

Sustainable food and nutrition security: Is there a need to pay much more attention to smaller farms, smaller food businesses and local food systems?

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Abstract

This paper brings together relevant theoretical perspectives and insights that we want to test in the new Horizon 2020-funded research programme ‘*Smaller farms, Small Food Businesses and Sustainable Food and Nutrition Security (SALSA)*’. We briefly outline the novel integrated multi-method approach that we want to apply at international and regional levels in Europe and Africa. Explicit references will be made to the particular values and goals that underpin smaller farm systems, small food businesses, their role in local food systems and their capacity to contribute to sustainable FNS. In doing that we pay particular attention to boundary issues and the way we want to address them.

The main part of the discussion focusses on the need for gaining a better understanding of the idiosyncrasies of smaller farms and more localised food systems with their relative strengths and weaknesses. The general background for our discussion is the increasingly globalised, uncertain and resource-constrained world. In the discussion, we pay particular attention to the capacity of smaller farms to contribute to FNS in different regions and contexts. Related to this we examine the dynamic properties of smaller farms and their capacity to adapt to changes in their economic, social, technological and natural environment. We explore the balance between the social, environmental and economic dimensions of sustainability in the development of smaller farms and the potentially higher resilience of smaller farm production.

We expect that the feedback received from workshop participants will contribute to finalising our implementation planning and open up numerous opportunities for cooperation with the Farming Systems Research and Extension community.

1. Introduction

1.1 Sustainable food and nutrition security

Following the recent global crises, which also affected food distribution and prices, food and nutrition security (FNS) has become a major concern not only in developing countries but also in Europe (EU SCAR 2012; FAO *et al.* 2014). According to the Food and Agriculture Organization of the United Nations (FAO), FNS is achieved when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (WFS 1996). FNS is widely recognised as having four components: the availability of nutritious and safe food, food access (including affordability), food utilisation, and food stability (WFS 1996; FAO 2006, 2008).¹ To date, most attention has focused on food availability, i.e. increasing the production of food. This in turn is most commonly envisaged through the intensification of production on large-scale farms, through implementing technological advances and achieving economies of scale. Sustainable intensification is a key notion in the more recent discourses (EC 2014a).

What is often neglected is food access, especially for low-income groups (HLPE 2013). Closely related with that is the important role that smaller farms might play in local food systems related to

¹ http://www.gecafs.org/research/food_system.html;
http://ec.europa.eu/agriculture/rural-area-economics/briefs/pdf/02_en.pdf

food access and utilisation. A closely related question is the resilience of the population in the face of systemic shocks (e.g. climate change, commodity price fluctuations). FAO stated in its annual flagship publication the State of Food and Agriculture (FAO 2014b) that there are more than 570 million farms in the world, and that about 94% of the world's farms are less than 5 hectares in size. Quite a few recent studies have argued that smaller farms, smaller food businesses and local food systems might play a rather significant role in FNS. Some studies go further arguing that smaller farms and food businesses play an even larger role for the resilience of these systems and sustainable FNS, and that this role could be strengthened further if smaller farms and food businesses were adequately supported.

The questions we want to raise in this paper focus on the position and role of smaller farms and smaller food businesses in food systems. We will examine the importance of the socio-economic, sustainability and resilience dimensions of FNS and challenge the conventional productivist view that emphasises the supremacy of commercially focused, capital-intensive and often large-scale agriculture. The main part of the discussion focusses on the need for gaining a better understanding of the peculiarities of smaller farms and more localised food systems with their relative strengths and weaknesses. The general background for our discussion is the increasingly globalised, uncertain and resource-constrained world. The discussion in this paper and feedback received from the Farming Systems Research and Extension community will help to shape the implementation of the new Horizon 2020-funded research programme '*Smaller farms, small food businesses and sustainable food and nutrition security (SALSA)*' that is co-coordinated and managed by the three authors.

1.2 The SALSA project

The new SALSA research programme (2016-2020) is to contribute to a better understanding of the current and potential contribution of smaller farms and food businesses to FNS. **Table 1** provides some basic information.

Table 1
Some basic information about SALSA

Smaller farms, small food businesses and sustainable food and nutrition security (SALSA)	
Funding	European Commission, Horizon 2020, SFS-2015-2, SFS-18, 5 million Euro
Period	April 2016 – March 2020
Project type	Research and Innovation Action (RIA), multi-actor
Co-ordination	University of Évora - Instituto de Ciências Agrárias e Ambientais Mediterrânicas (ICAAM), Évora, Portugal
Other countries involved	Cape Verde, Ghana, Greece, Italy, Kenya, Latvia, Norway, Poland, Romania, Spain, UK, Tunisia
International organisations	African Women in Agricultural Research and Development (AWARD) Food and Agriculture Organization of the United Nations (FAO)
Practice partners	Savannah Young Farmers Network (SavaNet) Federation of Italian Farmers (Coldiretti)
Central work planning component	A set of 30 reference regions where standardised information on small-scale farming, other small food businesses and FNS will be compiled both for SALSA related analyses and consultations as well as ongoing monitoring

Note: For more information or a document where the project is presented in more detail, please contact authors.

SALSA pays particular attention to effectively engaging with stakeholders to cut across classical boundaries in food system structures and situations, Europe-Africa relations, research, policy and practice.

SALSA will pioneer a novel integrated multi-method approach that combines quantitative, qualitative and discursive approaches. The project will start by kicking off a transdisciplinary process of review and theory building. This is followed by an initial spatial assessment that will include innovative methodological pathways and more effective uses of existing databases (incl. the use of SENTINEL-2 satellite images for acquiring detailed spatial information about smaller farm distribution). This first assessment will be complemented by a transdisciplinary in-depth assessment of food systems in 30 reference regions that will feed into the participatory multi-scale analysis as well as providing the basis for the analysis of governance systems and support frameworks. The in-depth analysis focusses on the relations between smaller farms and FNS in different contexts. The 30 regions will be selected based on the analysis of spatial and statistical data to represent the range of situations in all of Europe and, to a lesser extent, Africa. The selection will also pay attention to the spatial types of region in socio-economic terms and the urban-to-rural spectrum (ESPON 2011).

An assessment of governance frameworks related to smaller farmer organization and food chains is to support policy development and enhance the contribution of smaller farms and small food businesses to all four aspects of FNS. We aim at an effective collaboration and exchange between European and African research and practice partners in order to identify similarities and differences in food systems, improve mutual understanding and enhance future EU-Africa initiatives.

In SALSA, we will essentially need to tackle a number of challenges in a systemic way – in each one of them we will be confronted with very significant boundary issues:

- recognising the tremendous heterogeneity in smaller farm and farm household situations;
- taking the four dimensions of FNS into account and applying a systems perspective;
- exploring the precise linkages between smaller farms and FNS;
- understanding the peculiarities of smaller farms and local food systems;
- addressing vulnerability and resilience;
- based on a better understanding of the functioning and organisation of (local) food systems in the 30 regions, deriving recommendations regarding improved governance systems and support frameworks at relevant levels.

In order to manage the related challenges in project implementation, we think that a meaningful interaction between research and practice is central. The basic idea is that it will only be possible to better understand the role of smaller farms and small food businesses in FNS if practice and research make a joint effort in exchanging and learning from each other. The interaction with smaller farmers, rural entrepreneurs engaged in the food sector and their representatives will play an important role throughout the project. The same applies to the EU-Africa collaboration envisaged. These basic orientations acknowledge the fact that the different regional contexts and differences in situations play a major role, and that exchange and joint learning is possible.

1.3 Structure of this paper

The subsequent analysis starts with a brief discussion of the theoretical perspectives that influenced our project planning. The central chapter focusses on the way we want to address the key questions and challenges referred to before, and the related boundary issues. The concluding section focusses on the potential significance of more localised food systems, the lessons learned so far about boundary issues and the implications for our implementation planning.

Our paper sketches out an integrated systems perspective for assessing the role of smaller farms and local food systems in sustainable FNS.

2. Relevant theoretical perspectives

Our analysis is based on a number of theoretical frameworks as most frameworks can support particular components of the planned research, and none is sufficient on its own.

Brookfield and Parson (2007), Davidova *et al.* (2013), FAO (2014a) and others have shown that smaller farms encompass a wide range of organizational and structural patterns across Europe, and around the world. Bryden *et al.* (1993) and others point out that, different from larger and more specialised farms, farm families tend to make decisions and behave partially independently from the signals and pressures of the market economy. Bryden *et al.* (1993), EC (2011), FAO (2014a,b) and others have argued that the main common feature of smaller farms tends to be the significant direct involvement of family labour in farming operations, that often – though not always – other household income sources are important, and that farm production tends to play a significant role family food consumption.

Knickel (1994), Knickel *et al.* (2004, 2013), van der Ploeg (2013) and Caron *et al.* (2014) argued that smaller farms have the capacity to mobilize social capital and local knowledge, which has major implications for levels and types of market integration as well as transition pathways. Chayanovian models stress the trade-off between need for income and drudgery related to work (Schmitt 1992; van der Ploeg 2013). Models inspired by Polany highlight how market and non-market logic (such as reciprocity and redistribution) are mobilized in reaction to specific situations (Brookfield and Parson 2007). Neo-classical models use the concept of marginal utility of family labour to explain the mix of on-farm, off-farm and hired labour.

Sustainable livelihood approaches underline the multiple sources of livelihood and the role of 'vulnerability context' (Ellis 1988), and farming system approaches investigate the implications of multiple feedbacks between social, economic and environmental subsystems (Darnhofer *et al.* 2010, 2014). Actor-network approaches study the role of non-human factors in social organization, in social change and in innovation (Brunori and Rossi 2000).

Relevant institutional theory that gives body to the notion of system, and food system in particular, includes Blay-Palmer (2010) who asks how food systems can be more inclusive, how local and global scales interact and how power flows within food systems. In particular, the work on institutional frameworks shows that theory in the fields that are central to food, agriculture, change and development and its implementation is strongly affected by interests at stake and by context sensitivity. Theory development in the project is therefore conceived as a multi-actor process aimed at integrating different types of knowledge and interests around concrete policy-driven problems. Where and how these different theoretical frameworks enter the analysis, will become clear in the following discussion.

3. Discussion: key questions, the way we address them and the related boundary issues

3.1 Recognising the heterogeneity in smaller farm and farm household situations as well as their peculiarities

The most commonly criteria used to define smaller farming are land area, labour units, size of production, economic size, alone or in combination (Brookfield and Parson 2007; EC 2011, Hubbard 2009, Davidova *et al.* 2013; Lowder *et al.* 2014, FAO 2014a). While their main common feature tends to be the direct involvement of family labour in farming operations, often – though certainly not always – other household income sources are important (Knickel *et al.* 2004). Most importantly, small size confers additional particularities to farms (Bryden *et al.* 1993; Davidova *et al.* 2013). A very significant difference is the capacity of smaller farms to mobilize resources additional to those procured through market exchange, such as social capital and local knowledge (Knickel 1994; van der Ploeg 2013).

In SALSA, we explicitly recognise the tremendous heterogeneity in smaller farm situations and related concepts and discourses. The underlying idea is to facilitate a more comprehensive

analysis that crosses different discourses, and will be able to accommodate very different social, cultural, economic and historical situations. We therefore use "smaller farm" as a more generic term. Focus in the analysis will be on farms in which family labour tends to play a significant role and where self-consumption by the farm family, local sales, short supply chains and collective marketing tend to absorb a noteworthy part of production. **Figure 1** illustrates that in SALSA we will focus on smaller farms in which particular conditions and (social) relations play a major role.

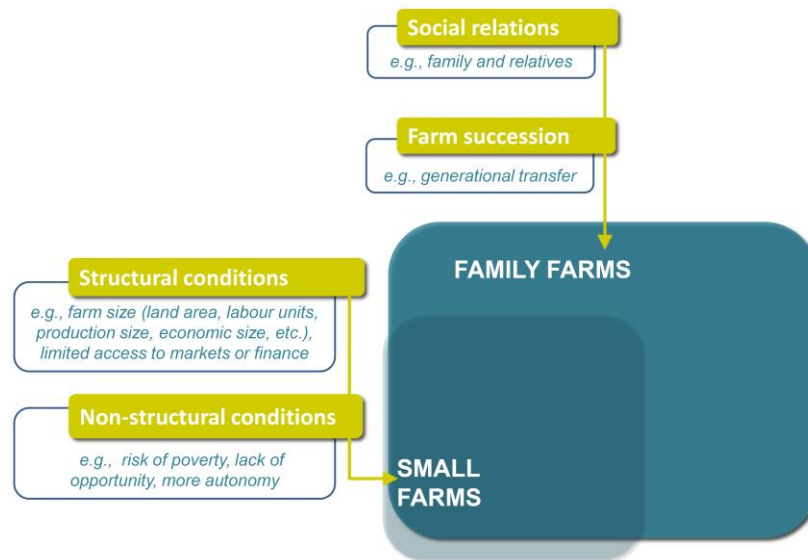


Figure 1.

Smaller farms as a subset of family farms, with particular characteristics related with farm succession, social relations, and particular structural and non-structural conditions

SALSA not only focusses on smaller farms but also on their relation with (small) food businesses. These have been defined as any undertaking, whether for profit or not, and whether public or private, carrying out activities related to any stage of production, processing and distribution of food (GECAFS 2014). Important for our analysis is that small food businesses also tend to be more directly linked with smaller farm producers, e.g. smaller farmer cooperatives, marketing cooperatives or small food enterprises sourcing from smaller farms.

3.2 Taking the four dimensions of FNS into account by applying a systems perspective

SALSA bases its analysis on the four components identified by WFS (1996): the availability of nutritious and safe food, food access (including affordability), food utilisation, and food stability. In the empirical analysis, we will adopt a food systems perspective in order to simultaneously explore the four dimensions of FNS and the connections between them. As food systems theory is broad and cross-cutting, employing it as a conceptual framework allows us to expand the scope of inquiry to include issues linked to land, economy, access to resources and food, production, processing, regulation, and politics. Particular attention will be paid to the question of food access and the role that smaller farms *can* play in local food systems.

3.3 Exploring the linkages between smaller farms and FNS in a food systems perspective

It seems to be rather counter-intuitive that smaller farms, smaller food businesses and local food systems are of critical importance for global level FNS. Closely related is the belief that the mere existence of local food systems is completely against the logic of free trade. The related suppositions are that smaller farms can hardly compete anyway and that they do not play a

significant role in terms of food quantities. The latter is in line with the conventional productivist view that emphasises the important role of commercially focused, capital-intensive agriculture.

The European Commission (2014c) adopts a different perspective by directly connecting FNS to the role of smaller farms: "*Ensuring food security requires access for smallholders, particularly women, to land, resources, investment and markets, access to nutritious food and adequate health systems, plus multi-sector action on behaviour and dietary patterns. The framework needs to promote sustainable agriculture, fisheries and aquaculture practices, the efficient use of resources and enhanced resilience.*" In line with this, the High Level Panel of Experts on Food Security and Nutrition (HLPE 2013) as well as others (e.g. Hazell et al. 2007, 2014; Bryden et al. 2011) also emphasise the role of agriculture in terms of employment and income, highlighting the importance of smaller farms in addressing both production objectives and development goals, including the fight against rural poverty and food insecurity.

SALSA aims at exploring this further by identifying and describing in 30 reference regions the precise linkages between smaller farms, smaller food businesses and the four dimensions of FNS. In the analysis, we will apply a food systems perspective and examine market relations (Tansey and Worsley 1995, Ericksen 2008, Ingram 2011, GECAFS 2014). Common methodological guidelines for the description and mapping of the food system, and reporting templates, will ensure comparability across regions.

The questions that will guide our empirical analysis of the organization of production, processing, distribution and consumption of food, and the related hypotheses are:

- How and to what extent can smaller farms contribute to food availability? Our hypothesis is that smaller farms can be rather efficient in the production of specific commodities although they have a much weaker position within food chains, especially those led by large-scale retailers or processors. New forms of collaboration are relevant, which enable small farms to persist. Smaller farms might also have a particular role in producing food on land that has been marginalised (e.g. in remote and mountainous areas).
- In what ways and to what extent can smaller farms improve access to food? Our hypothesis is that their involvement in local food production and distribution can play a very significant role. Smaller farms are in many regions probably also important as farming is a key component of household income generation and stabilization, in particular in periods of crisis. Smaller farms also have the potential to connect more directly with smaller food businesses (processors, retailers, restaurants, caterers, etc.) and consumers, establishing local and niche markets.
- How and to what extent can smaller farms and small food businesses contribute to food utilisation? Our hypothesis is that smaller farms and the related food businesses contribute to ensuring the stability of supply including also through their relationships to urban consumers. Apart from market opportunities that can emerge, direct producer-consumer links might also contribute to new urban-rural relations (e.g. food co-operatives) and sustainable consumption practices.
- In what ways and to what extent can smaller farms contribute to the stability of local and regional FNS? Our hypothesis is that smaller farms are less exposed to and dependent on international markets, and that this serves as a buffer in particular in situations of sudden shocks (e.g. economic crises, price fluctuations) or cyclical events (e.g. seasonal food insecurity). We also assume that smaller farms can more easily mobilize non-market resources and their adapt development pathways. Systems based on optimising profitability alone may not have this capacity. Households with smaller farms tend to diversify their activities in order to manage risk and benefit from economies of scope by creating synergies between different activities (Knickel *et al.* 2004), thus increasing their own resilience as well as the resilience of local communities.

Figure 2 sketches out the food systems approach adopted in SALSA. It pays particular attention to the complexity of our food systems and provides an integrated systems perspective that includes issues such as the need to better understand the match or mismatch between what smaller farms are producing and, particularly, urban consumption patterns and trends.

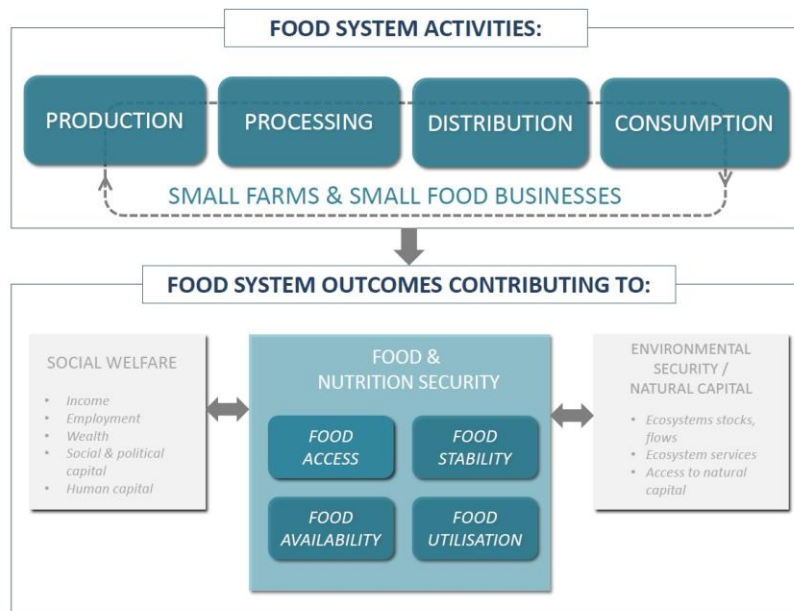


Figure 2.

The food systems approach: smaller farms and food businesses contribute to food availability, access, utilization and stability (adapted from Eriksen 2008).

3.4 Addressing vulnerability and resilience: dynamic properties of smaller farms and their capacity to adapt

The recent crises in food security and price spikes are increasingly also related to resource scarcities and the growing competition between food, feed, bio-based products and bioenergy (EU SCAR 2011, 2012; Knickel *et al.* 2013; EC 2014a). To ensure the sustainability of the food system, it will therefore be more and more important to 'optimize' it as a whole with all its constituent parts.

SALSA therefore also examines the (relative) vulnerability² of smaller farms, and of the related food businesses, and how this affects FNS. Closely related is the question of the resilience³ of smaller farms and small food businesses. Why is it that small farms manage to persist? Our approach draws upon Darnhofer (2014) and covers the buffer capability or ability to assimilate a perturbation without a change in structure or function; the adaptive capability or ability to adjust in the face of changing external drivers and internal processes; and the transformative capability or ability to adapt alternatives and possible futures.⁴

² Adger (2006) defined vulnerability as “the state of susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt”.

³ Folke *et al.* (2010) described resilience as “the capacity of a system to absorb disturbance and reorganize while undergoing change so as to still retain essentially the same function, structure and feedbacks”.

⁴ When analysing the resilience of small farms and of local and regional food systems, we will build on the recent work carried out in the RETHINK research project (see <http://www.rethink-net.eu/home.html>).

In the analysis, we will explore the social and agro-ecological distinctiveness of smaller farms. Our assumption is that the distinctiveness of smaller farms finds its expression in the means by which they can potentially respond sustainably to the expected growth in demand for food, feed and fibre. We will examine whether and in what ways smaller, locally embedded (family) farms can be seen as a potential source of resilience. An example might be their aptitude to use limited resources efficiently or their role in territorial development as a buffer and in providing work, incomes and food. We hypothesize that the development of smaller farms can also be an important factor in countering land abandonment, rural out-migration, and that it can help to create new urban-rural alliances, thus providing a necessary foundation for sustainable FNS.

The in-depth analysis will pay particular attention to the dynamic properties of smaller farms and their capacity to adapt to changes in their economic, social, technological and natural environment. The ability of smaller farms to activate non-market resources and the possibility to adapt pathways are important in this respect, both also in respect of the potential for endogenous learning and innovation. Structures and systems based on optimising profitability alone may simply have compromised this capacity.

3.5 Towards improved multi-level governance systems and support frameworks

Building on the findings obtained regarding limiting and enabling factors, and the importance of the particular regional conditions (all validated in a series of workshops at the level of the reference regions), we will then move towards deriving concrete recommendation on how to improve governance systems and support frameworks at relevant levels. Some of these arrangements will relate to the regulation and functioning of local food systems, chains and networks; others will concern the organization of smaller farms and other small and micro-sized food businesses as such.

The aim is to identify and assess, based on the insights gained from the in-depth analysis of local food systems and small farm situations, those governance frameworks that influence, positively or negatively, the contribution of smaller farms and related small businesses to FNS.

The analysis will therefore pay particular attention to

- the strategies of smaller farmer to participate in both short food supply chains and conventional value chains with large processors and retailers;
- the possibilities for collective action (e.g. self-provisioning and mutual food support, particularly in remote rural areas) and access of smaller farms and small food businesses to public programmes (including the impact of gender-focused interventions);
- the governance and regulation of local food systems, chains and networks (including legal frameworks, public policies and programmes, private food chain governance, local and customary arrangements and collective action processes);
- the adoption of private standards, access to national and global food chains and agency implications of different governance arrangements, i.e. how power is redistributed among participants;
- the buffer, adaptive and transformative capacity of different governance arrangements.

Building on the above, the types of tools and mechanisms that are most appropriate for enhancing the contribution of smaller farms to sustainable FNS will be identified. The guiding questions are: How can smaller farms and other small food businesses best be enabled to capitalize on their distinctive assets and particular efficiencies, and contribute to sustainable FNS? How can agricultural knowledge and innovation systems become supportive of smaller farms? In what ways can EU policy best support relevant mechanisms?

The discussions aim at actively involving relevant institutions and decision-makers. Four specially convened policy workshops at the level of macro-regions will be organised. In these workshops,

requirements for enhanced support frameworks, policy instruments and governance systems in the European, the African and the international cooperation context will be formulated.

4. Conclusions

4.1 Need to explore the potential significance of more localised food systems

There is little doubt that sustainable FNS requires a more significant rethinking of the food system as a whole as well as all its relevant constituents. We contemplate that the particularities of smaller farms and of the related food and farming systems might very well become more important in an increasingly globalised, uncertain and resource-constrained world. This is in line with IAASTD (2009) who came to similar conclusions based on a very comprehensive global level analysis as well as with FAO (2014b) who concludes that small farms “*can be protagonists of bottom-up food security strategies, if they are enabled to do so*”.

Global markets and relations tend to have a major influence on most local and regional food systems, including on consumption patterns (often even of rural communities and farm households). The assumption that we want to test in SALSA is that smaller farms play in many regions an important role in food access and utilisation as well as social value and the resilience of parts of the food system (IAASTD 2009; Caron *et al.* 2014; EC 2014c; FAO 2014a,b). We think that the intrinsic embeddedness of small farms in local communities, food systems and markets is one main reason for this.

The chance of a more holistic food system based analysis of the role of small farms in FNS is that it opens pathways towards transformational change and more resilient futures. Processes that build on an active involvement of relevant civil society organisations, institutions, private sector actors and other key stakeholders have a much higher chance to identify such pathways for a particular context.

“Systemic transformations require attention to the procedures and processes through which system boundaries are determined and governed, and by whom” (from: workshop description).

The discussion put forward in this paper provides a stunning illustration of this point as we completely miss the enormous potential and significance of more localised food systems, and of smaller farms and small food businesses, if system boundaries are drawn inappropriately.

5.2 What we learned so far about boundary issues

“Particular attention is [to be] paid to how system boundaries are determined, and by whom, because what is taken into account is constitutive of the kinds of innovation that emerge, who benefits and who loses from the change process, and how the governance of such change processes is performed” (from: workshop description). The questions raised in this statement have been central in the design of the SALSA project.

In this paper (and in the project planning) the word ‘system’ is used rather liberally. We for example refer to farm systems, (local) food systems and governance systems. During implementation, we will have to more precisely define all of these, including their ins and outs and dynamic elements, which will be a complex challenge that in many respects produces boundary questions.

There are at least four dimensions where boundary issues are particularly important:

- What is a “small farm”, and what is a “small food business”? What is our study object in more operational terms? Recognising the tremendous heterogeneity in smaller farm and farm household situations and seeing this is an opportunity to gain deeper insights, helped to overcome the rigid classifications that many studies use. In SALSA, we aim at facilitating a more comprehensive analysis that crosses different discourses, and that will be able to accommodate very different social, cultural, economic and historical situations. We will therefore operationalise the notion of small farm in different ways, depending on the goals and requirements of the particular analysis.

- What does it mean to apply a systems perspective in the analysis of food systems? Our intention is to take the four dimensions of FNS into account (availability, access, utilisation and stability). We will pay particular attention to the complexity of the problems facing our food systems and aim at providing an integrated systems perspective. Assessing the role of smaller farms and other small food businesses in food systems and FNS needs to include issues such as the need to better understand the match or mismatch between what smaller farms are producing and, particularly, urban consumption patterns and trends.
- Are smaller farms and the related food businesses only associated with more localised food systems? In our analysis, we will explore if, and if yes, in what ways small farms are also 'connected' to global markets. The idea of newly emerging 'nested' markets (Van der Ploeg et al., 2012) is relevant. We will therefore need to examine the organization, production, processing, distribution and consumption, and the governance systems shaping the relations between producers and consumers, price formation and the distribution of value added. We also need to pay attention to the fact farm households are both producers and consumers.
- At what level does FNS need to be achieved? In one way or another we will need to more precisely define the notion FNS. Is the mere existence of a local food system contradicting the logic of free trade? Maybe the very large number of small farms that exists contributes very substantially to total food quantities produced, and access, affordability and stability. Is it enough if rural households have enough income to have access to food even if they do not produce it themselves? Are the wider commodity markets for food that important or is it only the power of the large food corporations that plays out strongly?

Very clearly in the past, too many approaches to the study of food and agriculture have tended to focus on single issues or characteristics of food (Lien and Nerlich 2004), neglecting that the related activities are interconnected and sometimes closely integrated. By focusing on a single issue, we do not always grasp the systemic character of problems, and consequently miss opportunities for integrated responses.

The SALSA project builds very significantly on an active involvement of relevant actors and stakeholders. We consciously decided for this as it matters indeed "how system boundaries are determined, and by whom". By involving stakeholders at multiple levels, at different steps of the project and profiting from the long lasting experience of many partners with stakeholders interaction, we hope to produce insights that are truly relevant for decision-making.

5.3 Implications for our implementation planning: overcoming structural divides

We think that boundary issues can be best addressed in discursive approaches and based on a meaningful interaction between research and practice. The underlying idea is that it will only be possible to really understand the role of smaller farms and small food businesses in FNS if practice and research make a joint effort in exchanging and learning from each other.

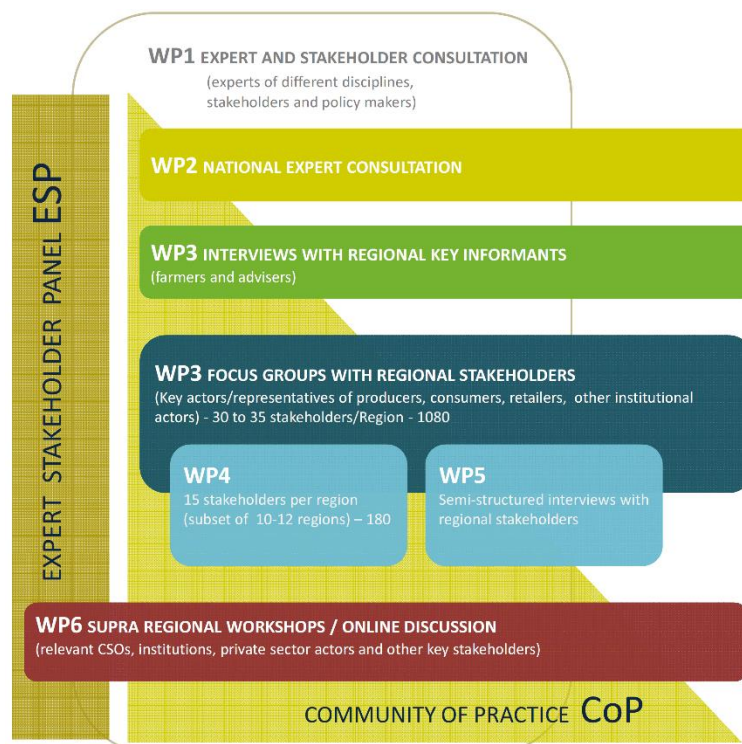
In SALSA, we therefore will be implementing a transdisciplinary, mixed-methods approach that builds on and connects relevant theoretical and analytical frameworks and models, and uses qualitative, discursive and quantitative methods in an integrated way and at multiple scales.

Figure 3 illustrates how a continuous process of consultation with stakeholders will accompany all empirical work.

Figure 3.

The structure of expert and stakeholder involvement in SALSA

In each of the 30 reference regions, we will together with practice partners and stakeholders examine food systems in terms of the position and role of smaller farms and of small food businesses. We will consider the relative weight of smaller farms to food availability, access, utilization, stability – examined over time, which will allow us to judge vulnerability. The analysis will provide ranges in the contribution of smaller farms to FNS as well as insights into key determinants. Both will support decision-making in private and public sectors related to smaller farm development and FNS.



Particular attention will be paid to the diversity, complexity and context-specificity of food systems and FNS, as well as the region-specific connections between local resources, production, processing, retailing and consumption, and how smaller farms relate to the food system. The discussions will also include the specific livelihood and development strategies of small-scale farmers and families. In each reference region, a detailed map and description of the regional food system will be produced.

In the more policy-oriented work, we will pay particular attention to the access of smaller farms and small food businesses to public programmes, the regulation and functioning of local food systems, chains and networks, the adoption of private standards, the access to national and global food chains, and the impact of gender-focused interventions.

Central in our approach to overcome structural divides is to emphasise the role of and interplay between very different markets, chains, networks, actors etc. in food systems (with consumer-producer relations, nested markets, processors, retailers, small food businesses, etc.). The same applies to the diversity in local and regional farm household and food systems that range for example from subsistence and semi-subsistence farm household and food systems to commercial farms fully integrated into larger (international) food markets. The aim is to identify and assess differences and complementarities between smaller farms and larger farms and to compare their particular relative strengths, weaknesses and support needs, highlighting how farm families use resources of different nature and origin. Particular attention will be paid to understanding the co-evolution between smaller and larger farms and their context (including food businesses), and relating this to the four dimensions of FNS.

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