforestry can augment soil water availability to land use systems, control runoff and soil erosion, keep soil fertility, lead to reduced insect pests and associated diseases, reduce greenhouse gas emissions and provide a more diverse farm economy and stimulate the whole rural economy, leading to stable farms and

ecosystems. Agroforestry can be seen as agroecological innovation as well as a return to tradition of the planting of trees in fields, however, trees in the Czech agricultural landscape are rare and farmers have not found their way to agro-forestry yet. An objective of this study was to investigate why Czech farmers do not plant trees in agricultural landscape. Using focus-group methodology we identify some barriers to planting trees which lay in injustice legislation, property-law relations, technology, inadequate subsidy policy, stereotypes, perception of rurality and farmers' identity and mainly low level of ecological knowledge.

#### The concentration of land use and family farming in Hungary

*Imre Kovách,* HAS CSS, Hungary

Concentration of land use structure after land re-privatization became significant from the beginning of the 1990s to accession to the European Union in 2004, according to both historical and international comparisons. The extreme size of the concentration is characterized by the fact that the largest 1300 farms use one third of the agricultural area and that 8700 farms cultivate two thirds of the arable land. Concentration of land use and land ownership is a consequence of legal regulation and implementation of land reparation, the rapid and radical reduction of agricultural subsidies, and a series of political interventions. After 2010, the political program of selling state-owned land and the landing of individual farms did not significantly change the overwhelming dominance of large farms. The number of land users is radically decreasing. Two decades ago, 1.5 million families were involved in some form of farming, while by 2016, 1 million farmers left agricultural production, and this is one origin of rural poverty and polarized agricultural society. 16,000 farms, with only one hundred thousand employees, use three quarters of the agricultural area. In addition to the large owners, some ten thousand individual farms and four hundred thousand very small producers represent the most important groups in the agricultural society,

This paper presents the determinants and periods of land concentration, the most important groups in the Hungarian agricultural sector and the dynamics of the development of family farms, new forms of new knowledges in technical modernisation of farming. It analyses the impact of land use on the local society, political and sociocultural barriers influencing land management, land ownership and local power relations, as land use management impacts local social relations. The analysis uses survey containing data of 380 000 farms and results qualitative case studies.

## Beyond the economic dimension – the social and environmental impact of a Producer Organisation

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Keywords: producer organization, uneven access to resources, socio-spatial inequalities, conflicting economic, social and environmental interests

One of the 33 case studies of the RELOCAL H2020 project (https://relocal.eu/) is the Szentes Producer Organisation (PO). Vegetable producers needed to fit their strategies to the polarizing power distribution in the Hungarian retail sector and to the increasing competition after the EU accession. The pressure became high on them to produce large quantities on low prices. In the context of oligopolistic market mechanisms cooperation seemed to be the only way for vegetable producers to survive.

The area of Szentes is characterised by a historical legacy of gardening and an access to geothermal energy. Both proved to be important for the PO. Historical legacy: Bulgarian gardeners introduced intensive vegetable production 150 years ago. The early plant production system (KZR) worked as a distinct branch of the socialist agricultural cooperative between 1975 and 1994 integrating small scale backyard farming. This integrated plant production system was revitalized and re-established as PO one year prior to Hungary's EU accession, in order to secure eligibility to EU funding. Geothermal energy is a local asset that provides relatively cheap energy for heating the greenhouses. However, access to plots with available geothermal energy is distributed unevenly amongst producers, on the one hand, and is provided through pumps and pipelines by contracts with the owners of the infrastructure. These contracts are claimed biased by many, who therefore, have little influence on the quality of service provision. This pressure forced a group of producers to organise themselves and stand up for their collective interest against their fellow PO member, the owner of the thermal infrastructure. This is one of the inner tensions among PO members dividing them, whilst they stand united against environmental authorities when they question sustainability measures related to the use of thermal energy.

The producer organisation of Szentes managed to stay alive in free market capitalism but on a systemic level it fails to hinder the reproduction of socio-spatial inequalities and respond environmental challenges. Environmental conflicts (failing to meet sustainability criteria when exploiting thermal water), competition, pressure to secure profitability (the need to reduce costs of production through technological advancement, low wages, grey employment) and its social consequences (self- exploitation, lack of old-age security) as well as democratic deficits of the PO's leadership are aimed to be discussed in this paper.

### Farmers' perceptions of changing patterns of farmland ownership, farmland concentration, and financialization in Canada

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For several years, scholars have been documenting changes to farm structure and farmland ownership on the Canadian prairies. To date, scholars have documented new forms of corporate ownership and control in the sector; increasing concentration of farmland into fewer hands; and increasing non-farm investment in prairie farmland. The main drivers of these changes are the ongoing neoliberal restructuring, rationalization, and financialization of the sector. Previous studies have provided a good understanding of the scale and scope of some of the changes, such as investor ownership, but no study to date has examined in detail the views and experiences of prairie farmers. I report on the preliminary results of a survey of a representative sample of prairie grain farmers. Key findings relate to farmers' experiences accessing land, their views on investor ownership of farmland, and changing relations between landowners and tenants in a financialized environment.

## Increasing land availability for new entrants to agriculture in Scotland: A progressive property rights perspective

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The James Hutton Institute, Scotland

Ensuring a sustainable agricultural industry requires a rebalancing of those individuals retiring from the industry, with those starting their careers. In Scotland, as in many other parts of Europe, the farming population is aging, whilst structural challenges exist within the agricultural industry and community which inhibit the potential for new entrants. Access to land for new entrant farmers is a primary concern, in addition to availability of capital for business investment, and 'push-pull' factors relating to family farming succession. The context of land reform in Scotland has led to an ideological debate around land ownership and tenure, with consequences for the availability of agricultural tenancies. Private landowners (including owner-occupier farmers) appear unwilling to release land for sale or lease due to threats to their wider land ownership, as well as policy and market uncertainties. This paper questions what the Scottish public can expect from private landowners in resolving the 'new entrant' issue and underpinning the future of agriculture in Scotland. The paper draws on findings from interviews and workshops with

existing farmers and land owners in Scotland, in order to better understand their reluctance to release control of their land asset, either through transfer of ownership or use rights, and to identify opportunities to overcome barriers for new entrants. This qualitative data is scrutinised through the lens of progressive property rights theory, including the social obligation norm, in conjunction with existing frameworks of wellbeing that seek to understand the 'fundamental functionings' of private landowners (cf. Rao, 2018). This paper reflects on 'why land ownership matters' and the relevance of this issue in the Scottish context due to new responsibilities for private landowners implemented by the Land Reform (Scotland) Act 2016. Critically, this paper demonstrates that there is a need to understand the underlying concerns and aspirations of private landowners in order to effectively balance the public-private regulatory system regarding land, and the potential to disentangle property rights of 'use' from those associated with 'ownership' to encourage greater access to land for new entrant farmers.

## The social ecology of HNV Farmland: Evaluating the role of farmer and farm characteristics and the implications for agricultural policy

David Meredith, Rural Economy Development Programme, Ireland

Keywords: High Nature Value farmland, socio-economic characteristics, agricultural and rural restructuring, agri-environmental policy

The United Nations Sustainable Development Goal 15 seeks to halt biodiversity loss by protecting, restoring and promoting sustainable use of terrestrial ecosystems. The EU has committed to supporting this objective through the implementation of a Biodiversity Strategy (2011) with the objective of halting all biodiversity loss by 2020. In support of this objective, the Common Agriculture Policy incentivises the preservation of habitats and biodiversity through various instruments including cross-compliance, direct payments rewarding the delivery of environmental public goods and the Rural Development Regulation which provides for Natura 2000 and agri-environment payments. As part of the latter, the EU supports High Nature Value farmland (HNVf), i.e. certain types of farming activity and practices, and land use and land use management, that produce environmental outcomes, including high levels of biodiversity and the presence of environmentally valuable habitats and species. To support policy makers and stakeholders in the design and implementation of agri-environmental measures, significant attention has been given to understanding the ecological characteristics and distribution of HNVf. Limited attention has been paid to understanding the social systems underpinning areas with higher levels of HNVf, i.e. the characteristics of the communities living in these areas, particularly the farmers, farm households, their farms and farm enterprises. Within this literature, a number of contributors have drawn attention to the socio-ecological dimensions of HNVf, i.e. the relationships between people, places and their governance, by way of explaining the inherent instability of HNVf and hence the need for human intervention at a variety of scales, e.g. individual, community and national and international agri-governance. This paper contributes to the further development of research in this area by describing the socio-economic characteristics of areas with higher levels of HNVf, summarize and assess the implications of key (demographic) trends shaping these areas and evaluate the extent to which contemporary agricultural policy frameworks are tacking these issues.

### Community participation in development of second home areas in Croatia: the roll of local social relations

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Keywords: community participation, local development, local social relations, second homes, Croatia

For several decades in Croatia, two population trends have been overlapping: the decline in the number of permanent and the rise in the number of temporary inhabitants. Only in the last two inter-census period, Croatia lost about 10% of population while the number of second homes increased for about 40%. Both these trends are more pronounced in rural and peripheral settlements, where the change in the ratio between part-time and full-time residents impacts process of local development on different levels. In order to better understand social aspect of this process, especially the nature of (dis)agreement between locals and second home users about the direction of local development, we conducted three case studies in three rural and peri-urban settlements with large number of second homes. In this presentation we will focus on community participation in local development of second home areas. More precisely, one of the main aims of the research project was to measure engagement level of part-time and full-time residents in planning local development. Additionally, we were interested in mechanism of this engagement, particularly associations between various kinds of community participation in development and local social relations. Data for this analysis was collected by a face to face questionnaire interview from 1015 respondents (447 locals and 568 second home users). To determine the extent to which community participation in development and local social relations are linked correlation and linear regression analyses were employed. Our analysis revealed that members of both groups were not much engaged in community participation in development. Although, second home users showed a little

more of interest. Also, we found that local social relations are important predictors of community participation in development but only for community of second home users.

### Can local governance and land ownership encourage innovation in agricultural practice? Case-studies from North-west Scotland and Norway

Gavin Parsons, Sabhal Mòr Ostaig, Isle of Skye, Scotland

Keywords: small-scale agriculture, innovation, land tenure, governance

This paper investigates changes in farming styles and the reasons for these in small-scale agriculture, as a part of resilient rural communities in west coast Scotland and Norway. It considers two case-study areas: Trotternish in Skye, on the north west coast of Scotland, which is mainly under crofting tenure, and Askvoll, in Sogn og Fjordane on the west coast of Norway where owner-occupied farms are of a similar size to the Trotternish crofts. These areas have similar geography and climate but land tenure and governance are very different. Government policies and support structures have also had different objectives.

By examining statistics and interviews with farmers and crofters, I will first describe the main changes which have occurred over the last forty years and then examine the perception of farmers and crofters of the reasons for these changes. Innovation as diversification is more prevalent in the Norwegian case-study and the ownership of land may be contributing to this.

Governance is strikingly different between the two countries and the Norwegian experience shows that people there have far more confidence in the effectiveness of putting forward local views.

Government policies can have a big effect on styles of farming but do not always work in land-users' favour. For instance reducing trade barriers on food products, while popular with consumers can increase vulnerability to changes in commodity price and adversely affect farmers.

The paper concludes that a sense of ownership of both the land and the decision making process can encourage investment and innovation and thus contribute to sustainability.

### Ownership in a Social and Constitutional Context: Comparing Scotland and Norway

Jill Robbie, University of Glasgow, Scotland

Property law, and ownership in particular, comprises the rules which most directly regulate the use of our natural resources. Property law, from a legal perspective, is often seen as an abstract system of rules which is independent from the social, political, historical and environmental context of a specific country. Deeper consideration, however, and comparison between jurisdictions, reveals that property law reflects the values of a particular country which originate from the priorities of the individual society. These values can be expressed in court decisions, legislation and constitutional provisions.

In this presentation, I will place ownership within its social and constitutional context by comparing the legal position in Scotland and Norway, specifically in relation to the connection between land and water. I argue that the priorities of these two countries are demonstrated in the decisions made regarding land use and ownership when water became an increasingly contested resource. I claim that the history of these two countries has implications for promoting sustainable land use in relation to water in the future. I suggest that understanding the way that property law and ownership functions within a social and constitutional context is crucial for fostering sustainable land use in light of growing global challenges such as continuing environmental degradation, increasing industrialisation and rising inequality.

#### The impact of market regulations concerning animal welfare on landuse

Markus Schermer, University of Innsbruck, Austria

Increasingly market actors impose regulations on the production process arguing with consumer demands. One recent example is the announcement of a major organic brand of the Austrian supermarket chain "Zurück zum Ursprung" (back to the origin). Within the entire province of Tyrol currently 638 farms supply to "Zurück zum Ursprung". The brand managers announced in Summer 2018 their supplying farmers have to provide free run for cows all year round for at least 2 hours per day. In the Tyrolean district of Lienz thus since first of October 2018 more than 100 farms were refused to deliver organic milk anymore to the brand. Most of these farms are very small and keep 5 to 7 cows in part time. From 2021 onwards "zurück zum Ursprung" will buy milk only from farms with free run barns. Other organic supermarket brands try to profile in a similar way. The regional chamber of agriculture, being the legal representative of farmers interests, fears that regulations in the organic sector are only the starting point for a general requirement of permanent free run husbandry. Presently in Tyrol more than 2/3 of all cattle (all

categories) are kept in tethering, albeit not permanently, but mostly in so called "combined husbandry". This is a rather new expression for keeping animals in tethering during the winter, but on pastures during the vegetation period, first at the homestead, and later on the alpine summer grazing. This used to be the traditional husbandry form in alpine regions. Retailers argue that animal friendly husbandry (often equaled to permanent free run barns) is of highest priority among customers. However, such a change might have adverse implications on the ecology in mountain areas. Experts argue that as a consequence alpine pasturing will be restricted to young stock (calves and heifers), while dairy cows will be kept permanently in the barn at the homestead. As the herding on alpine pastures of young stock is rather extensive (casual observation from the roadside and providing salt), alpine pastures will be in danger of bush encroachment. Ironically the retailers proposing stricter animal welfare regulations are the same ones boasting preservation of nature, traditional practices and traditional breeds.

### Speculating about Land Ownership? How (In)transparency of Agrarian Structures is negotiated

Felicitas Sommer, Universität Leipzig, Germany

Keywords: Land Concentration, Property Rights, Transparency, Statistics

Rising land and land lease prices in Germany since 2007 represent a challenge for agricultural enterprises and provide further incentives for speculation with land ownership.

Effective regulation of agricultural land markets is severely restricted by the lack of transparency of complex corporate structures and investment strategies. Therefore, the german government discusses transparency strategies in order to be able to develop targeted political intervention options in land markets.

At present, the dimensions of agricultural structural change cannot be measured with previous administrative data systems and statistics in the agricultural sector. The Thünen Institute refers in particular to transregional, aggregated, complex corporate and land ownership structures that are difficult to grasp with the current agricultural structure survey. In addition, land ownership statistics are not compiled and would be technically and legally difficult to implement. These limitations also have the consequence that the public debate on land grabbing and soil concentration is mainly fed by case studies and individual cases which generate a one-sided focus, for example on foreign or financial actors.

My presentation will focus on the concepts of land ownership (rights) that can be found in agricultural statistics and in the statistical law, in data management practice and in the negotiation of new survey and evaluation possibilities for agricultural structures. I will discuss how these representations of property are institutionally, technically and culturally stabilised and how impact and mirror socially accepted rights and obligations of property. The discussed reforms of the german land register and agricultural statistics show how the relationship between farmers, landowners and their role in society is currently renegotiated.

#### Material land ownership in the Rainy River watershed

Johann Strube, The Pennsylvania State University, USA

Keywords: land ownership, material power, settler-colonialism, Ojibwe, wild rice

Control over land is materially enacted through specific relations between people, and people and territory. Although legal land tenure systems may clearly define how land can be used by whom, the reality tends to be more complex. This is particularly true for places in which the utilization of land is contested, such as the Rainy Lake watershed which includes parts of the United States, Canada, and various Ojibwe Native American territories. Although treaties between the two Settler-colonial states and the Ojibwe nations allowed the latter to use this land for subsistence, the practices of colonial settlement made the exercise of Indigenous subsistence practices increasingly difficult. In particular, the construction of dams on the lake and the ongoing control of water levels severely damaged the wild rice (Zizania palustris) stands on which the Ojibwe communities depended. Using a blend of Actor-Network-Theory, Institutional Ethnography, and Indigenous Research Methodologies, this research aims to understand through which practices ownership over land is materially exercised. While the findings will be specific to the Rainy Lake watershed, this specific lens may yield important insights over how ownership over land is materially exercised and contested when applied to other places.

### Agri-environmental Governance in New Zealand: Exploring Farmers' Responses to Local Government-led Policies

Ismaël Tall, University of Neuchâtel, Switzerland

Keywords: agri-environmental governance, public policy, resource management, New Zealand

Operating under the Resource Management Act 1991, regional councils in New Zealand are institutional entities managing the effects of human activities on the environment. Their role include the implementation of regional plans for regulating natural resource management. In a country heavily reliant on farming and agricultural exports, regional plans aim to improve or safeguard certain environmental features and are thus de facto targeting farmers. Plans also involve an essential consultation process based on written submissions and public hearings for all impacted parties. Taking place within a public demand for stronger state intervention, regional plans embody instruments of reregulation in a contrasting and well commented upon background of neoliberal deregulation that peaked in the 80s. While the latter phenomenon and its impacts have been thoroughly studied by agri-food scholars, little attention has been set on public policy instruments and their consequences within the field of agri-environmental governance in New Zealand.

Based on an ongoing PhD research, this paper delves into the development and implementation of a regional plan in the farming region of Southland, the proposed Southland Water and Land Plan, which addresses primarily decreasing water quality by following a central government-based guideline, known as the National Policy Statement for Freshwater Management. By using data stemming from over 900 submissions along with in-depth interviews with Southland farmers, this paper focuses on farmers' responses to this regional plan. Submissions are above all conveyed by farmers and highlight a broad array of concerns such as financial pressure, the importance of work autonomy, bureaucratisation of farming and apprehensions about the resource consent regime. By assessing and deconstructing farmers' responses to this plan, this paper aims to analyse the transformative potential of agri-environmental public policies in a devolved regulation context.

## Nudging 'good' land management practices through co-production? An anthropological analysis of collaborative governance in the context of agricultural diffuse pollution

Thomas Vetter, University of Neuchâtel, Switzerland

Keywords: agri-environmental governance, collaboration, co-production, diffuse pollution

Partnership working has become a new normative principle within agri-environmental governance. With more and more benefits becoming attributed to closer multi-stakeholder collaboration, more public monies are being directed towards this cause especially within Europe. These benefits have been studied widely and are usually presented in terms of their contributions to environmental, economic and/or social

objectives. However, in contrast to these reported outcomes of partnership working, the practical ways towards them have hardly received any attention. What does it mean to work together on a day-to-day basis? More specifically, how do stakeholders become trusted partners, bridge interests and coordinate their actions? Which discursive spaces open up or are closed down, and how are they used to achieve common objectives? What codes of conduct become established within partnerships and how does this emerging collaborative working culture in turn affect wider governance outcomes, expectations and aspirations? Answers to these questions are not only important to better understand the factors that contribute to successful ways of partnership working, but also to account for its limitations. This paper responds to this research need by drawing on the example of Farm Herefordshire. This cross-organizational partnership promotes profitable farming, healthy soils and clean water to address the problem of diffuse pollution from agricultural practices within the Wye catchment area in the UK. The insights from this case study contribute to the literature on three fronts: (i) It closes an empirical gap. Most insights about partnership working derive from case studies in Germany, Australia, and the Netherlands, yet detailed accounts of similar examples are largely missing for the UK; (ii) The paper follows Prager's (2015) prompt to study such modes of collective action holistically and bottom-up to capture all their contributions and implications. It does so by employing an ethnographic research approach to investigate the social interactions and struggles that characterize joint working. This commands attention to the backstories, the actual work meetings, the discussions, the processes of consensus building, and the joint actions undertaken; And (iii), the paper connects with wider social science concerns around the underlying processes and practices of governmentality that - according to Jasanoff (2004) - are essential for establishing social and ecological orders. Thus, the paper explores how everyday practices of partnership working contribute to the co-production of institutions, discourses, identities, and representations – which in this case become strategically deployed to nudge 'good' farming practices.

# Working Group 17: Place-based cooperation and sharing among farmers for agroecological innovation

Viticulturists networks and care for the environment in Hérault (France)

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Keywords: Farming, viticulture, biodiversity, environmental networks, site-specific cooperation

Recent literature shows that farmers networks and environmental programs contribute to agroecological transition, since they allow sharing experiences and building collective references that contribute to foster sustainable practices (Compagnone and Hellec 2015; Hillis et al. 2018). However, researches mainly focus on farming practices within plots only.

This paper addresses the workshop's questions one and four (Q1: Which individual and contextual conditions allow the emergence of such forms of innovative cooperation? Q4: How to facilitate the involvement of a wider diversity of farmers?). In particular, this paper focuses on: 1) How diverse biodiversity observation programs and networks co-exist locally? 2) To what extent such networks are a factor of change in farmers' relations to biodiversity and affect their practices at and beyond plot scale?

To answer those questions, we used information collected during an ethnographic qualitative survey in the languedocian vineyard (department of Hérault, France). We conducted semi-structured interviews from November 2017 to May 2018 with 20 viticulturists. Most of them were doing conventional viticulture and were part of local collective environmental networks. We also did participant observations with two programs (Sustainable viticulture groups, "Groupes de viticulture durable", consisting of collective plots observations, and Biodiv'eau, consisting of a flora inventory made by viticulturists on the edges of their vineyard). Additionally we conducted semi-structured interviews with 8 members of local institutions related with the programs.

Inductive qualitative analyses allowed us to characterize 1) the conditions of emergence and success of these programs, 2) their effects on viticulturists' profile diversity, and 3) how being affiliated to several networks contributes to shape viticulturists' practices and relation to biodiversity issues.

#### We found that:

- 1. The co-existence of diverse networks and programs in Hérault allows viticulturists to participate to several networks;
- 2. While participating, viticulturists change their relation to biodiversity; they broaden their perspectives and conceptions of environmental issues. Regarding their vineyard, they are likely to change the way they take care of plots and edges;
- 3. However, without further political and financial support, these collective initiatives may not be able to recruit more participants and to increase their impact on agricultural practices.

### Grassland 2.0: Grounding Knowledge for Place-Based Action to Perennialize Agriculture

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Dairy agriculture in the US, and especially Wisconsin, is in full-on crisis. Returns to farmers for conventional dairy production have been significantly below break-even continuously for over four years. Wisconsin lost approximately 10 percent of its dairy farms in 2018 alone. As well, rainfall is becoming much variable and intense, with frequent record-setting rainfalls, resulting in soil erosion and pollution of water by nutrient and soil runoff. In Dane County, Wisconsin – the highest producing agricultural county in the state, and also home to the state capital, Madison – August 21st, 2018 saw rainfalls as high as 15 inches (38 centimeters) in some rural areas in just 24 hours. The area has many lakes, but most beaches had to be closed because of algal growth stimulated by phosphorus runoff. Eventually, the nutrients make it down the Mississippi River, leading to the infamous "dead zone" where algal growth removes most of the oxygen from the water, undermining fisheries.

In response to these agroecological challenges, a diverse agroecological network is launching the Grassland 2.0 project in the Dane County region. The goal is to convert as much of the landscape as possible to a new version of the grass-based ecology that persisted before European settlement. The initial impetus for the project comes from the Agroecology Cluster at the University of Wisconsin-Madison, which has a vision of the many social, economic, and ecologic benefits of grass-based animal agriculture, in place of the grain-based approach now dominant and now in such crisis.

But the project will only lead to agroecological transition if mutual knowledge identification among all local actors — from farmers to eaters to officials to business interests to academics — can be cultivated. The project is attempting to overcome the "initiation problem" widely discussed in participatory research through implementing a grounded knowledge approach

(Ashwood et al., 2014) that creates conditions that encourage participants to see their knowledge as socially situated but also potentially linked to other socially situated knowledges – just as one area of ground connects to all other ground. The aim of this approach is to transcend the typical expert/local knowledge divide by encouraging all perspectives, including university researchers, to see their knowledge as having a particular social situation or identity, but potentially linkable through building trust and a sense of inclusion. Through such knowledge mutualism, we expect to promote agroecological innovations that none of the participants could have fully anticipated.

### "Terres et Bocages" a farmers organization for hedgerows restoration in Brittany, Western France

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Keywords: hedgerows, agroecology, landscape, autonomy, farmers groups

The hedgerows are a historic feature of the agricultural landscape of Brittany, Fance. They offered multiple resources to peasant agriculture: firewood, fencing and protection for the herd, rainwater storage thanks to the associated ditches ... The agricultural modernization step contributed to the gradual disappearance of hedgerows. From the 80s, other qualities were put forward by the public authorities and the civil society around a set of public goods: the hedges contribute to reduce the erosion of soil by rain and wind, to retain and store pollutants of agricultural origin, to mitigate the homogeneisation of landscapes and to increase biodiversity niches and ecological corridors, to offer public pathes along the hedges...

Because of this, a large replanting program entitled "Breizh Bocage" hires private companies paid by European Union and Brittany region to take in charge the plantation of new hedges and their maintenance during the first five years. The benefits are obvious to farmers: no money, no effort but in return farmers are variously mobilised for those trees' future and their integration to the farms logic: trees are sometimes perceived as conpetitors of farmland and dramatically pruned and pressured by shallowing.

In parallel, a farmers' association called "Terres et Bocage" is also replanting agricultural hedgerows in northern and central Brittany. Based on the principle of autonomy, the group purchases tree seedlings (without public subsidies), participatory planting is organised as well as training programs to learn how to manage trees ... The design of hedges and farms is in tune with an agroecological approach: the growing trees fully fulfill their functions of biodiversity, pollutant sensors, shelterbelts, shelter for wildlife. Farmers develop a more systemic vision of their farm and also consider its ecological dimensions and the interactions between the various sub-systems of which trees. Their action extends to the rest of the local society thanks to the participation of citizens or young pupils of the schools in the days of plantations, and to public training days.

The presentation will cover the operating details of "Lands and grove" (numbers, organization ...). It will highlight the political support which favour the initiative, in particular the French national program supporting GIEE (Economic and Ecological Interest Groups) has proved decisive for the financial stabilization of the organization and by underlining its public recognition through a ministerial label.

### Agro-ecological farmers' cooperation for shared commercialisation and rural population access to healthy food: is living-lab a support?

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Inra Aster-Mirecourt

Keywords: Western Vosges (France), shared commercialization, food reterritorialization, Living-lab

Cooperation designs between farmers regarding distribution activities are developing and take different forms, such as producers' markets, farm drive-ins, or sometimes producers' groupings to supply collective catering.

The initiative of the association « les Bios du Coin » illustrates this trend. This collective was created in 2013. Since a few years, it gathers 11 producers from the Western Vosges who develop a new form of distribution and marketing pooling of a wide range of products from agro-ecological farming. Their strategy relies on the objective to cover a rural zone through deposition points situated in farms or places which normally are not dedicated to the sale of those goods (for example a participatory citizen café). Thus, they want to give access to a rural population to locally produced and transformed organic food.

This initiative is set in a territory characterised by difficult social-economic conditions with high unemployment and poverty rates in the main village (22 and 23% respectively). The Western Vosges is classified as a rural revitalisation zone by the French Ministry for land planning. Short-distance marketing is rather underrepresented and mass farming production dominates.

Organic farming main trends do not circumvent mass production, specialised and long chain distribution logics. However, since a few years the territory has become the place for the rise of alternative initiatives, particularly the development of organic and local products.

Since 2017, the producers' organisation is part of an agri-food living-lab (TEASER-Lab) on the territory. They share the common objective to construct a territorialised agri-food system supporting healthy food and agro-ecological practices.

With regards to its current development, the initiative "Bio du Coin" is a real opportunity to encourage and reinforce agro-ecological transition process within the territory. Still, community support appears as a main lever effect, even though communities struggle to take up such challenges, especially in deserted rural areas.

As a result, how can the Living-lab tool (which associates closely public, private, associative and citizen actors at equal status) allow the "Bios du Coin" initiative to reach its full potential in agro-ecological transition? On the contrary, what is the role of this dynamic of agricultural producers within the doers' network that constitutes the living-lab? Those questions will guide our analysis throughout this contribution.

### The needed peer-to-peer cooperation for the place-based agroecological transition: Tactics to reciprocally collaborate despite the farmers' heterogeneity

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Keywords: farmers' cooperation, agroecology, place-based, heterogeneity, reciprocity

In the current context of heterogeneity and competition between the diverse sociotechnical forms of agriculture, the agroecological innovation requires cooperation, especially at the local level, among the heterogeneous farmers. However, the local interfarm cooperation that offers opportunities for farmers to better access and manage equipment, labor and material resources, remains hidden in the academic production.

This paper, based on the experience of French farm machinery cooperatives (CUMA), shows how local inter-farm cooperation can help make farming systems more agroecological. Many French farmers cooperate through their machinery cooperatives and other sharing arrangements, which facilitates the agroecological improvement of their farming systems by relying to a greater extent on peer-to-peer cooperation. An increased interdependence between peers results from the deepening of their peer-to-peer cooperation, while providing farmers with additional room for maneuver.

The analysis of their modes of local inter-farm cooperation, based on the study of six machinery co-ops, reveals the key role and the intertwining of the sociotechnical and symbolic stakes. These give rise to a diversity of tactics organized by the farmers to manage to cooperate horizontally with their heterogeneous peers.

We conclude by arguing that local inter-farm cooperation warrants more attention, both from academy and policies, to help strengthen its development and to expand its potential for contributing to the agroecological transition.

### EIP AGRI: exploring emergent European policy tools and their potential to support collaborative agro-ecological innovation

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Europe's Common Agricultural Policy (CAP) has long supported schemes that seek to incentivise environmentally beneficial farming practices. The latest iteration of the CAP is seeking to trial new scheme models that incorporate more place-based knowledge through collaboration with farmers and other relevant stakeholders. Ireland's implementation of the European Innovation Partnership for Agriculture Productivity and Sustainability (EIP AGRI) is one such example. In this paper, I use a case study derived from Ireland's EIP Initiative to examine the potential for these kinds of policy measures to support the emergence of place-based collaboration. The Initiative itself called on locally embedded groups to propose agro-ecological farm improvements that they themselves had designed. Proposals were then funded on a competitive basis.

Using qualitative interview data, this paper traces the application writing activities of one such group based in Ireland's western uplands. The group's proposal sought to implement a sustainable grazing regime on tracts of collectively owned mountain farmland. This process involved the establishment of partnerships between farmers, farm advisors, researchers, rural development professionals, and a Non-Governmental Organisation. The collaboration that emerged manifested in a merging of knowledge input from a variety of these partners, often negotiated in terms of potential futures. However, this collaboration relied upon decision making structures that were established through years of anticipatory work by a small core group of actors with experience in facilitation, farmer leadership, and policy advocacy. While this policy initiative may thus encourage and give form to such collaborations, the experience and skills of locally embedded actors were crucial to the process. Responding to the specific goals of this session then, this paper asserts that the EIP AGRI policy tool could favour farmer led collaborative innovation. At the same time, it points toward brokerage roles that may be required in order to develop a collaborative process in which farmers can have meaningful input.

#### **Establishing and maintaining farmer cooperation for environmental benefits**

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Keywords: farmer cooperation, farmer groups, farm biodiversity, agri-environmental management

This paper explores a state-funded intervention to establish farmer cooperation for agrienvironmental benefits in England. The Countryside Stewardship Facilitation Fund provides funding for facilitators to develop cooperation amongst a new or existing group of land managers (e.g. farmers, foresters) and agree the agri-environmental management priorities that they plan to take forward across their holdings, with a view to achieve landscape scale management. Facilitators are expected to maintain links with local partnerships, initiatives, and government authorities to ensure the group's work complements other actions. Facilitators come from National Park Authorities, river trusts, wildlife trusts, conservation organisations and private consultancies. In 2018, there was a total of 98 groups (>2400 members), selected for funding through 4 competitive rounds since 2015.

The study investigated 6 farmer groups in Cumbria and East Anglia in terms of how they were established, how they work together, and what objectives were set and achieved. Semi-structured interviews were carried out with 32 farmers and with the various facilitators across both regions between June 2018 and February 2019. Results showed a varied understanding of what the group and its purpose is, which influenced the motivations of farmers to join and ultimately differing levels of group cohesion between groups. There were also examples of farmers who declined joining a formal cooperation effort because they were convinced they could achieve more if they maintained their flexibility. The notion of restrictions was linked to the government funding that the groups benefited from, as well as the perception that cooperation would limit the individuals decision making. The facilitators played a crucial role in setting up the groups and maintaining momentum, but they also felt restricted by the funding rules that exclude follow up one-to-one advice that is often needed for successful implementation of particular measures.

Findings show that government policies can help with some of the ground work for encouraging farmer cooperation. In areas that have no prior history of farmers working together, the Facilitation Fund helped to farmers to get to know each other, start building trust and explore members' interest in environmental and biodiversity objectives. In areas where farmers have previous working relationships or even pre-existing groups, the Fund makes it possible to expand the group's reach and members' knowledge, trigger interest and even 'friendly competition' around achieving farm biodiversity outcomes. However, there is still a long way to go to achieve wider landscape scale management, and a statefunded scheme faces serious limitations in supporting genuine farmer-led cooperation for agri-environmental benefits.

Farmer groups and socio-economics networks' structure: a role to play as social resource for farmers and as driver for agroecological transition. The French Comtat Venaissin study case

Carla Scorsino, Inra Paca

Keywords: Social network analysis, Agroecological transition, collective action, farming system typology, proximity

This contribution focus on socio-economic networks in which farmers from two different farmer groups of French Comtat Venaissin are involved. Trough social network and proximity analysis, it aims to study the diversity of interactions within and around the groups of farmers and the collective action dynamics in between members. This work pursue to investigate the role of farmers' social context as a driver for agro-ecological transition, and to explore the potential role played by collective organization in such process. A characterization of farmers, based on their farming systems or on their position in networks, will contribute to our discussionS and understanding of group's dynamics.

This contribution highlights that farmer groups, through organized proximity that emerge from them, facilitate varied economic resources fluxes – such as knowledge and advise sharing or material's and workforce exchange- that can play a crucial role in some farming systems. In that respect, groups create individual and collective social assets and could be drivers for sustainable intensification process.

By analysing the socio-economic networks structure, characterizing both groups and pointing out the diversity of cooperation forms emerging from each group, we reveal two different group's mechanisms and dynamics that corresponds to contrasting collective strategies. Network's characteristics and structure will be discuss as a determinant factor in facilitating transition within farmer's groups.

With an analysis based on both farming system typology and farmer's social logics and network position characterization, we aims to describe the influence in between individual social strategy, farming system and the involvement in collaborative experience. We will also discuss the co-influence between the social position of farmers in networks and their farming practices.

Largest networks, that connect several groups of farmers among each other, or connect farmers with other stakeholders- such as agricultural advisors-, will also be considered as a resource and different type of proximities will be identified.

This works question the interaction between farming systems and social context, and suggest that collective organization, as potential individual and collective resource, have

a role to play in agricultural transition issues. It brings up the question of transition cost for farmer—in terms of time, social and financial aspects-, and point cooperation as a way to reduce this cost.

# Working Group 18: Social justice and the future of rural places after the crisis

Transitions in the Portuguese landscape: historical perspective and the new trends.

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Keywords: agrarian question, territories, history, public policies, authors

The Portuguese Agrarian Question, particularly the need to provide food for self-sufficiency, has concerned different authors throughout the centuries. Together with the need to populate the territory for defence purposes, these questions have inspired the production of important public policies with different results. During the twentieth century there were some legislative movements which have encouraged agricultural production and the maintenance of people in rural areas. The ones with the highest impact were the wheat campaigns in the early 1930s and the agrarian reform in 1975, both heirs to eighteenth century physiocratic and mercantilistic theories.

After a summary of some of the most significant centuries old measures and legislation intended to solve agricultural and social issues in rural areas, most of them with scarce long term results, the present situation of the Portuguese rural areas is hereby described. Since the 1960s a huge rural exodus has resulted in a now irreversible depopulation of eighty per cent of the Portuguese territory, where less than twenty per cent of the population lives. Agriculture is no longer the main activity and new forms of occupation of rural areas have arisen.

From rural tourism to the promotion of heritage, both material and natural, many public policies by the central government and the municipalities have been put in place in order to attract people, families and private companies. Even if these policies haven't got the capacity to reverse depopulation, at least they try to provide services and possibilities for a better quality of life for the remaining few who still resist urban attraction.

However, recently a new trend has invaded the Southern rural landscape: associated with the use of water from dams such as Maranhão, Montargil, Alqueva and Santa Clara, there has been a huge expansion of super-intensive red fruits and olive monoculture. This new type of agriculture is a novelty in the Portuguese panorama and it places our country in a

similar situation to raw material dependent economies such as Brazil, Paraguay and such. Farms are now owned and explored mostly by foreigners in an international trend for land grabbing, resource appropriation and excessive use of water, chemicals and technology. It causes environmental danger, genetic erosion and the end of biodiversity. And it does not benefit local populations nor create jobs, because it uses seasonal labour, mostly illegal immigrants.

How do natural heritage and attraction strategies to rural areas cope with this new landscape?

## Assessing the future dynamics of rural governance in Turkey: Expanding boundaries of Metropolitan Municipalities

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Keywords: Rural policies and services, local representation, land control, the use of commons

Rural settings in Turkey have been challenged by various developments in the neoliberal crisis era. These processes alter the forms of production, livelihood strategies, and the use of land and labour in rural sites. Increasing indebtedness and land sales due to crisis, growing importance of non-agricultural activities, and redefinition of rural space and identity end up discussions on disappearing ruralities. Moreover, the state policies on rural development and governance have accelerated ongoing transformation and turn our attention toward state-society interface in the countryside of Turkey.

Recently, the Law No.6360 (issued in 2012 and implemented in 2014) expanded the boundaries of Metropolitan Municipalities with the intention of providing more effective and qualified local services. According to the Law, villages and sub-provincial municipalities within the administrative boundaries of metropolitan municipalities lost their legal status. Villages are no longer accepted as legal entities but neighborhoods. In the crisis era, the abolishment of villages and creation of new legal status as neighborhoods result in considerable change in rural governance and socio-political processes specifically on decision making procedures, use of common goods and land, agricultural production, taxes and payments in return services provided, and design of rural development policies. Therefore, this study focuses on socio-technical and political arrangements in newly opening scenarios for rural areas in the crisis period in Turkey within theoretical framework of new ruralities, the use of commons, and local representation and democratic governance.

Considering recent changes in law and its impacts, it is clear that rural representation and governance reflect contested state-society relations and power struggles that cut across different levels of government. As villages lost legal recognition, the common goods from pastures and meadows to vehicles and equipment used by the villagers were transferred to metropolitan municipalities. From public transport services to water sewerage services, many additional services will be provided by the metropolitan municipalities in return for fees and new taxes. However, there is higher possibility of increasing accountability problems related to the common goods and municipal services because allocation of local services is widely accepted as part of efforts to reward pro-government groups and to isolate opponents. In addition, any type of architectural projects and rural development programs will be controlled and designed by metropolitan municipalities. Villages are disappearing literally and rural people whose livelihoods are intervened, production resources are limited, and lands are grasped are losing the right to govern their own communities. As an outcome of the crisis, rural dwellers have failed to keep access to local governance and new legal regulations have taken power away from them. The shift in distribution and power structure is evident today, however rural societies should manage to make local autonomy and democracy one of their priority.

## Lagging Regions, Smart Ruralities and Empty Peripheries: A Discussion on the Post-crisis Futures of Spanish Countryside

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Keywords: accessibility, depopulation, hybridization, inequalities

The futures of rural areas in southern Europe seem to be determined, in the medium term, by their resilience to the protracted economic and financial crisis; the demographic transition towards ageing societies; and the developing of new accessibilities and forms of service provision. All these processes bring forth opportunities and uncertainties that are having a profound impact on the rural welfare. For example, the rural hybridization with socio-technical innovations and emerging paradigms of mobility, will configure some areas as smart ruralities, but these very processes also include the possibility of relegates some other territories to a kind of remotely managing and monitoring. This paper explores the possible rural futures and different socio-territorial configurations shaped by these processes in Spain. The budgetary constraints and austerity policies have eroded the futures of the lagging regions in a country where aging and poverty are often combined with the disadvantages of the habitat. Rural development policies aim to slow depopulation, organized the social agents in the territories and revitalize local economies. But, after the crisis, these territories have not managed to consolidate clear futures for the young. Almost half of the Spanish municipalities are threatened by depopulation and

even some inland regional towns lost inhabitants and show a mass outward migration of the young people trained due to aging and the lack of investments in services and infrastructures. They remain relegated to a condition of excluded peripheries under the effects of dynamics that reconfigures distances and disconnections. As illustrated by the investments in the railway network focused on high-speed connections between some main cities while the budget to maintain the rest of the network is progressively constrained. The Spanish case allows us also to analyse how the rural futures are represented symbolically in the debate about rural depopulation. A question that has become a kind of state issue, generating a public debate in the media and political arenas and that is summarized by metaphors such as "the empty Spain" or "the Lapland Mediterranean". And the research findings show that rural futures require policies that emphasize the symbolic rural-urban difference, as in tourism, and simultaneously reduce the real disadvantages, such in accessibility. The conclusions suggest the need to anticipate these challenges, to rethink another governance beyond neoliberal recipes and to pay attention to the rhizomatic nature of the rural.

### Culture events as strategy of resistance for rural areas in a southern european area in a post-crisis context (Castelló)

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Keywords: southern rurality, culture, resilience, post-crisis

The offer and cultural consumption and even the idea of culture have been habitually linked to urban spaces. Along with this, last financial and economic crisis has meant important cuts in those considered more superfluous services from the neoliberal viewpoint. In this context, rural municipalities have incorporated cultural strategies unevenly. Furthermore, in many cases it has been civil society that has maintained proposals derived from tradition, many of which have evolved over time or new bets born in current context. This communication analyzes cultural proposals in urban and rural spaces of the province of Castelló, minimally categorizing the offer in the territory through a radiography of cultural events. The communication tries to observe the general offer of the territory, compare the urban programming with the rural one and analyze the forms of resistance in the rural spaces which try to maintain an attractive offer. It will be observed as well what type of cultural offers with certain entity are programmed in the territory, who are the agents that program or organize and to what public these events are directed. The exhibition of cultural events is restricted for our analysis to practices as a festival or cycle, be it music, performing arts, dance or others. It is intended to avoid

specific programming, disjointed and without clear intention to develop a stable program that pretends to generate a sociocultural change. For this, various sources agglutinating events have been consulted, also agencies that collect this information and a detailed search in the network for the 155 municipalities of the province. The panorama of cultural events will allow to analyze if, through the data, there are any forthcoming resilience and livelihood strategies. Or, in other words, if there are municipal or county strategies that try to generate attractive spaces of life in the rural spaces in order to fight depopulation tendencies in the actual post-crisis context.

### Foreign immigration in depopulated rural areas in Spain: the precariousness of rural cosmopolitanism in the post-crisis scene

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Keywords: immigration, social diversity, rural depopulation, rural cosmopolitanism, economic crisis

Most rural areas in Southern Europe have been suffering a long lasting demographic decline. In the first decade of the 21th century, a new trend appeared with the arrival and settlement of labour immigrant population in small towns and villages. Immigrants have become a key point of demographic and social sustainability of many rural communities that have experienced at the same time the loss of their social and cultural traditional homogeneity. Local authorities and other rural stakeholders have had to deal with the governance of this new source of social diversity. The economic and financial crisis started in 2008 has had a profound impact in the labour opportunities of immigrants, has encouraged suspicious and xenophobic attitudes of native population and has removed a lot of economic resources from integration policies. As it has been recently pointed by Michael Woods, a sort of rural cosmopolitanism has emerged in the last decades as foreign born population have settled in rural areas across Europe. Nevertheless, this rural cosmopolitanism is weak and precarious, the economic crisis being one of the factors of this precariousness. Our paper explores this question in the case of rural Castilla y León, an inner and highly depopulated region of Spain. The research was conducted in three different areas of the region where immigrants, local politicians, social workers and other key informants have been interviewed. Immigrants were asked about settlement experiences, challenges they face in accessing employment, housing and local services, estrategies used to cope with barriers they encountered in setting in the area, quality of life, and plans for future moves. Key interviewees were invited to express their views about the needs and expectations of immigrants, how they contribute to the repopulation

and survival of the rural areas, and the capacity of local institutions to promote the integration of immigrants in the long-term. The analysis confirms the precariousness of the rural cosmopolitanism in the post-crisis scenario and explores the policies that should be implemented to promote social integration of immigrants and to build welcoming communities in rural areas.

This study forms part of the Project "Recession and immigration in the rural environment of Castile and León" (CSO2015-67525-R, MINECO/FEDER). This is an ongoing research project financed in the State RDI Programme orientated at the Challenges of Society. The project is incorporated into the IsoRural Network of Excellence (CSO2016-61728-REDT).

### Territories, inequalities and mobilities: analysis of two Spanish rural regions in a context of crisis

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The rural population has remained stable in absolute terms since the 1990s, although it has lost weight in the Spanish population as a whole. After the rural exodus of the past decades, different factors explain this relatively resilient behavior: residential moves, commuting, international migration flows, public development policies, improvement of transport and communication infrastructures, private automobility, etc. The mobility of people, capital, services, messages... is a transversal element to all these factors. It draws new social landscapes which deserve sociological attention. Therefore, this paper addresses the issue of mobility in the specific context of crisis, confronting and questioning the role of different structural conditions of the territory, essentially the distance to the city and the availability of roads or services, among others. The objective is to explore the role played by the territory in explaining residential and daily mobility strategies, many of them developed as a result of adaptative practices, linked to the effects of sharp decline in employment and other recession effects. To this end, a comparative research has been carried out between a rural mountain area - Navarra Pyrenees – and another of a peri-urban nature – Gran Vega de Sevilla – with the aim of testing the relationship established between the different structural conditions of both territories and the different strategies of sustainability and resilience based on mobility, deployed by their inhabitants.

The research has employed a qualitative methodological approach, consisting of conducting semi-structured interviews to different population profiles. A total of 53 interviews were conducted, 30 in the peri-urban area and 23 in the mountain rurality. On

one hand, expert profiles were selected (politicians, managers of public institutions, development agencies, etc.) and key informants (technical personnel of employment, doctors, teachers, social workers). And on the other hand, interviews were carried out with sociological profiles defined concerning their residential biography, gender, age, labor, and familiar and economic strategies.

The results show a great diversity of discourses regarding the strategies deployed, which reveal different degrees of crisis impact, and remarkable inequalities in the access to mobility as a resource to achieve greater well-being. In that sense, even though territorial conditions constrain everyday life, age, gender and social position appear as key elements — in relation respectively to personal autonomy, social autonomy or vulnerability — which can even transcend those structural differences.

### **Working Group 19: Rural Spatial Justice and Territorial Inequalities**

Inequalities in Portuguese territories: an approach to local policies in urban and rural areas

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Keywords: rural, urban, local government, political messages, attraction strategies

The Portuguese rural world no longer resembles the one described in literature. Mostly because people no longer live nor work there. Since the 1960s a huge rural exodus has resulted in a now irreversible depopulation of eighty per cent of the Portuguese territory, where less than twenty per cent of the population lives. Agriculture is no longer the main activity and new forms of occupation of rural areas have arisen. Farmers became brand managers and tour hosts and workers were replaced by machines. With depopulation, the agrarian landscape has been mostly transformed into leisure space or into places of nature conservation. Local government has played an important role in the development of attraction strategies for people, families and private companies. From rural tourism to the promotion of heritage, both material and natural, many public policies by the central government and the municipalities have been put in place in order to revert this trend or at least to try to provide services and possibilities for a better quality of life for the remaining few who still resist urban attraction.

However, a new reality has invaded the Southern rural landscape: associated with the use of water from dams, there has been a huge expansion of super-intensive fruits and olive monoculture. This new type of agriculture is a novelty in the Portuguese panorama and it places our country in a similar situation to raw material dependent economies. Farms are

now owned and explored mostly by foreigners in an international trend for land grabbing, resource appropriation and excessive use of water, chemicals and technology. It causes environmental danger, genetic erosion and the end of biodiversity. And it does not benefit local populations nor create jobs, because it uses seasonal labour, mostly illegal immigrants. How do natural heritage and attraction strategies to rural areas cope with this new landscape?

At the same time, recently, as a result of insecurity in other areas of the world and with the prospect of quality of life and lower prices, there has been a huge boom in tourism and foreign investments in urban seashore cities, particularly Lisboa and Porto, which has risen real estate prices to the levels of the most important European capitals. This trend has grown to such levels that some tourism phobia movements have arisen, as there have been in Venice and Barcelona.

How has local government dealt with these novelties? What are the differences between projects and political programs for urban and rural municipalities? Attraction strategies of municipalities and private entrepreneurs are analysed and compared.

### Pagan and Bourgeois: The Religious Origins of Rural-Urban Inequality – and What We Might Do About It

Michael Bell, University of Wisconsin-Madison

Rural-urban inequality has ancient roots in religion – roots that extend up to the present day. It is by now widely noted that the liturgies of the contemporary "world religions" such Christianity, Buddhism, Islam, and Judaism have little to say about ecological matters. Many are now trying to rectify that silence through a worldwide effort to "green" religion, with some notable successes, such as Pope Francis's recent environmental encyclical, Laudato Sí. But there has little attention paid to another silence: the muteness of world religions on issues of sustenance and the rural. Jesus may describe himself as a shepherd, and his followers as his flock, but this is metaphor only. He does not address issues of erosion, crop pests, rainfall, and thankfulness for the farmer's success in wresting another year's production from a resistant ecology. Alongside his silence on matters ecological, he proposes no agricultural or food practices nor harvest festivals.

And why? Because the world religions are bourgeois faiths that respond to the questions of their mainly urban followers, and are typically dismissive of the pagan beliefs of rural peoples and their enduring questions about the loyalty of kin in the continuous struggle to secure sustenance. Indeed, a bourgeois tradition such as Christianity has long

constructed those who don't follow it through rural metaphors. Pagan comes from the Latin for someone from the countryside. Heathen means someone from heath land. Savage means someone from forested land. Rude comes from the root word for wild land. These words are seldom meant kindly – at least in a bourgeois religious context.

In other words, in bourgeois religious traditions there is a rural silence together with a rural accusation: the accusation of moral "backwardness," long utilized to justify colonialism, reservations for indigenous peoples, low wages for supposedly "unskilled" rural work, and more. Religion is of course not the whole story behind the spatial injustice of rural-urban inequality. But a parallel project of ruralizing religion alongside greening it would help counter the ancient religious denigration of the rural and its continued implications for legitimating rural exploitation.

#### LEADER and spatial justice: insights from a North of England LEADER case study

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Keywords: LEADER, spatial justice, social justice, social inclusion, community development

The Horizon 2020 ReLocal project looks at the ability of community-level development projects to mitigate injustice, disadvantage and deprivation at the local and higher scales through 33 case studies across Europe (https://relocal.eu/). This paper examines the work of the LEADER local action group for the Northumberland Uplands, (or NULAG for short), over its 10 years of operation in two phases from 2008 to the present. These two phases present a vivid contrast between a balance of sustainability, social inclusion and economic development goals in the first phase, guided to a greater extent by an assessment of local context and needs; and an enforced narrowing to focus primarily on economic growth in the second phase, as a result of ministerial direction.

On closer observation this picture of a reduced contribution to spatial justice in phase 2 may be less clear-cut. There was undoubtedly greater flexibility and resource for support to disadvantaged applicants in phase 1, resulting in a scheme that was more socially inclusive and appropriate to the area's needs. These elements were curtailed in phase 2 through top-down framing and administrative control, despite this being a period of increasing rural poverty, disadvantage and deprivation. On the positive side, however, the expansion of the NULAG territory in phase 2 and transfer of the hosting of the scheme from the Northumberland National Park Authority to the Local Authority may have

enhanced the scheme's spatial justice, not least by encouraging greater inclusion of Uplands areas beyond the Park - a particularly sparsely-populated portion of the Northumberland Uplands.

This paper considers these social and spatial justice trade-offs and the extent to which local action can mitigate spatial injustice and support territorial cohesion. Moreover, in light of the likely difficulties in maintaining momentum for rural community development in the UK post-Brexit, we invite consideration of a number of ways in which any future such scheme might be made more inclusive, accessible and beneficial to disadvantaged groups.

#### **Income Inequality Across the Rural-Urban Continuum**

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Keywords: Income inequality, Pareto Gini Coefficient, Spatial Inequality, Demography, Rural Urban Continuum

### **Background and Motivation**

Income disparities have increased in recent decades, producing an "age of extremes" in which resources are concentrated among a selective segment of the population. This issue is well-studied at the national level, but there has been less attention to spatial variations in the degree iof inequality at the subnational level, including among rural places. We address this gap, with the goal of understanding recent income inequality dynamics in non-metropolitan U.S. counties. Using data from the Census Bureau, we describe and map levels of within-county income inequality in 2016 and 1970. These techniques allow us to (1) examine how relationships between the degree of income inequality and other sociodemographic variables vary between nonmetropolitan and nonmetropolitan counties, (2) how these relationships vary within the nonmetropolitan spatial sector, and (3) examine changes in these patterns and the spatial diffusion of income inequality between 1970 and 2016. We also conduct a multivariate analysis that accounts for the spatial structure of inequality within this time period. Accounting for spatial structure, relationships, and interactions across counties not only more accurately reflects the demographic relationships between these counties, but also improves statistical models.

We contend that our particular focus on the rural United States is merited for several reasons. First, the rural population is sizable. Defined as those living outside of

metropolitan areas, nonmetropolitan Americans comprise 15 percent of the US population, and these 46 million people are spread across 72 percent of America's land area (Economic Research Service 2017). Second, rural communities have distinct and heterogeneous demographic legacies and trajectories which interact with inequality in compelling ways that are inherently worthy of study. Finally, as the 2016 Presidential election reminded the nation, rural areas hold disproportionate political power relative to their population size (Monnat & Brown 2017; Scala and Johnson 2017). Many rural places are both acutely susceptible to recent domestic and global forces affecting increased income inequality and reliable supporters of political movements with platforms that are often antithetical to inequality-reduction.

#### Data, Measures, and Research Strategy

We draw on county-level summary files from the 2016 and the 2010 American Community Survey (ACS) 5-year samples and the 1970, 1980, 1990, and 2000 decennial Censuses.<sup>3</sup> Our outcome of interest is within-county household income inequality, which we measure using the Gini coefficient. To calculate the Gini coefficient for U.S. counties, the variable of household income, as represented by the number of households falling within income bins, was extracted from the decennial censuses and five-year ACS estimates. We then calculate the Gini coefficient at the county-level using the Pareto method, which assigns a midpoint to all income bins (von Hippel et al., 2017). We use two sets of stratifying variables to disaggregate the non-metropolitan sector into meaningfully different spatial categories. First, we use the binary metropolitan versus non-metropolitan delineations produced by the Office of Management and Budget (OMB). Second, we use the USDA-ERA Rural-Urban Continuum Codes (RUCC) to examine systematic variation within the non-metropolitan sector itself.

The research strategy consists of three major components. First, we examine how levels of income inequality vary between metropolitan and non-metropolitan areas. Regression methods that incorporate spatially explicit variables, such as spatial regimes analysis, are used to help address this question. Second, we examine how levels of income inequality vary across non-metropolitan county types. We will produce demographic profiles of high- and low-inequality non-metropolitan counties to understand whether and how the rural populations residing in such contexts differ. High- and low-inequality counties are defined here as the top and bottom 10 percent of non-metropolitan counties in terms of their Gini coefficients. There were 1,976 non-metropolitan counties in 2013. The demographic profiles include measures of population change, density, race and ethnicity, nativity, age structure, educational attainment, income sources, industrial-occupational

<sup>&</sup>lt;sup>3</sup> We use the summary files because microdata with county identifiers are not publicly available.

structures, and employment status. Finally, we replicate these analyses for 1970, examining levels and patterns of inequality from 1970 to 2016.

#### **Preliminary findings**

Overall, we observe a modest uptick in local inequality during 1970-2016, with the average Gini coefficient across all U.S. counties increasing from 0.412 to 0.432 over this period. Local income inequality is, on average, higher in nonmetropolitan than metropolitan counties across both study periods. However, we find evidence of convergence over time, as the metropolitan vs. non-metropolitan gap in the mean Gini coefficient decreased from 1970 to 2016. This diminished gap results from an increase in metropolitan inequality, not a decline in non-metropolitan inequality.

Our examination of variation in local income inequality among non-metropolitan counties in 1970 shows that local income inequality increases as one moves from more urbanized, metropolitan-adjacent non-metropolitan counties to the least urbanized and non-adjacent counties. This gradient is largely eliminated by 2016. Levels of income inequality are uniformly high across the U.S. geography in 2016, suggesting little correlation between the degree of rurality, so defined, and local inequality.

Our county-level maps clearly illustrate the overall increase in income inequality between 1970 and 2016. They also highlight important regional variations, with some places (e.g., the non-metropolitan South) characterized by persistently high levels of income inequality, others (e.g., parts of the central Great Plains and inter-mountain West) by persistent equality, and yet others (e.g., the northwest and northern Rockies) by rapid increases in inequality over the study period.

#### **Future research**

To complete this paper, we will build on these preliminary analyses in three primary ways. First, we will test the sensitivity of our findings by using alternative metropolitan (non-metropolitan) delineations. Second, we will also test the sensitivity of our findings to alternative approaches for estimating income inequality using binned income data (von Hippel et al. 2017). As the project progresses, we will expand our repertoire of spatial analyses through Geographically Weighted Regression (GWR) and spatial panel modeling. GWR will be used to examine how the relationship between income inequality and the sociodemographic variables of interest varies across non-metropolitan areas, and spatial panel modeling will be used to examine the spatial diffusion of income inequality over time.

#### **Acknowledgements**

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#### The right to the country? Ruralising spatial justice

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Keywords: spatial justice, inequalities, rights

In the heady year of 1968, French philosopher Henri Lefebvre championed 'the right to the city': the rights of the people to access and use urban space. For Lefebvre, when economic inequalities, social discrimination or state edict obstructed these rights, spatial injustices were made. Over the past decade, the concept of 'spatial justice' has been revisited in the social sciences as a normative ideal associated with progressive politics. Yet despite the clear significance of distributive inequities and access to space (or land) in rural areas, spatial justice is almost exclusively conceptualised as an urban ideal. What about the right to the country? If such a set of rights were recognised, what would they look like, and who should have them? In this primarily theoretical paper, we directly engage with the conceptual task of ruralising spatial justice. This task, we insist, is not as clear-cut as simply transposing Lefebvre from the high street to the back field. Indeed, an unreflective shift of locale would merely replicate the already troubling tendency of spatial justice scholarship to treat space as little more than a container in which justice is (or is not) to be found. By centring and interrogating 'the right to the country', we seek to move beyond space-as-container readings, attending instead to how enduring state and social imaginaries of what rural space is and should be actually contribute to the re/production of rural inequalities. Policies that position cities as drivers of economic growth, for example, can condemn rural communities to chronically inadequate infrastructures while idealistically requisitioning 'unspoilt' landscapes for urban leisure consumption. But, as we show, while rights of rural access risk pastiche, other rightsbased logics can preclude the participation of those who do not – to revisit the community studies staple - 'belong'. Ruralising spatial justice, we argue, allows us to problematise

the concept in ways that productively illuminate how patterns of inequality are created and perpetuated, and consider how more 'just' outcomes can be achieved.

#### Rural redlining: spatial injustice in the Danish housing market

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Keywords: housing, redlining, rural, spatial justice, mortgage lending, Denmark

Over the past two decades changes in mortgage lending practice have effectively 'redlined' (McCann, 2009: 626) large swaths of the Danish countryside. Potential house buyers are being rejected based entirely on the location of the place in which they wish to reside. Given that affected areas are already challenged by outmigration and the loss of both public and private services, the new situation risks exacerbating already existing patterns of uneven development in ways that are detrimental to the continued viability of local communities as places of settlement. Arguably, it also engenders a substantial curtailment of the rights of citizens to decide where to live. With an outset in theories of spatial justice (e.g. Soja, 2010) our aim in this paper is to explore how this situation came into being and to trace its implications, firstly, in patterns of uneven development and, secondly, in housing market exclusion of ordinary citizens. Our data material includes (1) quantitative data on the spatial distribution of housing mortgages in Denmark, (2) a sample of mortgage lender decisions in rural areas, (3) documents substantiating state intervention and state-driven discourse on rural housing markets, and (4) interviews with (would-be) house buyers affected by rural redlining. Our findings suggest that rural redlining emerged as a result of both state interventions to regulate the mortgage market and various procedural changes among mortgage lenders. Among the latter, the proliferation of algorithms and data-driven approaches to lending decisions are seen to be particularly important, contributing to the production of software-sorted geographies (Graham, 2005). In terms of state interventions, the global financial crisis stands out as a key catalyst prompting the state to double back on previous rounds of deregulation by placing new requirements on lender practice. Simultaneously, state actors have contributed to a discourse in which house-buying is increasingly portrayed as an investment decision rather than as a life choice. In combination with recurrent stories about deteriorating rural housing markets this may have further aggravated the situation through self-disciplining behaviour among potential rural house buyers.

#### **Spatial Variation in School Performance in Norway**

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Keywords: Spatial variation, school performance, policy

The paper will investigate the spatial variation in school performance in Norway. The spatial variation and patterns in school performance is important in the light of spatial inequality due to the consequences the place one is raised could have on individual pupils and their performance at school. The location one is raised is largely out of the control of the pupil. If it is systematic variation in performance at school based on the goegrapical location, the context one is raised could impact the results of individuals, in a positive or negative manner. The results one achieve in school will impact the opportunities of eduation at later stages, and with that the opportunity for work.

The investigation will be based on publically open data on all lower secondary schools in Norway in the years 2008-2018. The first objective is to investigate the spatial variation and patterns of this variation. It will also be investigated if certain factors have different effect on school performance depending on geografical location.

### On spatial injustices in different types of ruralities

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Keywords: Spatial justice, centralisation, administrative reforms, rural capability, rural classification

Austerity policies have put rural areas under stress and further accelerated urbanization. Different factors, such as service availability, commuting possibilities, level of social capital and changing demography interact and reinforce each other. Here, different types of ruralities are having different experiences, since these factors vary in strength and composition. By using the concept of spatial justice, this paper wants to explore the injustices experienced in different kinds of ruralities in order to enhance the understanding of how this concept may be defined in rural areas and used to identify the factors and mechanisms that reproduce injustices. The planning of the Regional government, health and social services reform in Finland will be used for studying local and regional responses to the reform in the region of Ostrobothnia on the west coast of Finland. Three types of ruralities are defined, which are expected to have different prerequisites to respond to reforms threatening to centralise authority: 1) Local centres in rural areas are located far from regional growth centres and thereby need to be self-sufficient in most regards, 2) rural archipelago is peripheral in both a spatial and temporal

sense, but often possess strong local identities and social capital, 3) urban areas on the fringe of commuting distance rely to some extent on regional centres but still need to maintain local jobs and services to stay attractive as places of residence. These different kinds of ruralities are investigated partly by conducting interviews with local inhabitants and local and regional authorities, partly by using available statistics on for instance services availability, commuting, demography and employment. Results show that the different types of rural areas are having very different experiences of the reform and also very different capabilities to respond to it. Using spatial justice as a framework for analysis would therefore form an important tool for governments to estimate reform consequences.

#### Territorial Inequalities, Resilience Practices and Spatial Justice in Rural Greece

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Keywords: rural spatial justice, rural regeneration, austerity, justice claims, Greece

Rural areas are often considered as areas where economic opportunities, access to services and employment positions are lacking and there is need for more targeted policy interventions to mitigate economic inequalities. The numerous socioeconomic problems (e.g. demographic decline, low education, low-skilled employment, etc.) together with poor infrastructures do not allow for optimistic prospects for the vast majority of rural areas. Rural abandonment is the end result of demographic deterioration and social marginalization of many areas. On the other hand, certain rural areas have become 'hot spots' of globalization due to intensive agriculture or have maintained rural development dynamics on the basis of combining various income sources due to their capacity to devise resilience practices.

In the era of austerity, Greek rural areas gathered the attention of urban dwellers and young people who were seeking for alternative life opportunities or for sustaining a quality of life in alignment with their middle-class status. In this way, the perceptions of the rural were (re)constructed on the basis of new entrepreneurial/employment opportunities connected to environmental values and sustainable development goals. This narrative of 'rural regeneration', linked to the 'return to agriculture and countryside' movement, was contested by the harsh reality of the country's regional inequalities, peripheralization and insularity. Due to austerity measures, many developed rural areas experienced the implications of cuts in state funding of public services along with the reduction of incomes of the salaried and the pensioners.

This paper based on research material collected in the context of the IMAJINE project, sheds light on the facets of the 'rural regeneration' narrative against the 'austerity' narrative in an attempt to uncover the complexity of the issues related to territorial inequalities, resilience practices and spatial justice in Greece. Our main argument is that the spatial scale (regional or local) offers diverging interpretations of these issues along with the appropriate measures to address them. Moreover, the claims of justice/ injustice on the part of various rural actors are important constructs for addressing rural spatial justice at regional or local level.

## Symbolic power, gender and the double paradox of social acceptability of energy project

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Keywords: Bourdieu, symbolic power, gender, large scale energy projects, social acceptance

This study describes the strong socio-economic transformation within a highly mineimpacted rural region in Galicia, in the northwest of Spain. In the light of visual analysis of posters announcing the most popular regional cultural event, it throw into sharp relief the rapid change in the symbol system of the community where traditional elements are replace by the new industrial reality in a matter of years after the beginning of the mining activity and construction of a coal fired power plant. When compared to other mineimpacted rural areas in Galicia, the social reaction was lower despite the greater impact. The analysis performed shows a double perverse paradox: first, the poorer social groups (former farmers) are now the main supporters of keeping coal-fired power plant open in a context of deindustrialization. Secondly, despite the strong masculinization of the labour market (see very low female force participation), there is a use of gender both in the self-representation of the community in the cultural event posters and in the community mobilization against the cessation of the mining activity. By bringing both gender perspective and the Bourdieu concept of symbolic power and dominance, this article argues that the acceptance and legitimation of certain energy projects may hide profound process of cultural dominantion, identity deconstruction and spatial unjustice. It also claims a sociology of socio-historical perception, i.e. how the (politically biased) perception of the region history legitimizes long-lasting inequalities, the innefficiency of the neoliberal policies of economic revitalization in the postindustrial period and the understimation of agriculture as an alternative economic path.

### Food Inequalities in Spanish rural areas. A study of food practices in depopulated and depressed comunities

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Keywords: rural food, food access, food inequalities, Spanish rural depopulation

The transformations of restructuring food retail and the rural depopulation has provided significant changes in food access in the rural population. The Spanish commerce in the dispersed rural territories tends to be characterized by a lower availability of food stores that are increasingly concentrated.

This is an important restriction for rural consumers because it forces them to develop alternative strategies of food supply that allow them solve the organization of food shopping and cooking.

This paper explores the different ways of organizing food practices in shopping and cooking in the households of small Spanish rural areas and shows how these are related to the lack of food retail. We conducted qualitative research based on in-depth interviews with 11 households located in comuninities with less than 2,000 inhabitants that are part of a Región of northern Spain (Asturias).

We identify the existence of a particular food organization derived from food practices such as family production on small farms for own consumption, individual food storage or the presence of itinerant trade. These alternative routines combine with shopping in small local retailers and grocery stores located in nearly villages where rural residents must travel to access a greater range of food. In the same way, references are made to various public-private policies that seek to improve food distribution in rural areas.

#### School closures and local centralization in education in rural Northern Norway

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Keywords: Rural education, assimilation, school closures, teacher's work experiences, centralization

Students from rural areas seem to do worse on scores for student attainment than their urban counterpart, and differences in attainment levels between rural and urban education in Norway are well documented but underresearched (Bæck, 2016, Roberts and Green, 2013, Kvalsund, 2009, Solstad and Andræ Thelin, 2006).

The main goal for this paper is to contextualize aspects of rural education, and this paper will discuss two specific issues and processes in rural education; how a history of assimilation on one side and school closures on the other can affect both school status, the work experiences among teachers, and in the end, affecting student results. The consequences on local communities and their opportunity structures are also of interest, as this relates to access to important services in rural areas.

The focus for this paper is the teachers' perspective, as teachers are one of the most important factors in explaining student result (Hattie and Yates, 2014, Kristiansen, 2014, Bakken and Seippel, 2012). The data material were collected through qualitative interviews with teachers and participant observation in the first half of 2018 in a case municipality in rural Northern Norway.

## Inequalities in access to commercial services and retail in rural area within South Moravian Region (the Czech Republic)

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Keywords: territorial inequalities, access to commercial services and retail, service functions, rural area, South Moravian Region

Inequalities in access to commercial services and retail and their changes significantly influence stability and social status of rural area and quality of life of rural inhabitants. These service functions are reciprocally connected with state policies, spatial planning, rural and regional development and municipality policies and programmes. Nevertheless, data related to services and retail and its analysis are not usually available, which makes it more difficult to investigate factors influencing inequalities in access to commercial services and retail and to create public policies.

The aim of the paper is to introduce inequalities in access to commercial services and retail within South Moravian Region (the Czech Republic) and to present their changes.

To meet the goal, a questionnaire survey concerning commercial services and retail in South Moravian Region municipalities was conducted in 2018. Results are compared with survey conducted by regional authority in 2002 and 2012. Data are classified into clusters according to size category of municipalities and further analysed within these clusters. According to particular service functions index of change is computed. Territorial location of municipalities is also considered.

The paper will be used as analytical base for next qualitative and quantitative research dealing with finding factors influencing inequalities in access to commercial services and

retail and their changes. Further research will be aimed at finding a correlation between the changes of inequalities in access to commercial services and retail and selected socioeconomic data. In addition, interviews with selected participants from the area of service functions will be conducted.

## Exploring socio-economic inequalities within rural regions: marketing regulations and land-use implications in Austrian, Italian, and Spanish cattle farming

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Keywords: Governance scales, land-animal relations, power distribution, spatial justice, qualitative assessment

Shifts towards environmental sustainability in European cattle farming demand farmers' participation in working towards restorative farming practices. In some parts of Europe agri-environmental schemes aim to improve environmental performance in cattle farming whilst sustaining the socio-economic performance of the farm. In other parts marketing regulations aim to guarantee quality production combining animal biodiversity or animal welfare improvement, with added value for farmers through new consumer markets. These public and private schemes can overlap or be combined and can help farmers to reorient their farm practice. They result in adjustments in land-use and farm practices—in some respects these are contested and may endanger family farms and livelihoods—that promote sustainable agriculture, generate knowledge and innovation, and empower family farms to change and adapt to new societal and environmental needs. We explore socio-economic inequalities within rural regions in Austria, Italy and Spain, investigating the patterns of marketing and resulting inequalities, identifying drivers of these inequalities, and how these are experienced and responded to. In Austria a new marketing schemes related to animal welfare in the organic dairy production chain limits small-scaled mountain farmers to continue their business activity. In Italy the marketing of Parmigiano-Reggiano cheese of an autochthonous animal breed brings good farm income but remains poorly related to improving the environmental conditions in farmland. In Spain marketing of regional produced beef provides farmers with access to a market but this has no specific orientation on land-use in mountainous areas, and added value remains limited. Preliminary analyses indicate that smaller farms receive poor policy support to differentiate farm productivity. Finally, we discuss the distribution of power and the role of the state in supporting a shift to restorative agriculture, and, more in particular, the need of new and innovative governance scales so as regional, selfregulatory farmers cooperatives that are aligned with other stakeholder groups and existing government structures in Europe, and context-specific public policies in way that these enable the specific needs, characteristics, and potentials of places and regions to be taken better into account. This way, unrealized territorial assets (territorial potentials) may be mobilized through policies and actions at various administrative levels.

# Working Group 20: Governing urban-rural relations and synergies: evolving theories and practices

Rurality as a vehicle for Urban Sanitation Transformation (RUST)

Sarah Cooper, Cranfield University

Keywords: Hyderabad, sanitation, institutions, rurality

Hyderabad is considered by the UN as one of the world's future mega-cities with a projected rise in population from nearly 7 million to 14.2 million by 2035. This transition fuelled by rural to urban migration is set to project immense pressure to provide a basic service for sanitation. Sanitation is important as it preserves human health, extends lifespan and benefits the economy. Rapid settlement around the city's perimeter has long extended beyond municipal provision and sanitation is now characterised by an assortment of different solutions. Adopted not only among visible formal populations but also 'messy' and 'hidden' communities. Many people living in the urban and peri-urban areas were once rural and still retain strong socio-economic and cultural ties to their origins. These notions of rurality are frequently embedded within their identity and institutions with distinct implications for sanitation governance and policy. It is likely that individuals navigate these geographies differently in their sanitation practices which influence the variety in sanitation solutions. The government's separate approach to urban and rural sanitation policy may also have instigated these fluid frames of reference.

This study seeks to explore the extent to which these notions of rurality interplay with the institutional context of sanitation, as there is limited understanding to how such people actually navigate between urban and rural systems. For example in rural areas, social connectivity tends to be stronger with substantial ties between people and the presence of community groups, whereas among urban populations connectivity tends to be weaker with people functioning more individualistically which could impact on sanitation. Institutions are often defined as the humanly-devised formal and informal "rules of the game" that govern the behaviour of individuals and organisations in particular contexts. Traversing two transects (rural-urban-rural) across the city. The institutional context of

sanitation will be explored by investigating the flows and networks of communication which communities' access for toilet construction, waste disposal and information. Also financial schemes and incentives which enable investment in sanitation. Analysing levels of trust and accountability will disclose synergies between communities and governing organisations and authorities which are inhibiting or enabling the sanitation process. This study will be integral in delivering new theoretical and conceptual understanding about the role of rurality as a driver of urban transformations, as well as evidence-based guidance on driving improvements in sanitation policy within India megacities.

#### Civil society organizations and community governance

Michaela Dopitova

Keywords: civil society, civil society organizations, community development, community governance

The potential of civil society organizations (CSOs) in regional governance is not gaining much interest in recent years. As part of empirical/practical session I want to address my case study on the CSOs' role in regional governance in the peripheral, underdeveloped region of Bohemian Switzerland National Park in the north of the Czech Republic. Building on community development theory and using the concept of the community field at regional level, I am observing a community field consisting of actors, associations and practices linked with tourism development. In particular, I am focusing on the CSOs' role in community-development and community-governance processes. My study is based on semi-structured interviews, participant observations and document analysis.

After the national park Bohemian Switzerland was established in 2001, tourism began growing rapidly in the area. This process established a complex tourism-related community field that is interlinked with the national park. This field involves a wide range of actors and institutions, including multiple CSOs.

By presenting five roles with exact examples of activities taking place within the observed region I want to highlight the potential of CSOs in regional governance, mainly in terms of enabling cooperation between rural and urban municipalities and local entrepreneurs. This synergy is a dominant force in many developmental activities within the given region. Five main roles played by the CSOs in this field are:

Community developer: through activities focused on incorporating new members

into the community field, CSOs work to expand community field in the long term and ensure the ongoing mobilization of community field actors.

Transmission-belt: because of their ability to gain legitimacy and maintain a network of manifold contacts that other groups or individuals are not able to maintain, CSOs transmit demands between stakeholders on the local level and those on the regional, national and transboundary levels

Coordinator: CSOs coordinate activities of multiple regional actors.

Mediator: CSOs mediate conflicts between regional actors and help to articulate common goals within the community field.

Fundraiser: CSOs are able to raise funds for common developmental activities on regional level.

### Emergence of "middle alternative farms" in west Paris suburban region: towards new ways of sharing and innovations.

Julien Essers, Université de Paris Nanterre, France

The west part of Paris metropolitan area is largely dominated by intensive farming and high producing fields where the notion of "local farming" is something uncommon. The links between agriculture and local food distribution are quite distended, even for school catering which is the major municipality policy in those areas.

The way agriculture recreates links between inhabitants/consumers and farmers is something very new in this west Paris region. Some examples could express these new ways to share and show the large innovation process from a high-field production to a local mix-up farm. These new farms are quite different but still remain in a high and intensive production based on cereal crop and oleaginous plants (rape). Farmers look for some diversifications but also new ways to share and interact with consumers. They have created new "sharing spaces" integrating "friendly relations", agriculture knowledge and new marketing for their products. They also have changed their crop culture by new agricultural techniques in a complete permanent learning.

Throughout two examples of new farmers, we'll understand the mutation capability for the agricultural-dominant-system in this suburban area of Paris. The case of "La Ferme d'Orvilliers" close to Dreux (70 km away from Paris) will enlighten this "middle alternative farm" and could be the next evolution towards an ecological and local transition for farming. We'll study these alternatives farms and we'll see how they cope with a dominant agricultural food system, how they build new relations through two systems, the hyper productive and the local way.

### Food policies in small cities. Towards an inter-municipal food policy governance in Lucca, Italy

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Keywords: urban food policy, governance, food systems, planning, small-medium cities

The key role of food-related practices in transition processes towards Sustainable Development Goals is acknowledged, as well as it is the role of cities. Promoting a sustainable food system at local level implies, among others, healthy food provisioning, adequate remuneration for all the actors of the food supply chain, developing a local economy based on mutually beneficial relations between the city and the countryside.

Organizing and structuring food policies entails different levels of action (i.e. local, national, European) and multiple voices have a role to play in food policy governance. In this perspective, local administrations are increasingly interested in defining urban food strategies by identifying shared principles and adopting governance instruments that impact on the local food system.

Many leading cities have adopted a food plan: Milan, New York, Los Angeles, Toronto, Valencia are only few of the well-known examples around the world. However, literature is limitedly available specifically addressing the governance arrangements adopted by food policies in small-medium sized realities. What are the drivers to building a local food policy in small-medium sized cities? What are their expected aims and outcomes? What are the obstacles faced by politicians, civil servants and other stakeholders throughout such processes? To what extent small-medium sized cities provide the suitable stage for the identification and management of rural-urban relations?

This contribution deals with how to structure a food policy governance in a small-medium sized context by documenting the process occurring in Lucca (Tuscany, central Italy), where the first inter-municipal Italian food policy is being setup. The different administrative levels, stakeholders and competences involved are taken into account, together with the identification of – and opportunities for – rural-urban relations.

The Food Plan and the Food Policy Council have been established to test possible governance arrangements and emerging solutions to selected food-related issues; to set up a space of cooperation for many, different actors unused to work together and to create an arena of knowledge exchange and collective reflection upon food-related themes.

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By discussing the drivers of the political and administrative process, we reflect upon the role of actors, activities and processes that are taking place in view of the expected outcomes of the local food policy, highlighting limitations and potentials and providing a benchmark to other possible initiatives.

### "Planners make plans and wait for somebody else to implement them"

### - the role (and limitations) of planning as a governance approach

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Keywords: urban, peri-urban, rural, development, governance, planning, policy, case studies

A key challenge for decision-makers, developers, planners and administrators involved at different governance levels and in different policy domains is to foster a more balanced, sustainable and spa-tially integrated development. Well-designed multi-level and multi-actor governance arrangements play a central role in orchestrating the interplay between different spheres, activities, actors and in-terests.

In this contribution we are examining the role of planning in strengthening beneficial relations be-tween rural, peri-urban and urban areas. Can more beneficial territorial relations be planned? Related to the efficacy of planning instruments and their contribution to higher-level strategies, drawbacks are often resulting from insufficient implementation. Are we more interested in constructing plans than implementing them?

In this paper, we examine the strengths and the limitations of spatial, regional and land use planning, as well as the connections with territorial development and programming.

The real-life cases that we analyse, show that more beneficial relations between urban, peri-urban and rural relations cannot simply be planned. Instead, they need to be accompanied by strategies and instruments that foster mutually beneficial relations between different actors across spatial lev-els and the urban, peri-urban and rural interfaces. Also, the planning process as such, might need to be revisited.

#### **Governing urban-rural relations in European Capital cities regions (Paris and Budapest)**

Imre Kovách¹, Nicole Mathieu²

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The paper seeks to identify and understand significant changes in urban-rural governance from long-term and medium term planning to short term planning and thinking. To illustrate 'short termism" we focus on territorial policies within different types (rural and urban) of space. From this spatial perspective, we argue that rural/urban relationships act as a counter tool for short-termist governance. Today many of European capital cities and rural territories are facing, or have faced, the forces of a double globalisation. On the one hand, they are facing increasing international competition while they need to retain their role in contributing to innovative European development. This paper offers not only an innovative way of assessing the extent to which the discourse of sustainability is genuinely capable of modifying European spatial policy, and particularly the spatial policies of the major capital cities such as Paris and Budapest but also a new approach to the temporalities of that policy by promoting a long term and intergenerational perspective that contradicts the short term political conception which has so characterized the era of the recent process of EU development. We focus on what is a critical component of governance, sustainability and cohesion, namely the dynamic relation between cities and their adjacent rural areas.

### Exploring the potential of living labs as social innovations to enable change in ruralurban governance

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Keywords: Living labs, Social innovation, Experimentalist governance, Rural-urban relations, ROBUST

Within rural sociology, geography and spatial planning, there has been a historical tendency to view 'the rural' and 'the urban' in binary terms. However, these 'spatial fixes' are increasingly challenged because they lack dynamism when set against social and economic challenges compared to new governance innovations and social experiments e.g. the rise of urban food strategies as polycentric forms of governance that connect city and rural hinterlands, the popularity of concepts such as 'the city-region' and 'smart development', and new spatial frameworks that examine place-based relations as assemblages. Inspired by these new ways of thinking about rural-urban relations, this paper explores the potential of 'living labs' as a research methodology that can firstly reflect and work with this spatial dynamism and can secondly enable creative thinking and experimentalist governance to improve synergies between functional ties in a region. The paper starts by reviewing the living lab concept and methodology, including links with social innovation and new forms of creative governance. We then introduce how the framework has been applied in a major H2020-funded project, ROBUST, as a transdisciplinary approach, that involves researchers and practice partners from living labs in 11 European countries. In each living lab, practice and research partners are working together to experiment with new ways to improve rural-urban synergies across three functions, including experimenting with new growth models e.g. circular economy, sharing economy. The living lab work is on-going and in the second half of the paper we present short vignettes of learning experiences captured to date through the project, with the aim of sharing these experiences and reflections to initiate discussion and critique regarding the potential of living labs as enablers of change. This includes analysis of potential pitfalls and challenges, such as how to monitor and evaluate learning and what is realistic in terms of changes to institutional arrangements to improve rural-urban relations.

#### Citizen-led innovation: social media, con-joined rural spaces and social haptics.

Matthew Reed, University of Gloucestershire, England

Many advocates of urban areas and their associated city regions point to the importance of the aggregation in creating the density of interactions and emergent phenomena that will drive the innovations necessary to overcome the grand challenges of climate change, resource depletion and seemingly intractable social conflicts. Often the mechanisms of this agglomeration are a 'black box' observed at the level of demography but rarely in practice. It also assumed that urban areas remain the central nodes of innovation with attending to how contemporary forms of communication con-join places and spaces, mixing urban, peri-urban and rural areas. It also elides the complex 'social haptics' of how

people touch one another online and connect off-line co-creating and co-recreating experiments in how they might live differently.

This paper considers two examples of co-innovation by citizens, spanning rural and urban areas to develop innovations that are citizen-led. The first examples are from the networks around urban food planning in the city of Bristol that have focused on creating plans for a city region food system. Which while they have focused on building formal plans, this paper draws attention to the importance of planning as a form of experimentation. The second is of a series of farmer-led field trials on farms in England, that have brought university researchers together with farmers to find practical, evidence-based innovations for farm improvement. Although seemingly distinct these two examples put citizens as the centre of change. Through comparison, it becomes apparent how the incremental, painful and messy social transactions of innovation take places and make new spaces.

### The mobility of peri-urban agriculture as social sustainability in the agglomerates of Andalusia Spain and northeastern Brazil

Mario Riquelme

Keywords: mobile peri-urban agriculture, social sustainability, land expansion.

The combination of peri-urban agriculture approaches and social mobility strategies single out the current phase of metropolitan rurality. The aspects that organize and disadjust social options are discussed in the various post-productive structural arrangements associated with the expansion of rural land to the outlying agglomerates surrounding cities. This topic therefore constitutes the two entries of reflection of this article to consider the conceptual framework in the diversity of the mobility strategies in Gonzales and Camarero (2005), Camarero and Oliva, (2002), Oliva (2006), and Camarero (et all; 2012), understood here as a hypothetical aspect for the social sustainability used by peri-urban agriculture to integrate into labour markets in commuting mobile occupations. The structural aspects and collective projects undertaken by mobile farmers examine the preliminary results of research in the case study in the contour strips of the region of La Vega in Seville and in the metropolitan agglomerates of Strength by means of bibliographic documentation tools to approximate the methodological formulation in the diversity of the mobile peri-urban agriculture. The final challenges imply the possible rural horizons in the areas under study on the current readjustments in the fragmented planes of soil rearrangement with effects on the commodification of land of the mobile peri-urban agriculture of one and another Iberian country in the grids of metropolitan contour.

### Is LEADER working as an urban-rural initiative?

*Irune Ruiz Martinez* 

The rural development programs (RDP) have a long tradition in the European Union. Recently, the decrease of rural area has opened questions to the territorial sustainability. The main aim of the regional policy is to recognize and promote synergies established between rural and urban area. LEADER is an opportunity for territorial cooperation, particularly in rural areas, as it works with the most relevant local actors: public administrations, civil society and the private sector or the business world. It was the first initiative in Spain from a territorial approach which put into practice a more endogenous and integrated view. However, the achievements so far have not yet been a solid base of work. Unfortunately, the last RDP 2007-2013 showed a direct link between producer and but omitting the social participation consumer, and flows (employment, infrastructures...). The ongoing RDP (2014-2020) is recognizing such synergies and that potential mutual benefits through LEADER from the Local Action Group (LAG). We are wondering to what extent LEADER is working as a territorial planning tool beyond the rural area (that is including the urban ones). We are focused on Spain where there are 273 LAGs throughout the area. They extend to application surface of 458.054 km2, corresponding to 90.5% of the total. We adopted a pragmatic approach taking into account the analysis of all local development strategies as well cooperation projects with the aim to detect which rural space is applying joint actions with urban. If not, the paper will give new views facing the next period (2021-2027).

# Working Group 21: Examining intersectionality and lived experiences of exclusion of individuals and households living and working in the countryside

Afghan unaccompanied asylum seeking minors in Swedish rural municipalities: Refugee and welfare worker perspectives

Ildikó Asztalos, Morell Mälardalen University, Sweden

Sweden applied a refugee-friendly policy until 2016, when temporary law was introduced turning the policy to the EU minimum standard. Sweden received every fourth unaccompanied asylumseeking child arriving to the EU. The responsibility for the settlement of unaccompanied asylum-seeking youth had been designated to municipalities. Rural municipalities have taken a disproportionately large share of accommodating asylum seekers, including minors. This paper explores the challenges that

rural municipalities face through the case study of a Swedish municipality using interview studies with asylum seeking youth and municipal welfare workers. It explores the challenges that welfare providers face as well as the experiences of the youth.

#### A study of threats to the labour market of the UK's horticultural sector

Holly Barlow, Czech University of Life Sciences

There are many fundamental issues affecting the labour market within the horticultural sector, primarily, the sector's reliance on migrant labour is having a direct impact on the production levels within the sector. Further affect by the industries is poor perception by domestic workers, which is often seen as, hard, physical work, long hours and poor wages. Additionally, the restructuring of the supply chain has resulted in retailer dominance thereby creating increased pressure in the supply chain. With the uncertainty of Brexit looming there has been exhaustive discussion surrounding the future of the labour sector which relies so heavily on the input on migrant workers. This paper looks to answer why the industry has come to rely so heavily on migrant workers and how the industry can review matters and seek to improve the perception of sector with domestic workers and help to provide a secure and fair labour sector for the future.

The methods used for this research are based on an in-depth literature review surrounding all the accumulative issues involved with in the horticultural sector and the formulation of three case studies of UK vegetable crop producers. The research shows that the pressures created by the supply chain impact heavily on the industry and the consequent dependency upon a flexible, productive work force to meet the demanding deadlines created by the retailer sector. The migrant workers, often arriving from Central and Eastern Europe, under vulnerable conditions causes them to be exploitable to meet the required demands. In this instance, the reliance on migrant workers and their social positioning is fundamental to the current operation practices of the food production industry. Horticulture is a vital cornerstone of food policy and healthy food production. Policy changes can be implemented to reduce work hours, improve pay and great better equality within levels of management.

### (Un)availability of social and labour support to farm families in case of occupational injuries and illnesses

Majda Černič Istenič, University of Ljubljana

Keywords: farmers, illness and injuries, coping strategies, social support networks, time perspective

Available records of work related injuries and occupational diseases from all over the world show that farm occupation, mostly carried out on family farms, is one of the most hazardous and risky occupations. Notwithstanding the significant contribution of occupational injuries and illnesses to mortality and disability – the vulnerability of farmers and farm workers - research that would shed light on this phenomenon is limited. Moreover, regardless of the increased public interest in agriculture and production activities of farmers, in terms of demand for quality, healthy and safe food provision the studies that would address also the quality of life and wellbeing of farm men and women and specifically their experiences and coping strategies with the consequences of occupational injuries and illnesses are almost absent. Bearing in mind yet weak research interest in this phenomenon, the proposed paper is dealing with the question on how do farm family members experience and resolve their own disability or the disability of their family members due to occupational injuries and illnesses, specifically what social and labour support (both informal and formal) is available to them when labour loss on a farm occurs due to injuries or illnesses and to what transformations in the provision of assistance/support to farmers in need the farming communities, facing with the changes in their population structure (e.g. because rural youth is leaving the farming), are exposed over time and what opportunities and impediments they encounter. The consideration of these issues relies on the results of the interviews conducted with the members of 60 farm families of both genders and across generations in autumn 2018 in Slovenia, the country with specific agricultural context dominated by small family farms, socialist legacies and radical changes occurred in the last twenty five years.

## The Future is Thunderbird Women: Indigenous Knowledge Sharing and Cultural Sustainability

Amanda Fayant, University of Tromsø/NTNU

Keywords: Indigenous, education, methodologies, feminism, intersections, indigenization, decolonial theory, epistemologies, matriarchy, Indian Act, Canada

Indigenous gender roles have been distorted by colonialism, both through imposed systems of patriarchy and redefining gender roles within Indigenous communities. In Canada, the Indian Act of 1857 initiated a system of patriarchy which resulted in the loss of matrilineal family lines and Indigenous women's rights to represent their community in leadership roles. This system still exists today, and despite numerous attempts to modify the law, the Indian Act still exerts patrilineal bias on Indigenous communities. In spite of this, there exists a large volume of research and literature by Indigenous women which investigates Indigenous feminism and the agency of Indigenous women in their communities. Examples include the writings of Sherry Farrell-Racette (Farrell-Racette 2010), Lee Maracle (Maracle 1996), Beverly Singer (Singer 2001) and Carol Rose Daniels (Daniels 2018) as well as online campaigns such as Rematriate (Rematriate 2018). Moreover, many Indigenous women in Canada are now stepping forward to address patriarchal systems in Indigenous institutions, such as the Assembly of First Nations, and outdated laws favouring male representation over female in meeting with governmental institutions.

My research considers decolonization methods in relation to Indigenous feminist perspectives in research practice. Through an Indigenous research paradigm based on the teachings of the Indigenous Cree medicine wheel, this paper aims to decolonize homogenous forms of research by promoting Indigenous women's knowledge. The medicine wheel in Indigenous teachings is a philosophy and a practical method of interpreting the physical, mental and transcendental domains. For research purposes, the medicine wheel offers a unique representation of Indigenous epistemology, ontology, axiology and methodology for use in research. Furthermore, following decolonial theory and Indigenous methodologies this research investigates the intersections of Indigenous feminism in decolonizing knowledge production and dismantling paternalistic affects in educational institutions.

Including Indigenous approaches to listening, participation and storytelling as opposed to standardized interviews, as well as observation and document analysis, this thesis opens space for generating community-based definitions of Indigenous feminism. Focusing on the Canadian context, Indigenous women in Saskatchewan possess a vast amount of traditional knowledge and ways of knowing which have been devalued since the enforcement of the Indian Act. One vital way of Indigenizing cultural revitalization is by reclaiming Indigenous women's epistemologies as a means of decolonizing gender roles and negating the impacts of the Indian Act.

#### Threats and priorities of the Macedonian village

Jorde Jakimovski, Ss Cyril and Methodius University

Keywords: village threats, village priorities, emigration, unemployment, aging, economic status of households

The paper presents a part of the results of the project entitled "Development of Rural Communities", which aims to identify the threats and priorities of the Macedonian village. The survey mainly includes 64 village settlements, 640 households, that is 640 individuals. The survey was conducted from 10 December 2015 to 10 January 2016. The rural settlements were grouped according to their configuration into plain and hilly-mountainous settlements. A random selection of 10 households was made in the deliberately selected villages. The preferred interviewee was the holder of the household; however, if that person was not present, we spoke to the person who last celebrated his/her birthday (age +15).

The hypothesis that emigration (rural exodus), unemployment and aging are the greatest threats to the future of the Macedonian village was confirmed. The results show that two fifths of the respondents (40.50%) highlight emigration as the greatest threat. It is evident that just over a quarter (26.70%) of the respondents stress unemployment and 21.70% point to aging as a threat. Namely, the village is abandoned by a predominantly young and vital contingent of the population in active and fertile age which are of crucial importance for the development and population balance of the rural areas.

Agriculture still represents the only source of income that cannot maintain the microsystem and the developmental needs of the rural population. Only 18% of the respondents are satisfied (satisfied-15.3%, quite satisfied-2.80%) of the income they obtain from agriculture.

Small farmers (60.98% <1 ha used agricultural land, 2016) are technically and economically an obstacle to competitive agricultural production from which farmers can live modestly, but with dignity.

Accordingly, the research indicates that the basic life priorities of the rural households are: improvement of the economic situation of the rural households, competitive agricultural production and employment. According to the data, most of the responses point to the "improvement of the economic position of the household" (56.30%), 16.40% chose the modality "competitive agricultural production", while 15.20% of the respondents consider "employment" as a priority in life.

The author concludes that according to the EU practices in the field of rural development, it is necessary to develop certain models for the Republic of Macedonia. This primarily means categorization of "less favourable areas" which must be specifically addressed in future rural policy.

### Being Global and Being Regional: African female refugees setting up and running an enterprise in non-metropolitan Australia

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Keywords: African refugees, female entrepreneurship, regional

Refugees are the most disadvantaged cohort of immigrant arrivals and face the greatest settlement difficulties in regional and rural Australia. Refugees face severe difficulties in entering the Australian labour market as regional and rural labour markets are even more constrained. One strategy adopted by refugees over many decades in Australia and other countries to overcome this blocked labour market mobility (Collins, 2003) and engage with the economy is to create their own jobs through refugee entrepreneurship. Refugee entrepreneurship in Australia is shaped by the intersection of a number of factors: ethnic resources and networks, class resources, regimes of regulation, inclusion/exclusion, opportunity, family relations, gender and racialisation.

This paper presents the data gathered from interviews with 15 African female refugee entrepreneurs currently living in regional and rural Australia. It investigates the reasons why female refugees started-up their own business, their strategies for overcoming the massive obstacles they faced setting up the business and the extent to which their businesses are embedded in their family and community. African female entrepreneurs located in non-metropolitan Australia are also involved in diasporic entrepreneurship, with the critical role that international social networks of immigrant communities play in the dynamics and success of those enterprises. The field work identified strong relation between resources obtained from personal network ties of the African female refugees and start-up success of their enterprises, as well through the process of internationalisation. African female refugees benefited from social networks and commitment among the family but even more from the trust and relationship established and maintained through personal contacts with overseas based buyers and suppliers.

The paper also reflects on the experience of formal and informal discrimination, the extent to which the racialization of female refugees in Australia has shaped their lives,

blocked their access to the labour market, and influenced moving into specific ethnic niche industries, as well as some contradictions embedded in the refugee entrepreneurship paradox in Australia.

#### Using Intersectionality to Understand Farm Women's Complex Work Lives

Susan Machum, St. Thomas University, Canada

Intersectionality has gained momentum for understanding the complex nature of human identity. Yet 'farm women' continue to be classified and framed as a homogenous, rather than complex group. Early research on 'farm women' sought to understand the multiple and varied ways that women participate on family farms and in food production systems. The emphasis on 'farm women's work' led to extensive discussions of both farm women's roles in the family farm business and the day-to-day work activities of women in farm production, the family farm household, paid employment (on and off-the-farm), and in community activities. In their efforts to understand farm women's work, researchers often treated farm women as an homogenous group, whose identity — and work life — could be captured and distinguished from other women's by the simple descriptor 'farm'.

However, 'farms' are complicated and so are the individual socio-economic characteristics of individual women. This paper argues researching, discussing and presenting 'farm women' as a cohesive entity within rural communities undermines knowledge of who these women are and the impact particular policy directions have on women engaged in agriculture. The paper draws on Julie MacMullin's (2010) intersectionality framework to understand how farm women's identities and work experiences have been influenced by the particular 'CAGE's their lives are embedded in. MacMullin (2010) argues our physical bodies and individual lives need to be understood in terms of how class, age, gender and ethnicity (i.e. the 'CAGE' within which we live our lives) intersect. This paper illustrates how using an intersectionality framework makes it possible to better appreciate and recognize how complex and diverse farm women are as a social group. It argues that when studying the agricultural community it would be more useful to expand MacMullin's CAGE acronym to CA2G2E in order to recognize class, age and able-bodiedness, gender and geography, and ethnicity to understand how these dynamics overlap and intertwine in farm women's lives and work.

In order to illustrate the value of intersectionality as a theoretical framework for understanding farm women and their contributions to agriculture, past and present, the paper briefly reviews the historical literature on farm women's roles in agriculture and farm women's work activities. In addition, it draws on interview data collected from case studies conducted over three decades exploring women's contributions to agriculture in

New Brunswick, Canada. What emerges from the literature and interview data is an appreciation of how diverse farm women's identities and interests are. By illustrating the value of intersectionality for studying farm women's contributions to agriculture, this original research article contributes to theoretical advances in rural sociology and feminist food studies.

### Agriculture students' perceptions towards entrepreneurship and farming: the Slovakian case

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Slovak University of Agriculture in Nitra

Keywords: agriculture students, entrepreneurial intention, farming, self-employment

Promoting entrepreneurship in general has become an important policy strategy in Europe. Entrepreneurial spirit represents a crucial aspect of running a successful business. Entrepreneurship and self-employment are terms that are being used more often when discussing about agriculture and farming. They are also key factors for the survival of agribusiness sector in the complex global economy. This paper brings a specific look into the agriculture student's community of the country's only agricultural university through the entrepreneurial intention survey. The main goal of the survey was to examine the attitudes of students of the Slovak University of Agriculture in Nitra towards entrepreneurship, self-employment and farming in order to understand better their future entrepreneurial intentions. The study was carried out on a sample of 437 students using a structured questionnaire, and additional information were conducted using the brainwriting technique at a workshop of 84 students of specialised study programmes in economics, in order to access the pros and cons of the work in agricultural sector. The paper investigates selected findings of the survey and point out personal experience level and entrepreneurial predispositions, differences between aspirations and real effort of responded students, and rural – urban aspects of their enterprising potential. The authors focus specifically on agricultural sector and tendencies of agriculture students to establish their own farm or run own agribusiness.

#### The British Farm Worker. Extinct or extanct?

Caroline Nye, University of Exeter

Since the 1850s, the number of farm workers in the UK has declined dramatically, from approximately 1.7 million workers to an estimated 300,000 today. Contemporary research into farm labour tends to concentrate on seasonal workers, more specifically, migrant labour. But these only make up  $\frac{1}{3}$  of the agricultural labour force. Other farm labour contributors have become the 'blind spot' of agricultural research. But whilst attention has been diverted, patterns in farm labour have emerged which could have an enormous impact on the future of farming in the UK.

At the same time, despite some recognition in the past that the structure of labour organisation has transformed significantly within the average farm holding, causing important transitions concerning front-line workers who directly work the land and the soil, there currently exists little evidence as to how new interconnections formed between farmers, farm workers, agricultural contractors and other related agents might affect knowledge exchange, decision-making processes, motivation in the workplace and frontline activity on British soils. Although the traditional farm worker and the agricultural contractor are two of the most significant actors in the life-world of the farmer, their role within the sustainable intensification agenda has been almost completely ignored. The assumption that farm labour contributors who are not the farmer, lack agency in the workplace; that they simply act on the command, knowledge and direction of the farmer, is based on an archaic perception of the British farm worker as deferential, powerless, unskilled, or lacking ownership. The rapidity of technological development and transformations in types of knowledge mean that often farmers might no longer necessarily be the most informed out of the three cohorts. So identifying actual labour patterns and processes is a key step not only towards the goal of sustainable intensification, but also the sustainability of the agricultural industry itself.

(Happy to deliver this as a Pecha Kucha)

### Low-wage employer 'hiring-queues': the geographies of recruitment preference and prejudice across the global strawberry industry

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Employers often have preferences and prejudices with respect to workers based on characteristics including geographical origins, gender, class, age, appearance, etc. These

'hiring queues' (Waldinger and Lichter, 2003) shape eventual recruitment decisions and explain why certain characteristics may be more or less common within a workplace and across a sector. Drawing on one rural industry known in particular for low-wage and highly seasonal employment – the strawberry industry – this paper examines and compares employer hiring queues in the UK, US and Norway. We find that although there is variety in the hierarchies (hiring queues) that employers construct in the different national contexts, geography is the decisive variable used to determine who are seen by employers as the best low-wage seasonal workers. The paper explores why geography matters in low-wage employers' hiring decision-making.

#### Differential inclusion of migrants in rural labour market in North Karelia, Finland

Tiina Sotkasiira, University of Eastern Finland

In the context of demographic decline, the rural regions particularly in the eastern and northern parts of Finland, which arguably do not receive sufficient 'spontaneous' flows of in-migration, have found themselves in competition with urban centers for foreign born workers and residents. In principle, all key organisations, working in rural and regional development in Finland, are in an agreement that more immigrant labour is needed in rural regions to fill gaps that native labour will not respond to. This concern has been highlighted also in a number of policy documents published in past years.

This paper, which is based on my long-term (2013-2018) ethnographic study of international migration in the region of North Karelia, argues that the aims of the such regional development policies and the actual immigration policies are fundamentally at odds with each other. From this ethnographic perspective, which looks at the issue at hand through the everyday experiences of migrants living in North Karelia, the lack of labour flow from abroad is difficult to come to terms with considering how difficult they themselves find to access labour market. Furthermore, it appears that the endeavors to 'draft' migrants into regions that suffer from depopulation sit uncomfortably alongside migration schemes intended to recruit and create a 'flexible' workforce as well as policies that protect the local (blue-collar) workers by limiting foreign workers to the positions that cannot be filled by locals.

The paper applies the concept of differential inclusion to explore the selective involvement of migrants in the sphere of work in the region of North Karelia. It contributes to the discussion on differential inclusion by providing an empirically grounded analysis of the role of immigration law, namely the role of Finnish residence permit system, in differentiating non-citizens' rights and immigration trajectories regarding their employment and settlement in rural Finland. It also highlights, how

various intersecting categories, such as nationality (EU vs. non-EU), education, class and family background, differentiate the position and rights of non-citizens in this particular context. The analysis of differential inclusion, which in this case takes place through laying out specific conditions for obtaining a work-based residence permit, are of particular relevance to those rural and peripheral regions that are struggling to attract new labour force in the first place.

The paper is based on the collaborative work of the author with Dr. Ray Silvius and Dr. Jill Bucklaschuk on migrant settlement in rural Canada and Finland.

# Working Group 22: Qualifications and rural development: From challenges in a near future to the opportunities for those in greater disadvantage

Important Role of Vocational Agricultural Education in Developing Rural Communities and Engaging with Rural Youth

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Keywords: agricultural education, extension, young farmers, rural development

Agricultural education is the teaching of agriculture, natural resources, and land management through hands-on experience and guidance to prepare learners for entry into the agricultural industry. Agricultural education plays a pivotal role in the development of rural economies supporting the development of environmentally friendly and sustainable farming communities by equipping young farmers with the knowledge and skillset required to adapt any farming system. Several studies have highlighted the importance of an agricultural qualification in benefiting higher production rates and increasing economic returns within a competitive agricultural industry.

Exploratory semi-structured interviews (n=28) were conducted in Ireland to explore the purpose of agricultural education and the importance of educating young farmers within rural communities. The study sample consisted of college principals (n=6), college teachers (n=6), agricultural students (n=6), agricultural graduates (n=6), and policy leaders (n=4) in the field of vocational agricultural education within Ireland. All interviews were conducted in-person, audio recorded, transcribed and thematically analysed using

NVivo software. An inductive approach was used for coding and identification of themes with repetitions, similarities, and differences recorded.

Findings from the study highlight the significant importance of agricultural education in developing young farmers both personally and professionally as they acquire new skillsets, new knowledge, and new ways of thinking in addition to fostering networking opportunities with like-minded people within the agricultural farming sector. The agricultural colleges in Ireland have a significant role to play in the development of these young farmers within rural communities enabling and equipping them with the skillset to function more efficiently in both the social and professional space. The findings also suggest there is great opportunity to broaden the nature of agricultural courses available to young farmers currently, in particular agricultural graduates in the area of continuous professional development for young farmers. Consequently, this paper will focus on the significant role agricultural education plays in developing young farmers within rural communities and the considerable opportunity that exists to connect further with young farmers within these communities in an attempt to enhance the transition from education to the labour market.

### Who are Italian "NEETs"? A study on rural and non rural Neets' social skills

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After Greece, Italy is the second European country with the largest number of NEET (Istat, 2015), for a total of around 14 million young people aged between 15 and 19. The aim of this study is to investigate some characteristics and perceptions of the condition that characterizes Italian NEETs in rural and non rural area. In our work are considered rural area municipality with less than 10.000 inhabitants. this work sets the following objectives: a. to describe the characteristics of young NEETs in Italy, rural and non rural, with particular reference to socio-demographic variables such as age, marital status, parental status, in relation to gender and the amount of time of this condition; b. to analyze the life and social skill they perceive to have; c. to investigate the representations they have about high school. A group of 668 rural NEETs will be compared with 2230 non rural NEETs. The analyses are now running.

After the discussion of the results, some ideas of intervention will be discussed, for example "Team work" by Action Aid! that proposed a project with the aim of providing soft skills to the young NEET, exploitable within the labor market. This project lasted three months and was based on sport and job training (e.g. mock job interviews, editing CVs,

etc.). The evaluation carried out in order to understand the young people's perception of the exploitability of acquired soft skills and the project's strengths and weaknesses showed the participants' general satisfaction, and their identification of project as a good way to obtain several soft skills.

### The Integrated Qualifications Register as a suport for the practical implementation of lifelong learning policies in rural areas. Case of Poland

Anna Plutoska, Educational Research institute, Poland

Keywords: qualification, rural areas, Poland, lifelong learning (LLL), Integrated Qualifications System, Integrated Qualifications Register

The phenomenon of marginalization and social exclusion which affects individuals, groups and the whole communities is found to be a major social problem, and is perceived as such in the European Union. Intellectual and material resources of numerous institutions are involved in finding the solution to the problem, and academic centers seek to develop conceptions, strategies and the so-called good practices which would enable effective prevention of such undesirable social phenomena. One of the suggested solutions is the conception and practice of lifelong learning, which has recently become an important instrument in the inclusion policy applied by the European Union, the instrument (too optimistically perhaps) thought as the remedy for marginalization and social exclusion. Analyzing the effects of inclusion policies supported with the conception of lifelong learning applied in the sphere of social practice in rural areas it can be noticed that efficiency of the actions for the benefit of social inclusion of the excluded persons in rural areas is low. However, a low level of efficiency and numerous problems facing the inclusion policy in rural areas do not mean that there are rational premises to challenge legitimacy of a lifelong learning conception as an instrument of social interventions. A promising offer for the inclusion practice in which the conception of lifelong learning is applied are qualifications which seem to be crucial to reducing poverty, improving the quality of life, and promoting sustainable development of rural areas as well as a consequence of building and stimulating the resilience of rural social systems. Also a promising offer for the inclusion practice in which the conception of lifelong learning is applied is Integrated Qualifications System and it's crucial tool - Integrated Qualifications Register. Namely raising and confirming qualifications contributes to increasing the competences of individuals and reduces the risk of social exclusion. Qualifications obtained in non-formal and informal ways, the process of acquiring, accumulating and confirming qualifications enable rural residents to function more efficiently and to find themselves in in the social space.

The presentation will be based on the analysis of polish experience in implementing of the Integrated Qualifications Register as a suport for the practical implementation of lifelong learning policies in rural areas.

### Agricultural training for farmers in the framework of rural development policies. A case study from the Basque Country

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Keywords: agricultural training of farmers, Agricultural policy, young farmers, informal training

This paper introduces an issue dedicated to enquire about the agricultural training of farmers within the context of the Rural Development Programs. A particularly unexplored topic, but that has ultimately become more relevant due to the rapidly social and economic changing of the rural. This evolution ad specialization of rural areas, and particularly, of agriculture and agri-food demand an appropriate level of qualification for farmers at different level (entrepreneurial training, new production and quality practices etc.) in order to acquire practices compatible with competitiveness, the maintenance of the landscape and the protection of the environment. This situation is particularly relevant in Spain, when more that 80 percent of the farmers have never followed any particular training, relying their activity on practical experience.

The paper examines these questions in the context of the evaluation of the Measure for Agricultural training within the 2007-2014 Rural Development Program of the Basque Country, in Northern Spain. It has been followed a methodological approach which combines the analysis of the data coming from the training projects supported (more than one thousand), together with qualitative information with key informants (eleven indepth interviews) in charge of the training measure design and those collective representatives from social fields such as agricultural associations or farmers' Unions.

The results show how the promotion of entrepreneurship together with business management were the training subjects most attended by Basque farmers during the analised period. Likewise, vocational training courses are especially addressed to young people who want to settle at the sector along with other groups such as farmers who are also in need of training. Even though the interviewees recognize the relevance of this measure in creating a modern and competitive agrarian sector, the discourses show also that agrarian training remains as a controversial issue and it is poorly valued by the

farmers. Both factors constrain an adequate application of this Measure. An analysis of this kind is important because it is concerned with key agrarian questions about also involve the future of farming and rural areas as a whole.

#### Rural NEETs qualifications: What do we know so far?

Francisco Simões, University Institute of Lisbon (CIS-IUL)

Keywords: Rural NEETs, qualifications, employment, social exclusion

Youths not in employment, education or training (NEET) are the ones aged between 15 and 34 years old who are excluded from employment, education, or training. This category is heterogeneous, including young people that fit into the International Labor Organization definition of unemployed youth, but also others not actively seeking work.

For a long time, NEETs were depicted as a homogeneous group. More recently, withingroup variability hasbeen discussed in terms of developmental, age-related criteria or according to different transition pathways to the labor market. The need for a more ample understanding of NEETs according to other criteria, such as their origin, is critical. This is especially true in the case of those NEETs living in rural areas. The most recent figures released by the EUROSTAT underline the urgency of this approach. Across the overall European Union member-states, the proportion of NEETs is higher in rural regions (18.9%) than in urban areas (15.6%). This trend is evident in 17 out of the 28 EU countries. This difference is greater in Southern (e.g. Greece) and Eastern European countries (e.g. Bulgaria and Romania). In spite of these figures and the general notion that these youths are those who were left behind, accumulating a higher number of risk factors for social exclusion, rural NEETs have not been addressed in the literature as a specific subgroup of this broader category.

Taking this scenario into account, this presentation has three aims. The first one is to propose rural NEETs as a specific subgroup of NEETs. The second intention is to pinpoint the specific risk factors for rural NEETs social exclusion. Third, the presentation will explore in more detail the role of rural NEETs qualifications profile as a structural threat to these youths biographies. It is expected that this presentation contributes for discussions about the relevance of a collaborative research agenda designed to capture psychosocial profiles of rural NEETs, as well as to identify and spread best-practices in the field, including those aiming at improving these youths' qualifications.

### Qualifications: A new opportunity for development and its residents – the case of Poland

Anna Sitek, Educational Research Institute

For many years we have been witnessing dynamic processes of change that are happening in rural areas. As a result of these changes, rural life is becoming more and more diverse, and agriculture is no longer the main source of income - in rural areas there is a growing share of income from non-agricultural activities. This situation contributes to the increase in the attractiveness of rural areas for the creation of non-agricultural jobs, which in turn is associated with the need to not only raise, but also confirm - by rural residents - the qualifications acquired in their daily activities activities. There are to many (previously unconscious) qualifications that rural residents can confirm in order to start a new business or professional activity. Raising and confirming qualifications contributes to increasing the competences of individual residents. There is no doubt that the process of acquiring, accumulating and confirming qualifications allows individuals to function more efficiently in the social space (both at the macro, meso and micro level), for example in active searching and taking up a job. In addition, qualifications seem to be crucial to improving the quality of life, reducing poverty, increasing the productivity of rural residents and promoting sustainable development of rural areas, as well as a consequence of building and stimulating the resilience of rural social systems.

The presentation will be based on the analysis of qualifications submitted to the Integrated Qualifications System in Poland and information obtained from the Ministry of Agriculture.

#### Rural youth's job access after leaving agricultural education

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Keywords: School-to-work transition, NEET, transitional labour market approach, Labour Force Survey, Germany

This study applies the transitional labour market approach to give insights into rural NEET (Young People Not in Education, Employment or Training) trends in Germany with using Labour Force Survey (LFS). Whilst existing studies provide insight into school to work transition flows in urban and peri-urban regions, little is known about the rural youth labour flows from student to employment, unemployment and inactivity status. The main aim of this study is to provide overview of rural youth's job access after leaving

agricultural education in Germany. Our empirical analyses suggest that there are substantive differences in the agricultural education to employment flow (in agriculture sector) between female and male samples. In contrast to the male sample, very few percentages of female (that have agricultural education background) flow to a profession in agriculture sector. Contrary to our expectations, living in rural areas does not suggest a significant negative effect in accessing a job within a year period. For students graduating in fields such as agriculture and veterinary (including market-oriented, skilled agricultural workers, farmers, and fishers), a high percentage is employed relative to other studied disciplines.

# Working Group 23: Understanding Rural Community Resilience – Enabling rural communities to harness knowledge and deal with change

#### **Resilience of Villages as Systems**

Alistair Adam Hernández, University of Applied Sciences and Arts in Göttingen and University of Vechta

Since the late 1990s the use of the term resilience has experienced a bonanza1. It is not only used in a ubiquitous and transdisciplinary manner in European cohesion and regional policy design2, but in the meantime it has risen to become a key element of scientific and popular scientific publications3. In the context of declining populations, economic degrowth and ecological imbalance, village communities in so-called shrinking rural areas are perceived mainly as losers4. The contentious concept of resilience5 may possibly deliver empowering answers for dealing successfully with these threatening processes of change in the countryside.

But, can the resilience concept explain why some rural communities adapt to change more successfully than others and even why some thrive despite adverse circumstances? What does it mean to be a resilient village community, what system properties do those which are resilient possess and how can these system properties be enhanced?

This research aims to contribute to further theory development as well as to establishing resilience research in the context of spatial and regional sciences. How to build and manage resilience in villages will be examined by setting up a conceptual framework for rural and village resilience based on three bodies of research of particular importance for the conceptualization of resilience in the spatial and regional sciences: social ecology, psychology and community development. Also the interdisciplinary, systems and

complexity thinking approach is of vital importance for this research. This framework is to be put to the test in a comparative European study in a German, an English and a Spanish village.

During the ESRS19 Conference findings and outcomes from the empirical testing of the named framework in the specially dynamic and vibrant villages of Wooler (UK), Albarracín (ES) and Oberndorf an der Oste (DE) will be shared and discussed with the attending public.

### Understanding processes of farm demographic change on family farms - the case of the Flemish Dairy Sector

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Keywords: Farm demographic change, resilience, family farms

The resilience of family farms is reflected in how, and to what extent, farming families cope with the increasingly complex challenges and changing environment in which they operate. The ultimate outcome of resilience in this context is the intergenerational survival of the family farm. Although it is clear that the major trends describing farm structural change in most of European regions are the decline in total number of farms and the increase in average size of farms, there is a need for research that aims at understanding how demographic dynamics relate to these aggregate trends. Thus, to assess in a comprehensive way what factors influence the resilience of farms, and to determine how this resilience can be enabled, one needs a profound understanding of processes of farm demographic change. Farm demographic change in a region can be defined as the combined effect of changes in farm numbers – as a result of farm entry, farm exit and farm transfer of individual farms - and changes in the distribution and characteristics of labour force on farms. This paper aims at a better understanding of the processes of farm demographic change, taking into account the different influencing drivers. These entail a historical, a socio-cultural, a political, an institutional and a human resource dimension. The results allow to identify opportunities for increasing the resilience of farm demographics and entry into the sector.

An in-depth investigation of farm demographic cycles in the context of the Flemish dairy farm sector was performed. Eight farms that are in a different phase of the farm business life cycle were selected. For each farm, several farming family members that play an important role in the current/future farm specific challenges were interviewed, resulting

in 18 interviews with in total 22 respondents involved. A semi-structured interview outline was used. Interviews were transcribed and coded using NVivo-software. The approach of clustering interviews with different types of respondents around specific farm cases was used to gather the needs and opinions of (potential) successors, the incumbent generation, as well as other family members who influence the strategic farm decisions regarding farm demographic and structural development. This approach also allowed us to create a more in-depth understanding of each farm case and each respondent, bringing the specific context of each farm business situation into account.

### Consensus or confusion in the understandings of rural community resilience: exploring differing perspectives in Scotland

Margaret Currie<sup>1</sup>, Annie McKee<sup>1</sup>, Annabel Pinker<sup>1</sup>, Elliot Meador<sup>2</sup>, Rob McMorran<sup>2</sup>

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Keywords: Community resilience, perspectives, multiple understandings, rural development, Scotland

Academics and others with knowledge and experience of rural communities currently tend to describe rural community resilience as relating to the ability of that community and its inhabitants to survive a series of generally gradual changes affecting "everyday" life (e.g. the closure of key services and facilities, demographic changes and populations decline) whilst being able to move forward to create a new milieu, a process that involves both human agency and social capital. However, the term resilience may be understood and applied to rural communities in other ways. This paper seeks to explore this problem in rural Scotland. Specifically, from our research, we have found that Scottish resilient policy refers to a community's ability to respond to or plan for extreme events or "emergencies" (e.g. flooding, fires, terrorism). This contrasts the established rural development definition and can lead to confusion regarding what is resilience, what it means for rural communities to be resilient and how it can be responded to. This paper draws on findings from two projects; "Local assets, local decisions and community resilience" funded by the Scottish Government and "Long-term implications of funding" funded by the Centre of Expertise for Waters. It aims to explore to show how these different and potentially conflicting understandings of resilience exist and manifest themselves in rural communities. Finally, the paper examines whether these different conceptualisations of community resilience are separate, or in fact are inter-twined and contribute to an over-arching and more complex understanding of resilience.

#### Reinforcing Rural Based Livelihoods in the context of the IPCC

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Keywords: socio-ecological systems, adaptive co-management, traditional institutions, natural resource governance, democratic transition

Land-based livelihoods and associated assets are crucial elements of rural economies. Furthermore, the Intergovernmental Panel on Climate Change (IPCC), released a special report (48th Session of the IPCC) in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. The report highlighted the impacts of higher global and local temperatures on various sectors key to the prosperity of people and rural economies like agriculture. It is argued that the IPCC Special Report's anticipated climate change may well make core current land-based livelihoods such as agricultural practices unviable. This makes interrogating factors that affect smallholder systems' resilience and productivity essential so as to fulfil the "Leaving No One Behind" agenda as the rural milieu is home to some of the world's most vulnerable households and communities especially in the global south. This article situates the IPCC Special Report (SR 15) and the Leaving No One Behind agenda in the context of the rural milieu using case study from South Africa.

#### Developing resilient community plans to manage dispersed rural settlement

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Keywords: sustainability, rural housing, planning, settlement studies, history

Rural villages in remoter parts of Ireland experience continuing population decline or minimal growth while the commuting zones of cities and other economic centres are growing at fast rates. Villages, like their larger counterparts, have lost population in the urban core, offset by population growth in the surrounding countryside. In line with other Western countries, urban centres have lost ground to out-of-town retail parks and exurban development, frequently taking the form of 'one-off' dispersed rural housing in Ireland. While planning practice has officially favoured clustering and urban development, attachments to dispersed rural housing are historically and culturally embedded in the population. This creates tensions with other national objectives, such as the siting of wind turbines and powerlines, and the provision of essential services such as healthcare, schooling, utilities, and transport. It also has a tangible impact on the imperative to reduce

greenhouse gas emissions and sustainably manage the environment for biodiversity. This study approaches the question of planning sustainable and resilient settlements by examining people's attachments to forms of settlement and the degree to which they are rooted in cultural practices and perceptions of historical injustice. It consists of, firstly, spatially describing current settlement patterns in relation to kinship networks using planning records and qualitative interviews, and secondly, co-producing community planning scenarios. The project seeks to contribute towards the co-creation of resilient, neo-endogenous community plans that mitigate the long-term costs of dispersed settlement with a more nuanced and tailored appreciation of the locus urbis and the benefits of clustered development.

### What does community resilience mean to you? Results from a Delphi survey of experts in rural Scotland

Annie McKee<sup>1</sup>, Rob McMorran<sup>2</sup>, Margaret Currie<sup>1</sup>, Annabel Pinker<sup>1</sup>, Elliot Meador<sup>2</sup>

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Keywords: Rural community resilience; Delphi method; transdisciplinarity

The concept of 'rural community resilience' is not always clearly or easily defined, both within the academic literature, and within rural development policy and practice, hence the term is used in a range of contexts with varying interpretations. Any approach taken to assessing community resilience will involve a series of subjective decisions at different stages, for example, in relation to defining descriptive and normative attributes of the concept (cf. Strunz, 2012, Ecological Economics). This paper presents findings from a transdisciplinary Delphi survey which sought to gather the views and experiences of those involved in community resilience actions across rural Scotland. The project aims to provide recommendations to the Scottish Government for how best to assess and support rural community resilience and empowerment. The Delphi method invited participants to collectively consider a complex problem through an iterative and inclusive communication process, designed to remove power imbalances between knowledge types (i.e. academic, policy, and practitioner). Twenty-two anonymous Delphi 'panellists' were interviewed with an iterative and progressive interview guide, developed following analysis of the previous interviews. The process also developed a series of reflective summaries and culminated in a final participatory workshop. The expert panel highlighted that resilience is a financial necessity for governments who must implement budget cuts. This can translate into a reductive survival-orientated paradigm of community resilience, which may be associated with a neoliberal agenda that pushes rural communities to become increasingly responsible for their own resilience. Whilst the dominant paradigm

of resilience is 'bounce-back' (i.e. community-scale recovery), the panellists assert that there is a need to move towards 'transformational resilience', which involves building capacity for deep reflective learning and proactive approaches in the face of large-scale phenomena, such as climate change.

#### Youth Perceptions of Resilience and of the Rural

Brendan O'Keeffe, The Institute for Action Research (IE)

Keywords: Youth, Perceptions, Service Provision, Gender, Vibrancy

This paper looks specifically at perceptions of rural resilience and community vibrancy. It presents data from research among young people (mainly aged 15 to 18 years) in the south-west of Ireland. As McGrath and NicGabhainn (2007: 17) note, "young people have an astute awareness of the communities within which they live, despite their lack of voice at a political level." A transnational study across a number of EU member states concluded that the future resilience of rural areas "lies in the hands of young people who still have direct links with these areas and with agriculture -thanks to their family relationships" (National Rural Network, 2012: 37).

Adapting a rural vibrancy measuring tool that was used in a more extensive survey of citizens in an adjoining area (O'Keeffe, 2015), this paper presents largely quantitative data on young people's perceptions of the local economy, social and cultural amenities and environmental resources. The research also looks at where young people would like to live, and where they expect to be living in the future. These, largely quantitative, findings are complemented by qualitative data from a series of focus group discussions with the survey participants, their teachers and community development workers.

Our findings reveal that most young people would like to live rurally, preferably in their home locality, but the majority do not expect to be able to do so. They express a need for greater investment in rural services, particularly transport and health. The findings show some notable gender differences, with males being more favorably disposed than females to rural living. Males are more than twice as likely as females to want to continue living in their home community. They are also more optimistic than are females about the resilience of rural communities and about their prospect of returning home if they move away to go to college or find their first job.

### Negotiating the triple-bottom line: resilience and social sustainability in three cottondependent communities in Australia

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The University of Melbourne

Keywords: social-ecological resilience, community resilience, social sustainability, change management

The Australian cotton industry relies on the skills and capacities of the service sector, predominantly located in regional towns. In turn, regional communities have organised around the cotton industry as a major source of income. The resilience of the industry and cotton-dependent communities is currently being tested by drought and attendant changes to water policy. Alongside this, anticipated changes in energy generation and technology adoption could significantly impact the future of regional communities. In light of these challenges, the Australian Cotton Research and Development Corporation (CRDC) is funding research that pursues a better understanding of what makes regional cotton communities resilient and how the industry can contribute to building and maintaining their social sustainability. While the industry trusts in its adaptive capacity via the adoption of new technologies and cotton varieties that would allow growers to move their production further south towards greater availability of water, the research presented here reveals a number of tensions between industry and community interests. For example, the assumption that a resilient industry equals resilient communities is simplistic and contestable. A more holistic understanding of resilience that incorporates the social, ecological and economic pillars of sustainability is required. The paper explores opportunities for driving sustainable change afforded by a nuanced and critical interpretation of community resilience and as they emerge from an ongoing participatory research project involving three regional cotton communities in Australia.

#### Dealing with the option of wind energy development on the island of Amorgos

Maria Proestou, Humboldt Universität zu Berlin

Keywords: resilience, robustness, habits, institutions, wind energy

The community of the Greek island of Amorgos has repeatedly rejected wind energy proposals over the last ten years although contemporary politics regards wind farms as a crucial means of pursuing a sustainable future. I study how the Amorgian community judges the option of wind energy development by applying approaches derived from resilience thinking, social psychology, and institutional economics. Based on face-to-face

interviews and participant observations, the analysis shows that robustness characterizes the socio-economic system of the Amorgian community. The option of wind energy development disturbs this system by disrupting entrenched habits and established institutions. Unsettling these habits and institutions drives the community to judge the option of wind energy development in the Deweyan sense, thereby enabling the community to cope with the disturbance. In particular, Amorgians resist external large-scale development through a synergy of calculation, reflection and intuition. This means that they estimate costs of and benefits from wind farms, question wind energy development per se, and respond spontaneously to this kind of development path based on their experience. Currently, Greek politics conflicts with the Amorgian habits and institutions, and thus jeopardizes community resilience. It remains to be seen if the Amorgian socio-economic system will depart from robustness and if such a change can ensure sustainability.

#### Assessing small farm resilience within adapting business models

Paolo Prosperi, F. Galli, L. Fastelli, S. Grando, A.J. Ferreira, L. Palmioli, G. Brunori

University of Pisa

Keywords: Small scale farming, Farm resilience, New business models, Community resilience, Local food systems

In a global context of increasing concern for the unsustainability of the food system, small farms' role is acknowledged to have positive effects on food security, community development and multi-scale resilience. Despite economic and environmental uncertainties, and the increasing abandonment of rural areas, small farms still produce nearly 80 per cent of food globally. The international community is focusing attention on small agricultural realities as driving forces to face the global crisis. However, a supporting policy design needs to address small farms' landscapes that are extremely diverse with respect to the context-specific adaptation of business models. This work aims to assess how small farms, in two regional contexts of central Italy, have adjusted their entrepreneurial activity to changing socio-ecological and economic conditions. Small farms' resilience has been measured through a set of indicators that help identifying the role of different components of their business models through a holistic and multidimensional approach exploring how small farmers carry out their business activity. Within framework the of the Horizon 2020 project 'SALSA' (http://www.salsa.uevora.pt/en/) a quantitative analysis on 40 small farms has been combined with qualitative and participatory research. It emerged that various social, ecological and economic components are differently embedded in small farms' business

models and, therefore, contribute to small farms' resilience in different ways, whether they adapt towards place-based business models or conventional business strategies. A strong context-specific approach allowed structuring the architecture of new business models, positioning small farms in the socio-territorial context and understanding significant differences between groups of farms in the sample and their potential to increase resilience. Beyond contributing to value creation and competitive advantage, implementation of adapted business models by small farms may enable them to contribute to the resilience and sustainability of social, community and ecological contexts.

### Community resilience in peripheral rural areas: experiences of a qualitative approach in the Austrian Alps

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University of Innsbruck

Keyword: community capitals, tourism, farming, mountain area

According to critical community resilience studies (e.g. Allen et al. 2016; Sharifi 2016; Kelly et al. 2015), the conceptual framework of community resilience is based on social, cultural, economic, political and environmental capitals and drivers. Their configuration influence the resilience or vulnerability of a community (Emery and Flora 2006; Wilson 2012; Adger 2000).

In an interdisciplinary project (sociology and ecology), this concept has been applied to a qualitative investigation of two remote rural Alpine mountain communities, Obergurgl and Vent, in the Austrian Ötztal. Both communities changed from livestock farming to the provision of tourism services as a main source for livelihood incomes. However, both are challenged by similar slow-onset disturbances such as outmigration of young people. The study highlights that both communities are facing substantial resilience challenges, however their vulnerability differs. On the one hand, Obergurgl is relying on its economic capital and drivers; its social capital (i.e. the cohesion of the community) has weakened with the structural change from a farming towards a service economy. Even if the remaining family farms are relatively resilient, their reputation within the community has lost. On the other hand, Vent is relying on its natural resources, valorizing its remote location and the agrarian landscape (see also Wilson, Schermer, and Stotten 2018) . However, their economic capital is considerably weaker.

The case studies under investigation demonstrate two different trajectories and different configurations of capitals to strive for resilience. Further, they demonstrate that an approach based on the five community resilience capitals and drivers provide a richly textured framework for understanding the subtleties of resilience pathways and transitions. However, also challenges arose with the application of the concept, such as the measurability of qualitative indicators in order to define the communities as weakly, moderately or strongly resilient. The presentation tackles thus also questions beyond the theoretical concepts, such as its applicability and the questions what hands-on outputs can be extracted to serve the local communities.

### Retired but responsible: Assuming additional responsibilities for resilient Swiss family farms

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Keywords: Family farming in Switzerland, retirement, responsibility, resilience

The qualitative study about retired former farmers in Switzerland this paper is based on draws semi-structured interviews with eight women and seven men aged 63 to 70, who are retired or will retire within a year. All but one have handed over the farm to a next generation, mostly to a daughter or a son. One couple moved to the nearby village, while all other interviewees still live on the farm together with their successors. All still feel responsible for the farm. On one hand retired farmers assume responsibility when working on the farm. This support for the younger generation is traditionally anchored and expected in exchange to care elderly farmers when becoming frail. On the other hand, the study shows that former farmers assume new responsibilities that are not part of this agreement between the generations: The younger generation is more often working offfarm, and the presence of the elder generation is vital to make sure that the animals are well, that someone is there when material is delivered or when children return from school. These duties go beyond the expected responsibilities of former farmers, restrict to a certain extent their freedom and in some cases force them to work beyond what they can. Most interviewees even make financial restrictions when providing direct financial support for the younger generation: They alleviate the financial load by paying bills for both households or by cooking for the whole extended family. The elder generation fears becoming physically too weak for working on the farm. They perceive themselves as a burden for the younger generation in case they don't contribute with work but require care.

The changes in delegating and taking responsibilities in intergenerational settings can be seen as a strategic reaction to foster the resilience of family farms in a politically, economically and socially changed setting. They seem to challenge the solidarity between the generations. And they confront retired farmers with a new situation and with issues they are not used to address.

## Working Group 26: Provenance foods as a pathway for a sustainable rural transformation

Using multi-level perspective to understand differing degrees of organic adoption in the Danish dairy cattle and pig sectors

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Keywords: Multi-level perspective, sustainable transitions, rural transformation

Farmers' incomes from standard agricultural products are decreasing, which is causing rural landscapes to change. Various notions have been proposed to describe this change, including 'post-productivism', and 'multifunctionality' or 'rural eco-economy'. In order to understand what might constitute current and future sustainable rural transformation, it is important to understand past agricultural transitions. This study takes a historical look at transitions in Danish agriculture from the 1800s to present day in order to understand how transitions occur over time and how social, cultural, political, and economic factors at local, meso-, and macro-levels effect change.

Before the 1870s, Denmark predominately grew grain for export. After the grain crisis, where cheap grain was dumped on the European market, the composition of Denmark's farming industry changed dramatically. Pigs and dairy cattle became the country's primary agricultural sectors. Livestock were turned into value-added products — bacon and butter — mainly for export. Both the pig sector and the dairy cattle sector have development structures that have persisted for decades. However, the dairy cattle industry has easily incorporated organics into its structure, while the pig industry has not. This study explores the interactions of niche innovations and social movements, mesolevel regimes, and socio-technical landscapes to understand transformation processes in agriculture. Specifically, this study uses a multi-level perspective to understand why and how 11 percent of Danish dairy cattle farmers have transitioned to organic production while less than one percent of Danish pig farmers have done the same. This historical perspective of Denmark's transition from grain to livestock and then the differing degrees of adoption of organic practices by the dairy cattle and pig sectors can provide insights

into current and future rural transformations. This in turn can help shed light on the degree to which provenance foods could play a role in fostering change in rural economies.

### The value chain governance of Public Food Procurement in Korea: the role of public kitchen as a leading actor in rural agri-food systems

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Keywords: local food systems, public food procurement, value chain governance, municipal policy

There is growing recognition that the Public Food Procurement (PFP) play a potential role in enhancing the local agri-food systems as for its institutional purchasing power and its comprehensive dietary impacts on consumers. The purpose of this paper is to identify the Value Chain Governance (VCG) structure of the PFP initiative that introduces locally produced food to public kitchens in Jeonbuk Province, South Korea. The article argues that active institutional interventions in PFP may develop the position of a public kitchen in VCG. Following a value chain analysis case study, a series of qualitative interviews with PFP stakeholders conducted. The interviewed sample covered representatives from local authorities, national government, school's public kitchens and farmers from the public meal support centres. With a focus on the position of pubic kitchens as the leading entities, it empirically investigated the governance structure, analysing institutional environments: regulatory and supportive intervention to the chain. The results show that the municipal policies enable the public kitchens to engage in the PFP value chain governance. In particular, the case of Jeonbuk province presented a cooperative approach to value chain governance, with institutional environments favouring regional entities, in addition to bestowing them with public legitimacy. The model entails that, public meal centres provide space to improve the capacity of regional producers and kitchens to deal with the complex challenges of PFP. The study thus suggests the importance of municipal policies deploying an approach to facilitating setting beneficial standards of diverse food quality and practices in local agri-food systems.

### Selling the Rural in Urban Specialty Stores – Establishing new liaisons between town and country through the sale of rural provenance food products in Portugal

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Keywords: rural provenance food products, rural-urban connections, specialty stores, selling rural provenance food products in urban stores

The aim of this contribution is to present a recently started research project1 that seeks to contribute to the understanding of the role of urban specialty stores selling rural provenance food products in fostering new or renewed rural-urban liaisons. Like in other European countries, there is growing evidence on the increasing number of this type of stores in Portuguese urban areas. This evidence – alongside with the growing interest of Portuguese and foreigner consumers on traditional (officially certified or not) rural food products from Portuguese rural areas – seems to unveil the potential contribution of specialty urban located stores in closing the long lasting gap between rural and urban areas in Portugal. At the same time, a potential contribution to foster agricultural activities through the valorisation of local productions, as well as to promote rural attractiveness can be foreseen. These aspects may also induce a larger economic diversification of rural areas and foster sustainable development of rural communities. Despite these potential contributions, little evidence has been produced on the central role that (urban) retailers may play in the process of valorisation of rural provenance products. In fact, scarce research has been conducted until now on the motivations of retailers, the type of products they sell, the provenance and promotion of products, as well as on the links they have with rural territories and small farmers. In commercializing traditional local foods, generally of higher quality and presenting unique characteristics specialty stores offer a 'piece of the countryside', a piece of specific 'terroirs', a piece of local (sometimes regional and/or national) cultural identity and a particular vision of the world and know-how. Consumers of such traditional and differentiated food products value their authenticity and this attribute is largely socially constructed, meaning that it is not only inherent to the products character, characteristics and places of origin, but also constructed through the perceptions of the producers, retailers, distributors and consumers themselves. Based on an exploratory analysis of selected cases, our aim is to illustrate and (mainly) debate the multi-level approach of the project and its contribution to produce innovative knowledge to improve food chains of production, commercialization and consumption unveiling new opportunities for rural development.

### Provenance as source of origin, but which origin? Opened thoughts around Stockfish from Lofoten as a case study

<sup>1</sup>Atle Wehn Hegnes, <sup>2</sup>Virginie Amilien

The regulation and labelling scheme for PDO, PGI and TSG was set up in Norway in 2002, modelled on corresponding systems for GIs in the European Union. This paper proposes to study the dried Stockfish from Lofoten, which is not only one of the most successful provenance food constructs in Norway but also the first Norwegian product to have obtained a European Protected Geographical Indication. Stockfish from Lofoten as a case study allow to focus on market, communication and gouvernance perspectives.

The stockfish from Lofoten is produced on the Lofoten Islands, offering climatic, geographical and cultural conditions worthy of a great "terroir" product. Already in the early Middle Ages it was a central Norwegian food, and export, product. By focusing on this particular PGI product we will emphasize the role of the market's actors in the construction of an official geographical indication. Moreover this paper will provide a reflection on the relationship between all agents participating in the visibility and acknowledgement of provenance food, including local stakeholders, producers and state regulations. Although each example of provenance food is particular, and go through its own cultural adaptation work influenced by cultural, market or institutional frames, the PGI Stockfish from Lofoten is an interesting case to open a discussion and a common reflection on provenance foods (and especially to reflect upon the concept of provenance) and their potential positive impacts on local, regional or "national food economies and on national biodiversity indicators."

The main idea of this paper/ base for dialogue is about the meaning of provenance or origin: What is the real provenance of a fish food product? The stockfish from Lofoten is PGI building on the fact that the product has been recognized during several centuries in several part of the worlds: Considering the cultural-historical evolution of the product, we will highlight the governance perspective and especially the impact of institutional frames and regulations on the labelling of stockfish from Lofoten. A second point will consider the market perspective focus on the way the organization of the value chain and the stockfish from Lofoten PGI model did influence the visibility, and potential success, of the product at national and international levels. Eventually a third point will concentrate on the communication perspective, shortly looking back at the historical evolution but mainly highlighting the way PGI and place branding are communicated to consumers, and its role in creating a "provenance" of the food.

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#### Developing an integrated approach to Danish provenance food developmen

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Keywords: geography, multidisciplinarity, transdisciplinarity, perspectivism, epistemological pluralism

The authors are involved in a Danish research- and innovation project, ProvenanceDK, which is funded by the Danish Innovation Foundation. The objective of the project is to map the potential for developing Danish provenance foods. An important part of the work is to map both biophysical as well as cultural resources which might be utilized in product development. In terms of research, the project is organized as a multidisciplinary inquiry. The project is a partnership between three Danish municipalities, Aarhus University, and private enterprises from retail, food service and other sectors with a business interest in the field of specialty foods, including provenance foods. For the municipalities food plays an important role with regards to regional development policies across different sectors. Preliminary experiences from the project indicate that the project face considerable challenges, both with regards synthesizing research inquiries, both also concerning the transdisciplinary effort of integrating scientific knowledge into specific development processes. More specifically, the challenge concerns coupling between different timescapes and different forms of knowledge. The paper is an inquiry into the methodological aspects of the project, arguing that an integrated approach to developing Danish provenance food involves combing insights from scientific perspectivism, systems theory and synthetic geography.

#### Constraints to increased livestock production on small farms in Scotland

Carol Kyle and Dominic Duckett

The James Hutton Institute, United Kingdom

The Horizon 2020 project SALSA (Small, farms, small food businesses and sustainable food and nutrition) aims to enhance food and nutrition security (FNS) by promoting enabling mechanisms whereby small farms can increase their contribution to local food systems. Using a food systems perspective, the project looks beyond production capacity and investigates food security in terms of the availability of nutritious and safe food, food access and control, food utilisation, and food stability. This paper highlights two case studies exploring the opportunities and challenges around livestock production on a small scale in Scotland. Researchers interviewed 35 smallholders and crofters who farm < 10ha

in two NUTS 3 scale regions of Scotland. UKM27 Perth & Kinross and Stirlingshire, and UKM63, Lochaber, Skye & Lochalsh, Arran & Cumbrae and Argyll & Bute.

Small farms at this scale contribute between 1% - 4% of the total beef and lamb produced in these regions and are frequently labelled a lifestyle choice rather than a lucrative commercial enterprise because they are often economically unsustainable at the household level unless supplemented by an additional income (e.g. pension or full-time employment out-with the livestock business). However, many respondents acknowledged the potential for greater production and SALSA findings point to significant opportunities for greater contribution to FNS.

Small livestock farms in Scotland typically produce products with the following characteristics; added value by specialising in heritage breeds, for example, Highland cattle and Hebridean sheep; geographical provenance which facilitates entry to the growing market for locally produced food; animal welfare and organic principals which differentiate their products from mass-produced, lower priced alternatives and environmental principles which makes them 'greener' than some larger producers and well placed to assist in a sustainable rural transformation. Furthermore, small scale is often said to facilitate agility when reacting to changing demands in production.

In addition to economic constraints, barriers to increasing livestock production were said to include a subsidy system thought of as "more trouble than it's worth"; an increasing lack of easily accessible abattoirs; a shortage of available and more importantly, affordable, land for new entrants and the fickleness of the market.

Using a food - systems approach we examined relevant governance systems related to the organisation of small livestock farmers and associated food chains to provide tools to guide decision-makers in enhancing the contribution of small farms and food businesses to food and nutrition security.

#### Why business models matter in local food production

Klaus Brønd Laursen and Lars Esbjerg

Aarhus University, Denmark

An important question in relation to understanding the success of local food producers concerns their choice of business model. A viable business model allows the actor to reflect upon the organization of the business and the relations in which she engages. Insights from the study of business models can therefore help generating a better

understanding how local food producers experience challenges and how they manages to solve them.

In this presentation, we present empirical insights from the ongoing Danish research project Provenance.dk on business models of local food producers. We argue that a central component in the success of these business models consist in the ability of the business in engaging in a network where the central values are mutually recognised. Empirically such values include; a strong emphasize on developing the local, an animal welfare that often exceeds the standards found in regulations, a strong focus on sustainable production and consumption and, finally, a strong devotion to good artisanship favouring non-generic products. We stress, that local food producers need to think of themselves as business operators. This we find is often neglected in favour of a strong dedication to the product. We maintain that by paying more attention to the focus-point of a full business model, the possibility of succeeding as a local food producer increases.

#### Pathways to sustainability? Aligning Protected Food Names with agroecological praxis in Wales

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Keywords: Protected Food Names, Agroecology, Agroecology territories, Transition theory, Wales

Protected Food Names (PFNs) are increasingly regarded as important endogenous rural development mechanisms; cultivating territorial agri-food systems that sustain producer livelihoods, enhance consumer trust, and preserve cultural heritage. There are now over 1,400 PFNs located across the European Union (EU), whereby the provenance and 'terroir' of food and drink are protected and enshrined in law. In the last 4 years, Wales, a devolved nation of the United Kingdom (UK), has increased the number of its PFNs from 4 to 16 representing considerable investment by Welsh Government (WG). Concurrently, in 2015, WG also ratified the seminal Future Generations Act (Wales) which requires public bodies to safe-guard the well-being of future generations based on the principle of sustainable development encompassing economic, social, environmental, and cultural factors. However, it is not clear the degree to which current PFN schemes meet this requirement.

Hence, in this paper, we discuss how Welsh PFNs can potentially be regarded as conduits for sustainable development and agri-food transformations. We do this by drawing on transition theory and the concept of 'agroecology territories', which are spaces where a transition process towards sustainable agri-food systems is engaged. We also draw on qualitative research data collected during 2018-2019 with a range of PFN stakeholders.

We argue that agroecology has much to offer in terms of further aligning PFNs to WG policy objectives, promoting quality-led place-based food systems, enhancing environmental resources and ensuring the well-being of future generations. Indeed, agroecology is gaining international recognition as a solution to address environmental challenges and to adapt to crises such as climate change, resource depletion and injustices within conventional food systems. Integrating ecological restorative production methods and principles of democratisation that underpin agroecology with Welsh PFN governance would mean a shift from their current purpose to one that incorporates a more holistic, transformative mandate. To this end, we draw on the 10 principles of agroecology as defined by the Food and Agriculture Organisation (FAO) to understand the extent to which Welsh PFNs align with agroecological praxis.

We conclude by discussing the key challenges facing Welsh agri-food stakeholders in further aligning PFNs with agroecological praxis and cultivating multi-scalar, interconnected agroecological territories. We also consider how existing regulatory frameworks, such as agri-environment schemes, might be leveraged to collectively achieve sustainable transformations in Wales.

### Seeking out the 'potential' in developing provenance food: The case of shepherding in Western Jutland, Denmark

Trine Ørum Schwennesen, Aarhus University, Denmark

This research takes departure in a current Danish research- and innovation project (ProvenanceDK), which aims at mapping the potential of developing provenance foods. Drawing on an 'epistemology of the margins', it addresses this 'potential' of provenance foods by shedding light on non-dominant forms of place-based agricultural practices which can be interpreted as culturally and ecologically embedded within time and space. Methodologically the research traces sheep and practices surrounding the sheep through the Danish agricultural landscape as an example of a marginalized non-human object. In this presentation, a case study of sheep practices in Western Jutland is presented to explore embodied forms of meaning related to shepherding and the enactment of sheep-related practices. The case reveals a richness of different possibilities for exploring different conceptual meanings of temporality, spatiality, freedom, community, care, 'the

good life' and empowerment as expressions of meaningfulness to the humans involved. In the light of provenance foods, the case is meant to open up discussions addressing our ways of thinking about 'potential' both in its material and non-material forms.

#### Gastronomy, craft beer and policy – regional development perspectives

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During the last decades, gastronomy and small scale artisan food production has successively become elevated in terms of its capacity to provide a platform for regional development dimensions. One of the gastronomic subsectors which has shown the quickest growth is the production of craft beer. Since its symbolic starting point at the Great American Beer Festival in 1982, the sector has since grown immensely. In the US, only 44 breweries existed in 1980, whereas today the craft beer sector alone includes over 4000 brewers. In Sweden, the development has been similar, with only around 20 breweries in total in 1990, whereas small scale breweries alone represent almost 200 producers.

This study has its focus on gastronomy, and particularly craft beer, and how the sector is perceived and supported from a regional development perspective. It is done so by investigating the highly rural northern Swedish region Jämtland, which has been successful in terms of small scale gastronomy businesses, also being one of the national leaders in craft beer.

With earlier studies showing that traditional and gastronomy businesses often differ in character, this study aims to further clarify in what ways they are different and have different needs. The purpose is also to investigate how the sector is perceived from a policy perspective. This together provides the foundation for contributing with theoretical and practical aspects on how to support the sectors development.

This qualitative study was undertaken in Jämtland during a time period of three years. The data contains over 25 interviews with small scale food producers, policy makers, and food tour operators, including the entirety of the regions 15 breweries. The data also encompasses place visits, document studies, seminars, as well as formal and informal conversations.

Conclusions show that the producers view the support mechanisms as requiring a deeper understanding of the meaning of running a rural craft food business, which to them means that values come from dimensions beyond pure profit making. Among policy

makers, the gastronomy and craft beer sector is troublesome to support since it deviates from the ordinary paths on supporting development. Also, the different organizations working with gastronomy development could benefit from closer relations and networks amongst each other in order to be more efficient in contributing to the regional development potential of the gastronomy sector.

#### What influence the success of provenance food initiatives?

Martin Hvarregaard Thorsøe, Aarhus University, Denmark

Across the EU, farmers' income from the production of standard agricultural products is decreasing, in many areas domestic products lose market shares to foreign products, and there is a continuing trend of job loss in rural areas. Provenance foods offer a pathway for sustainable rural transformation, but the question is to which extent this potential is realized and which factors condition the success of food initiatives? Provenance foods can be defined as foods with distinct qualities derived from their place of origin and/or production history. The uniqueness of provenance foods derives from their distinct sensory characteristics, geographically specific place of origin, and the tradition and culture associated with food. All these markers of uniqueness must be mediated to consumers. Both natural and cultural heritage is drawn on in the production and marketing processes to generate added value for actors in the food chain, by for example drawing on specific climatic or soil conditions, or traditional or unique food growing and processing techniques. In many EU countries, provenance foods have proven to have a positive impact on national food economies and on national biodiversity indicators. This is achieved through the diversification of the agricultural landscape and a similar diversification of the food markets. However, in other areas particularly in northern Europe this development is less developed. The ambition of this presentation is to review the existing literature to explore the factors that condition the success of provenance food initiatives.

# Working Group 30: Change and resilience. International migration and its impact on rural and mountain regions

Beyond agriculture. International migration in rural labor markets. The case of the Basque Country, in Northern Spain

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Keywords: international migration, labour migration, Basque rural areas.

Basque rural areas are involved in a social and economic restructuring process that started in the late nineties, showing particular features that distinguish this region from others from rural Spain. One of these characteristics is that depopulation has not turned out to be problematic due to the proximity of urban and semi-urban areas and, also, to the demographic increase in the Basque rurality. A migration process that has been gradual and quite heterogeneous, focusing firstly along the nineties on coastal areas with newcomers coming for urban places. At the same time, from the last fifteen years the villages in the interior have been perceiving the settlement of international migration. The paper shows the social and economic diversification and complexity of rural population, paying special attention to international migration in Basque rural areas, as very limited studies have focused on them.

The study examines their demographic profile, and particularly attends to the international migrants' labour market. With that aim, it is analyzed data provided by the Spanish Statistical Institute (INE) from the last fifteen years, as well as some other labour and residential statistics, which had been kept unpublished, provided by the Basque Statistical Agency (EUSTAT).

The results show a relatively heterogeneous profile (and in some way different from urban areas), finding territorial concentrations of migrants depending on their area of origin, coming most of them from Latin America, Rumania and Africa. Concerning employment, the analysis suggest the existence of two parallel labour markets in those rural areas: one composed of local workers, with generally better job conditions, and a second one carried out with international migrants. It can be observed a big presence of these workers in primary sector, service (tourism) and construction. In addition, from a gender perspective the results widely show the occupational segregation of foreign women.

### Co-creation of value in Italian mountain regions: beyond the utilitarian approach to reception facilities for asylum seekers and refugees

Giulia Cutello, Marzia Bona, Raffaele Addamo, Andrea Membretti

EURAC, Italy

Reception centres for refugees and asylum seekers, especially when located in marginal areas, have come to epitomize ill-management and value extraction, thus contributing to

the overall hostile rhetoric towards forced migrants in the Italian public sphere. The arguments, from different poles of the political spectrum, point on the one hand to the degrading conditions for asylum seekers and refugees and to the mis-allocation of public resources, on the other. Yet case studies point to the potential of successful socioeconomic inclusion of asylum seekers and refugees also in rural and mountain areas.

This paper presents two case studies of reception facilities located in mountain regions in the North-East of Italy. In the two cases considered the marginal location of reception centres turned from a means of spatial segregation into an opportunity for the valorisation of local resources and innovation. In Cadore (BL) and in Lavarone (TN) asylum seekers and refugees have managed to successfully enter the local labour market, characterized by a significant prevalence of the touristic sector. This paper considers enabling and hindering factors that intervened in the access to employment, paying attention to the processes of adaptation and socio-cultural renegotiation triggered by the arrival and settling of asylum seekers in these two Italian mountain regions. Based on indepth interviews with multiple actors, the paper explores their practices and role in such processes. It focuses on the interactions among the specific socio-economic characteristics of the highlands, the actors involved in the receptions activities and the alternative practices experimented. It considers the activation of nested markets (van der Ploeg, 2016) as well and the development of a welcoming culture (Gretter et al. 2017; Weiß et al. 2017).

#### Refugee integration and rural resilience

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Most research on integration of migrants has focused on urban destinations. Our project focuses on rural places, many of them have long experienced significant outmigration. The influx of refugees in 2015 implied settling of refugees in rural and peripheral areas. This might represent new opportunities for challenged communities, possibly halt the population decline and increase municipal economic space of action. Our project(s) explores into everyday life practices of refugees placed in small towns and rural areas in Denmark and Norway and examine what role local communities have played in their integration.

The empirical material is mainly based on fieldwork and qualitative interviews with refugees and local volunteers that have started activities for refugees in the local areas. The project builds on two key theoretical approaches; the socio-economic development

of rural localities: resilience; and integration and refugees' sense of belonging to the rural places they are in.

Preliminary results show that local integration is challenged by structural factors such as lack of cheap rental housing, few and expensive transport options, busy everyday lives and different social practices. Many refugees come from urban areas where social practices and their use of the local area was more informal and characterised by an outdoor life which can clash with local social life being more formalised in associations and limited by the cold climate, as well as lack of education and work opportunities. Local integration and belonging seem to be stimulated by other migrants in the areas, refugee children going to school as well as active local people helping newcomers to navigate in their new everyday life.

# Exploring the positive impact of refugees in society: Social, cultural and economic contributions of Hazara Afghan humanitarian immigrants in the suburban and regional South Australia

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University of South Australia

Keywords: Refugees, Hazara Afghan Humanitarian immigrants, South Australia

In this project we are trying to identify the ways (social, cultural and economic) in which humanitarian migrants transform, and in turn, are transformed by the migration settlement process in regional Australia.

We are planning of conducting forty in-depth interviews with Hazara humanitarian migrants and ten interviews with non Hazara local residents/stakeholder representatives. We will investigate the process and negotiation of cultural difference, cooperation, and conflict related to the settlement and contributions of the Hazara humanitarian migrants across four broad ranges of community spheres:

- (a) economic activities (e.g. business development, employment, investment, innovation),
- (b) civic activities such as participation in community organisations/events;
- (c) sporting contributions (football club),
- (d) impact in education settings (local primary school),

We expect that interviews will also provide perceptions and feelings about living in the community; experiences of social change since arrival; interactions with diverse others in formal/informal situations; perceptions and feelings about everyday strategies used to negotiate, social, cultural, economic boundaries; the ways that people negotiate cultural and religious difference; experiences of, and feelings about inequalities and disadvantage, and perceptions of their causes.

#### Migration and Pentecostalism in a Mendicant Roma Community in Eastern Moldavia

Lehel Peti, Romanian Institute for Research on National Minorities

The paper analyzes the changes in the religious and social life of a Roma Pentecostal community in an ethnically mixed village, and the relationship between migration practices and conversion to Pentecostalism. The first part of the paper presents the Roma community and outlines the circumstances under which Pentecostalism emerged among them. Thereafter, the two types of migration practiced by the Roma will be presented: migration focused mainly on northern European countries, based on panhandling, and migration aimed at longer term residence in the countries of Western Europe. The analysis points to the importance of foreign migration-related income in the changing situation of the Roma, as well as the role of the Pentecostal religion in the modernization changes that began in the Roma community.

#### Hosting Refugees in Mountain Areas as a new Form of Social Innovation

Manfred Perlik, University of Bern, Switzerland, and Université de Grenoble, France

This presentation deals with (a) the question whether migrants by force or by poverty, coming from the global South to peripheral areas in European, might be an opportunity for their hosting regions. Furthermore,(b), how migration can support the efforts of social actors in marginalized areas to develop social innovation with the aim to resist to socioeconomic decline. It presents experiences from the H2020 project "Social Innovation in marginalized rural areas" (SIMRA), the COST action EMPOWER-SE and the network "Foreigners in the Alps" (FORALPS).

The presentation starts with the question "Why should we host refugees at all?" beyond the moral humanitarian aspect and beyond international conventions in order to find supplementary reasons for welcoming migrants.

The rationale in the contested debate on refugees might be: Hosting refugees is derived from the normative aim of social inclusion which can become a practice of social innovation towards the standards of United Nations Sustainable Development Goals. Hereby it is assumed, that inclusive societies are more sustainable than excluding societies.

Hosting migrants in mountain areas is under several aspects a social innovation and contributes for cohesive societies:

- taking the responsibility for the colonial post-colonial exploitation of the Global South
- residents' consciousness on their own role in the context of global migration
- universalistic perspective against a partial interest strategy
- enlarging the demographic potential of marginalized peripheral areas
- national and supra-national solidarity to cope with common problems (the counter-model is an identity-dominated ethnically purified Europe)
- mountain areas: benefitting from the solidarity of the wealthy urban areas by getting attention, visibility, qualified jobs etc.
- for the migrants: benefitting from another model of better life which might be less exposed to individual competition

The presentation will explain the options and opportunities for mountain regions with up to five short case studies: In Italy we will present two examples from Alpine valleys in Lombardy and Piedmont. In Germany we see in Bavaria the paradox between rejection on the governmental level and acceptance on the local level. In Eastern Norway we present an example of hosting refugees which has become a case study in the SIMRA project. In France, we show a project at the fringes of the Pyrenees initiated by an artist who brought together refugees with migrant-friendly and migrant-hostile people.

#### Conclusion

Although it seems to be advantageous to host migrants in urban areas because of better infrastructure for integration and administration and because there are better working opportunities for the migrants within larger labour markets, migrants in mountain areas may get a better support if they become visible and well known by the locals. Locals may benefit from migrants by raising the number of population, the input of externakl knowledge, and the multiplied social interactions, which, all together, reduce the lack of

agglomeration economies in the mountains. Finally, it helps to reduce territorial cleavages between prospering urban and declining rural societies. "

# Working Group 31: Benefits, challenges, social learning and controversies around Local Food Systems

The Principles of Alternative Food Movements and the New Gastronomy Manifesto. Evidence from Eastern Europe

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Keywords: alternative food movements, local food products, family farming, social gastronomy, short food supply chain

For a long time, gastronomy embedded the knowledge involved in preparing and eating fine food and positioned itself as an art. As such, it has often been considered a product of the elites, intended for elites, enjoyed by gourmets. Contemporary gastronomy retained the idea of using sophisticated techniques and high-quality ingredients to preserve its status, but at the same time embraced the principles that militate for an alternative to the doctrine of neoliberalism. Concepts such as organic farming, local food, fair trade, civic agriculture, sustainable food systems, food justice, food sovereignty, short food supply chains, quality foods represent the creed of alternative food movements that challenge the negative consequences of the industrial food system. The presence of these principles is fundamental in countries where agriculture has an important role in the socio-economic context and especially in rural areas where family farms are predominant. Among the countries of the European Union, Romania has the largest number of family farms. Given that their production is small and that almost all forms of association are absent, one of the biggest problems Romanian rural small producers are facing is the impossibility of penetrating the market. Consequently, the presence of local food products in the conventional food supply system is reduced. European and national agricultural policies provide tools to support rural small farmers, especially to support production, but fail to connect the producer with the urban consumer. We observed that in the case of Romania, grassroot movements and NGOs play a determinant role in making this connection, involving various actors of the agri-food sector. The objective of this study was to determine the factors that contribute to the valorization of Romanian local food products and the role played by the actors of the food system in this approach.

To accomplish this, the broadest and most coherent initiatives at national level were selected and analyzed. The first case study was centered on an international food movement's project (the Slow Food Chefs' Alliance) that aims to create and to strengthen the direct relationships between chefs and food producers and to promote good, clean and fair products made locally on a small scale. The second case study focuses on Romania's participation in The European Region of Gastronomy project that aims to support local economies by developing awareness of wider food issues. The third case is focused on a regional approach to village discovery and the promotion of local products through the organization of gastronomic culinary events, supported by the Association My Transylvania.

#### Small farms, evolving typologies to support policy making

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Keywords: small farms, farm household, food systems, typologies, economic integration, self-provisioning

There is a long standing theoretical and empirical debate on structural change in farming and the implications for the competitiveness of the agri-food sector, sustainability and territorial development.

Small family farms represent the largest number of farmers in Europe: their decision-making processes take place within farm and household needs and dynamics. At the same time, small farm households are connected to territorial food systems through various forms of economic integration. These features call for more salient and updated descriptions of small farm household requirements and dynamics for policy making processes and better targeted support.

This paper departs from a conceptual framework, which considers different dimensions and combinations of self-provisioning and economic integration and develops a typology of farm households. It draws upon qualitative and quantitative primary data gathered in selected regional food systems (NUTS 3), across twelve European countries as part of the European research project SALSA (http://www.salsa.uevora.pt/). Results illustrate the interactions between self-provisioning, i.e. the extent to which farm production is directed to fulfilling household's consumption needs, and integration with markets, i.e. the extent farm production aims at being commercialized on one or more markets. This

contribution provides a detailed understanding of the nuances around these variables across countries, and the interplays that take place in each context, in relation to external conditions (e.g. economic trends and political drivers) and internal factors (i.e. production sector, diversification, relations and capabilities, etc.), thus enabling a more realistic view on small farming.

### From a civic food network towards a local food movement. Strategies and dynamics of collective action in changing local food governance

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Keywords: Civic Food Network, social movement, food governance triangle, Movement Action Plan (MAP), social movement strategy

The notion of "Civic Food Networks" (CFN) highlights the importance of the civil society for introducing structural changes in the agri-food system. I argue that the transformative power of CFNs reinforces if it takes on the character of a social movement. I will investigate this assumption relating to the case of a Civic Food Network fighting for the prohibition of pesticides in the municipality of Mals, Italy. First, I will present a strategic and processual model of changing food governance through active citizen's engagement drawing on the food governance model by Renting et al. (2012) and social movement theory. Based on this model, I will analyze the CFN's social movement character by identifying the main stakeholder groups in the sphere of state, market and civil society, their goals and action, and the outcomes of the movement in four different stages. Subsequently, I will focus on the dynamic interplay of the movements stakeholders playing different roles at different stages of the movement. The main result is that the movement's success is due to the dynamic interplay of the actors within and ouside the movement that is marked by conflict and collaboration.

#### The role of food value chains in local food systems: A case from Ontario, Canada

Monika Korzun, University of Guelph, Canada

Local food systems are increasingly examined as a means of challenging and addressing the issues posed by the industrial food system. Direct marketing is largely promoted as a means of distributing local food. Direct marketing allows producers to deliver agricultural products directly to consumers through a variety of marketing channels such as roadside stands, farmers markets and community shared agriculture. However, direct marketing requires a set of skills, such as social media skills or people skills that many farmers may not have and a set of practices in which many farmers may not wish to partake, such as

going to farmers' markets. In addition to various criticisms, some claim direct marketing works most effectively for small farmers and are not always suitable for mid-scale farmers. Market opportunities that are capable of providing the scale and price point that allow mid-scale farmers in North America to remain viable are decreasing. This makes it difficult for mid-size farmers to find a market and stay competitive. The loss of mid-scale farms will not only result in the decline of what is often perceived as an idealized icon of rural North America, but it will also impact other rural industries as large industrial farms are more likely to source their inputs from outside local and regional communities as well as result in more soil erosion and less crop diversity. Values-based food supply chains or food value chains provide a third option not only for mid-size farmers, but for all farm sizes. Food value chains can play an important role in meeting the increasing demand for local, regional, sustainable and other value added products in North America. Food value chains have been increasing in Canada. Online distribution channels, grocery stores and mobile markets have sprouted to meet the demand of local and ecological food while handling high volumes of quality food and aiming to build sustainable local food systems. Can food value chains meet the increasing demand for local food? What are the opportunities and challenges that farmers face with food value chains? Do farmers believe food value chains can contribute to a more sustainable and resilient food system? This study will explore the role of food value chains in local food systems in Ontario, Canada via the perspectives and experiences of farmers who are partaking in food value chains.

### The local food system in the genius loci - the role of food, local products and short food chains in rural tourism

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This article explores what roles locally produced, processed and marketed food (Local Food System) can play in rural tourism and local socio-economic development. High value added food and drinks, based on small scale, supposedly sustainable local production often provides a large part of the touristic attraction of a territory, thus, are important elements of the genius loci (the spirit of the place). Through business opportunities, multiplier and knock-on effects they can also significantly help to maintain local economy, culture, traditional production systems, social networks, etc. However, there are many controversies. When local food system means local food for extra-local people, then environmental sustainability becomes at least questionable, visitor pressure can cause social, economic, and environmental degradation, resources, profit, and power can be

overtaken by incomers or external investors, leading to conflicts, at the end damaging the local resource base.

This article is the first account of a 3 years research project (LO-KÁLI, supported by NKFIH) that investigates the ongoing development process in the Káli-basin, Balaton-uplands, a very successful region of rural tourism in Hungary. We investigate what (rational and 'irrational') attitudes, norms, values influence the behaviour of both producers, keeping them in the rural area and tourists/customers, making them to pay premium price for local food. We contrast the perceived image ('genius loci') of the region ('Hungarian Provence', cultural landscape, gastronomy, social and environmental sustainability) with the realistic impacts of the current development process on the environment and the general wellbeing of local economy and society.

Concentrating on a relatively small geographic area and using both quantitative and qualitative methods in a multidisciplinary framework will allow us to collect substantial new data, create a dynamic framework for analysis and contribute to both scientific, methodological and policy objectives.

### Can a Food Strategy bring about a more locally oriented food system? The case of Stockholm, Sweden

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Keywords: Food strategy, Stockholm, local food system

This paper presents and discusses a political strategy to support a sustainable food system in an area where local food production is a fraction of total food consumption. The case that we present is Stockholm County and the Food Strategy and Action Plan that was developed there during 2017-2018. One of the aims with the strategy – that we focus on in this paper – is to increase local production of food. Other important goals are to decrease vulnerability in the regional food value chain, bring urban and rural areas closer to each other, to use the innovativeness that exist in the region, and to contribute to regional, national and global climate and development goals. The Strategy and Action Plan contains a description of the current situation in the county concerning food provision and production – a large part of food is imported – as well as 17 goals to be obtained before 2030. Each goal is accompanied by one to three action points, to be carried out during the next two years. We explore these goals and actions in order to learn about their ability to support the development of a local food system in Stockholm. Especially

three goals pertain to local food systems: 1) the supply of Swedish and local foods should increase, 2) the number of small food businesses should increase, and they should be profitable, and 3) public procurement of Swedish and locally produced foods should increase. Actions include: support to improve business know-how among farmer and small food businesses, increased procurement of food of Swedish origin, improvements of food planning in municipalities in case of risk situations, information campaigns, and creating meeting places for local food actors. Importantly, responsible actors are identified for each action point and the ambition is to work in collaborative and process oriented ways. While only three percent of Sweden's arable land and three percent of Sweden's farms are situated in Stockholm County, a fourth of the Swedish population lives there. This implies a number of opportunities, not only for a more locally oriented food system, but also for the region as a whole as well as for the national food production.

### Participatory Guarantee Systems for small farms and local markets: involving consumers in the guarantee process

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Keywords: Participatory Guarantee Systems, local food systems, geographical indications, producer-consumer networks, digital representations

This paper addresses the development of alternative certification systems, known as Participatory Guarantee Systems (PGS) and intends to rethink schemes of geographical indications (GI) and traditional specialties through a participatory approach. In a context of growing criticism of conventional third-party certification, PGS aims to construct an alternative process of guaranteeing the authenticity of GI with the active participation of producers, consumers and other stakeholders engaged in the production chain.

Using the case study of an existing producer-run PGS of 'Feta' cheese with the PDO label 'Terra Thessalia' (Thessaly, Greece) this paper contextualizes and analyzes the PGS scheme and explores the future role of consumers by allowing their direct participation in the guarantee process. Based on semi-structured interviews conducted with consumers in rural and urban areas and focus groups with consumers, farmers the research explores: a) consumer awareness and expectations of the PGS by analyzing their perceived needs, values, preferences and opinions concerning the identity, quality and guarantee process of local food and GI, b) the effect of various PGS features (material and immaterial) of the territorial resource (e.g. pasture lands, flock, breed, animal feed proximity and welfare, health and quality of products, environmental footprint,

traditions, etc.) on consumers' purchasing behavior for the product guaranteed by PGS. In order to better visualize the existing PGS features, the interviews are complemented by the use of 3D spatial representations as a way to consult consumers, share information and get their feedback.

In this way the research aims to explore how the 'consumer' perspective can improve and reinforce the effectiveness and legitimacy of the existing PGS by identifying challenges and influencing factors associated with the guarantee process and PGS recognition. We further intend to portray in an understandable way the consumer's 'link' with the place of production, authenticity and specificity of the geographical indication and support a common vision between consumers and producers by enhancing knowledge exchange, participation, reciprocity, transparency and trust.

### Challenges and Opportunities for Mixed Horticulturists and Small-Food Businesses in Scotland

Christina Noble, James Hutton Institute

Keywords: FNS, mixed horticulturists, small-food businesses, Scotland, niche, local food system

SALSA (Small farms, small food businesses and sustainable food and nutrition security) an H2020 project, seeks to examine food and nutrition security (FNS) from the scale of small farms and small food businesses across selected European and African regions. Using a food systems approach, it allows for an appreciation of small farms and businesses as actors other than simply food producers. In Scotland, the picture of farms and small food businesses (<10ha and less than 5 employees) is not well developed, and the project aims to address this by exploring the local food systems in selected areas, namely Perth and Kinross and Stirlingshire.

This paper will set out the challenges and opportunities facing small farms (SFs) and small food businesses (SFBs) in their local food system. Small farms and SFBs utilised in this study represent a diverse range of products and services and this paper specifically focuses upon mixed horticulturists including market gardeners and small food businesses using vegetables and soft fruit produce.

A significant portion of SFs and SFBs attribute only 40% of their overall household income to be derived from these enterprises and many acknowledge the necessity of another income stream to support the farm and/or business. Yet, the desire to produce food at the small scale is a source of pride for many, citing perceived environmental benefits from

their growing practices (organic), sustainable and nutritious food products, a high degree of traceability and transparency and an increased level of customer engagement in local foods. In order to be able to make a living or grow the business, participants feel they are encouraged to produce and sell niche items or services in order to find a foothold in a market dominated by larger retailers and supermarkets. The perishable nature of produce from mixed horticulturists and the degree of uncertainty around quantities and availability of certain produce add another layer of complexity to the future potential to FNS from these enterprises.

Qualitative interviews as well as focus groups with both farmers and businesses allowed the opportunity to explore challenges and opportunities, they currently face in their local food system, notably the specific market constraints, social and cultural norms surrounding local produce and the governing infrastructure and policies within which they operate. The findings from this study will firstly provide a more detailed picture of the current markets and social norms affecting mixed horticulturists and small food businesses in Scotland in the context of a local food system. Secondly, by assessing the governing structures SFs and SFBs operate under, the implications these hold for future policy changes can be identified.

### Ambivalences in the Governmentality of Alternative Food Networks: convenience, social selectivity and marketability

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Recently, a number of resourceful community-driven initiatives for local food production and retail have arisen in Luxembourg, where low organic agricultural rates are paired with high consumer demands for organic produce. The main impact that heterodox actors can have seems to be the creation of resourcefulness from innovative niches, not designed to be upscaled but spread by ubiquitous networking. The motivations of actors involved in such social movements, albeit diverse, tend to stem from a stance of care and ethical (self)government, often using community self-organisation-tools.

Based on qualitative interviews and participant observation, we expand on four case studies of fruit and vegetable production as well as unpackaged and socially responsible food retail in Luxembourg. One has been established since the 1980s with over 200 employees, partly in social insertion measures, producing and importing organic fruit and vegetables. Since 2014, three significantly smaller initiatives with higher citizen involvement have emerged. These recent initiatives are more radical in their agroecological and/or permaculture practices, proposing a political enacting of circular economy precepts.

Yet, daily practices stay embedded in social, cultural and economic constraints and in routines, which are built on tacit knowledge and engrained convenience. By analysing ethical entrepreneurship and the governmentality at its core as well as ambivalences and paradoxes within convenience, social selectivity and marketability, this paper touches on interrelations between food policies and the politics of contested claims for, and practices of, social and environmental justice.

### Alternative To What? The participation of the small(est) European farms in regional food networks

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Keywords: small farms, alternative agri-food networks, SALSA, Europe

There is a well-established literature that focuses on Alternative Agri-food Networks (AAFN) in diverse European and North American regions. As this literature has matured, several scholars have noted the development of two converging strands within these accounts. The first, often rooted in the North American experience, focuses on the potential of these networks to provide a radical alternative to the corporatist model of food production. A second strand emerging out of the European context has focused more on the potential of localized food networks to support rural livelihoods. Where these two strands seem to converge is around their interest in the transformative potential of 'scaling up' or extending these networks towards a more sustainable and equitable food system

But what the existing AAFN literature has so far not contended with is the presence of much smaller farms, which may be characterised by a range of production models, from semi-subsistence to lifestyle or hobby farms. These smallest farms sometimes appear in discourse as idealized peasants, who, by virtue of their low intensity practices, function as the romanticized 'before' to the after(math) of big agri-business. Yet there is very little consideration of the contemporary and future role of the smallest farms in calls for a radical (or even reformist) transformation of the agri-food system. What would the participation of semi-subsistence or hobby farms in alternative food networks look like? And would these farms be better off for their participation?

This paper draws on insights from research within the H2020 SALSA project, which focused on European and African farms no larger than 8ha. For the purpose of this paper we focus on European reference regions only. Based on survey and focus group data with small farms and small farm stakeholders, we explore the types of AAFNs the smallest farms participate in and the contextualising factors that shape how and if they do so. We

then reflect on small farm participation in AAFNs by highlighting factors that small farmers identify as the key conditions that enable them to continue farming, as well as their identification of the most significant challenges and threats to this. The paper concludes with reflections on the current state of smallest farm participation in AAFNs, and some tentative conclusions about the conditions that would enable the expansion of their participation. Finally we consider the potential outcomes or trade-offs of increasing smallest farm participation in AAFNs.

### Promoting local food products in an urban environment: Exploring farm-to-restaurant relations and supportive urban government roles in the city-region of Groningen

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Keywords: local food systems, farm-to-restaurant relations, urban governments, motivations, perceived barriers

This paper asserts that urban restaurant chefs and managers are relevant stakeholders for urban governments to involve in their local food system advancement efforts, for they can have an important role in bridging between urban and rural, act as opinion leaders and introduce and promote regional products and food traditions to their urban clientele. In this paper, I aim to explore the motivations of urban restaurants to promote local food products, the barriers urban restaurants and their local suppliers experience in their local food procurement efforts and their views on potential roles for urban governments in supporting farm-to-restaurant relations. To achieve this, I have conducted semistructured interviews with eight restaurant chefs, owners and managers based in the city of Groningen (the Netherlands) and nine urban and rural farmers, producers and distributors these restaurants regularly source local food products from. Additional data collection methods include a content analysis of the menus, websites and social media pages of twenty-two urban restaurants and a focus group with four officials of the Municipality of Groningen involved in food policies and programmes. The results show that participants are generally satisfied about and experience trust and reciprocity in the farm-to-restaurant relations that they are involved in. However, the case-study also demonstrates that restaurants, suppliers and urban government officials can have very different needs in, conceptions of and motivations for promoting local food products. Moreover, a severe gap can be identified between urban restaurants and the urban municipality. While both sectors actively propagate the local food discourse, they seem to approach it from different angles. Additionally, restaurants are largely unaware of the food policies and programmes their municipality is involved in and the municipality is

experiencing difficulties to get in touch with and engage urban restaurants. The insights presented in this paper can help to cultivate understanding amongst the various stakeholders and encourage urban restaurants, local suppliers and urban governments to join forces in developing profitable and sustainable arrangements and infrastructures for everyone, for instance in the form of a local food hub network.

### Farmers' markets in Japan: creating new spaces of action for alternative food initiatives?

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Among industrialized countries, Japan stands out as the one who has gone through some of the most dramatic and swift changes in the structure of its agri-food system. These include both changes in the agricultural system (rapid intensification and mechanization, followed by an equally rapid decline and marginalization of the agricultural sector and rural areas) and in the food system (Japan is now importing a large amount of its food, and one of the reasons is the "westernization" of food culture). Japan, however, has also a long history in relation to the development of alternative food movements, which started emerging in the 1970s as a response to the failures of the domestic agri-food system. One more recent example is the development of farmers' markets, which have a shorter history than in the US and in Europe, having become popular only in the past ten years. While the concept of 'farmers' market' had been initially launched by governmentled campaigns to support the promotion of locally-grown food, farmers' markets expansion has been in large part grassroots-driven. Farmers' markets are being established, among others, by local organic farmers' groups and by NPOs, and one of their main objectives is that of creating opportunities for interaction and communication between producers and consumers, and by extension between rural and urban areas. Moreover, farmers' markets are increasingly becoming a space for socialization, leisure and community-making, the kind of "third place" that is often missing in contemporary Japanese urban landscapes. Finally, farmers' markets are opening up opportunities and spaces for the organic farming movement, so far marginalized as a result of unsupportive government agricultural policies. This research examines three farmers' markets, all established through the efforts of organic farmers' and local NPOs, and investigates the reasons behind their creation, the objectives of their administrators, the interaction among the different stakeholders involved, and the visitors' response. By drawing upon interview and questionnaire survey data, we attempt to make a critical examination of the positive outcomes, as well of the problematic aspects, of this fledgling alternative food movement.

# Working Group 33: Family Farming: Agriculture and Rural Development

Public participation & Socio-technical controversies over wind power in rural communities

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Keywords: Socio-technical conflicts, Sustainable rural development, Community acceptance, Wind Power

Studies show a gap between national and local level of support in wind power projects, with recent projection indicating an overall decrease in MWh installed in Denmark. Recent data show that projects have been turned down due to local opposition in rural communities. Therefore, conflicts in wind power development in Denmark have fostered the interest of public participation. Often projects are deployed with a rigid technical/scientific attitude, whereas it is suggested engaging the local community with a more appropriate collaborative approach. This paper applies an adapted framework to analyse the influence of public participation approaches on the boundary dimensions between stakeholders. The analysis features three cases, each with a different approach towards public participation. The conclusion is that public participation has an influence on the boundary dimensions of wind power projects. It is important to include the local community early in the planning process, acquire the capability of brokering between communities of practice is crucial and empowering members of the local community in wind power projects will increase social acceptability.

#### Family farming in Switzerland, retirement, responsibility, resilience

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Keywords: Family farming in Switzerland, retirement, responsibility, resilience

The qualitative study about retired former farmers in Switzerland this paper is based on draws semi-structured interviews with eight women and seven men aged 63 to 70, who are retired or will retire within a year. All but one have handed over the farm to a next

generation, mostly to a daughter or a son. One couple moved to the nearby village, while all other interviewees still live on the farm together with their successors. All still feel responsible for the farm. On one hand retired farmers assume responsibility when working on the farm. This support for the younger generation is traditionally anchored and expected in exchange to care elderly farmers when becoming frail. On the other hand, the study shows that former farmers assume new responsibilities that are not part of this agreement between the generations: The younger generation is more often working offfarm, and the presence of the elder generation is vital to make sure that the animals are well, that someone is there when material is delivered or when children return from school. These duties go beyond the expected responsibilities of former farmers, restrict to a certain extent their freedom and in some cases force them to work beyond what they can. Most interviewees even make financial restrictions when providing direct financial support for the younger generation: They alleviate the financial load by paying bills for both households or by cooking for the whole extended family. The elder generation fears becoming physically too weak for working on the farm. They perceive themselves as a burden for the younger generation in case they don't contribute with work but require care.

The changes in delegating and taking responsibilities in intergenerational settings can be seen as a strategic reaction to foster the resilience of family farms in a politically, economically and socially changed setting. They seem to challenge the solidarity between the generations. And they confront retired farmers with a new situation and with issues they are not used to address.

#### Benefits, challenges, social learning and controversies around Fenalar fra Norge

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The regulation and labelling scheme for PDO, PGI and TSG was set up in Norway in 2002, modelled on corresponding systems for GIs in the European Union. The implementation of GI in Norway was demanding, causing local producers, administrators, consultants and others to make a significant and all-round effort to adapt the scheme to Norwegian food culture, and Norwegian food culture to the scheme. This paper probes the theme of this mutual adaptation work, and its consequences. Norway makes up the food cultural context in this study, whereas Fenalår fra Norge (salted, dried and matured leg of lamb and mutton of Norwegian origin) is used as an example of a GI product.

The analysis is based on diverse forms of empirical material, such as document studies of laws, policy documents, etc. and interviews with persons responsible for working out product regulations in producer organizations. Interviews have also been conducted with key informants representing public administrative bodies administering the regulation. The analysis is not dedicated to any specific methodological or theoretical tools but takes inspiration from an adapted set of perspectives to describe and understand the cultural adaptation work of GI schemes and products.

Protecting Fenalår as a GI in Norway and EU is used as a concrete example on dissonances, negotiations and struggles among actors in a multifaceted foodscape, where some block and some enhance transitions. Fenalår is selected as object for analysis because it is one out of two Norwegian products also registered as third country GI-products in EU - making the adaptation work and its consequences even more complex and intriguing. Local and extra-local stakeholders in the qualification process of Fenalår as a GI often have different and conflicting interests and responsibilities. The dynamics of knowing and producing food in such a contested arena is negotiated, adapted and transformed – sometimes in a mutually enhancing and locally beneficial way, and sometimes in more conflictual ways. We analyse the relationships, interconnectedness and agency of niche innovations, local and non-local appropriations, as well regime hegemonies. This opens up for a the theoretical perspective where the evolution of Fenalår as a GI in Norway and EU can be understood as a chain of adaptations and adaptive practices necessary to unite the dynamic ordering of modern global regulations with the food cultural status of traditional local products.

Through our description and understanding of the tensions and local problems of GIs, we identify and develop a typology of constructive and destructive adaptive and transformative practices. This typology can help to support relevant policies to understand and solve current controversies within the GI sector.

### Small farms as potential intervention points to improve the sustainability of food systems

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Keywords: small farms, sustainability, food and nutrition security, agricultural development

Adoption of a systemic approach to understanding food issues is imperative if we are committed to achieve the goals set in the 2030 Agenda for Sustainable Development. This is because the processes affecting food define the linkages between people, prosperity and planet. Food systems' development depends on natural resources, and paradoxically, food systems are currently also responsible for their depletion and degradation. In order to ensure that people have access to safe and nutritious food, in suitable quantities, natural resources need to be managed and used through sustainable and effective practices.

Since the industrial revolution, food systems have been largely dominated by large-scale farming, which benefits from economies of scale and increases in productivity and efficiency. Large-scale farming is also closely connected to the supply chain, through which it is granted bargaining power to negotiate and play within global markets. This has resulted on smaller and alternative types of farms – and farming practices – undergoing detrimental consequences for their development and continuation. They have become the unseen players in policy with all the negative consequences this entails.

In spite of all this, small farms continue to exist today in many parts of the World, especially in Europe; generating employment, forging communities, and growing food for thousands of people, as well as holding together the fabric of rural landscapes. Thus, small farms could be an effective point of intervention in food systems to increase their sustainability. However, little is known about what specific role are small farms currently playing in food systems, or what structural and socio-economic characteristics and factors shape the dynamics within their food systems.

This paper presents a comparative analysis of the empirical case studies of small farms in 12 Mediterranean regional food systems located in 6 different countries: Spain, France, Portugal, Italy, Greece, Croatia and Tunisia. Quantitative and qualitative data was drawn from 187 key expert interviews, 355 interviews to small farms and 9 focus groups in total. Results show both similarities and differences across food systems related to territory, local implementation of sectoral regulations, small farmers' profiles, networking strategies, and governance patterns. Identified variables hinted at the diversity.