



Project Summary Booklet

2016-2020



salsa
small farms
small food businesses and
sustainable food security



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An introduction to SALSA

The EU-funded Horizon 2020 “Small Farms, Small Food Businesses and Sustainable Food Security” (SALSA) project has brought together 16 partners, from European and African countries and the UN system, who have a unique blend of multidisciplinary expertise and experience from a wide range of geographical and socio-political realities.

SALSA has aimed to provide a better understanding of the current and potential contribution of small farms and food businesses to sustainable Food and Nutrition Security (FNS).

The project is supported by a high-profile international Expert Stakeholder Panel (ESP), whose members include experts and key stakeholders in the area of small farms and food and nutrition security.



The five specific objectives

- 1** To thoroughly assess the current role of small farms and small food businesses in achieving sustainable Food and Nutrition Security (FNS) in Europe and in selected African regions.
- 2** To evaluate the means by which small farms can respond to the expected increase in demand for food, feed and fiber of an increasing population in an increasingly constrained world.
- 3** To assess the capacity of small farms and small food businesses to contribute to FNS under alternative future scenarios for 2030/50, and to identify the main determinants of the capacity to respond.
- 4** To help better tailor international cooperation (in particular EU-Africa) and research, and to develop tools to guide decision makers in enhancing the role of small farms in FNS.
- 5** To establish a Community of Practice and to enhance the use of FAO’s channels as well as European and African networks and platforms in order to strengthen the voice of small farms in the global debate on FNS.

Structure of SALSA

Eight work packages (WP) are at the basis of SALSA's research process



Structure of the work plan and connections between the eight work packages in SALSA

Communication & joint learning

A clear priority for SALSA was to enable and foster communication, stakeholder involvement and joint learning in all phases of the project and at all levels. SALSA project results were presented in several national and international meetings and fora. Among these, the SALSA project was featured in the renowned Committee on World Food Security (CFS 2019).

The Food and Agriculture Organization of the UN and the Baltic Studies Centre coordinated the project's joint learning activities through tailored communication channels for small farms, small food businesses and their interest organisations. The communication strategy included the active use of social media, the project website and SALSA page on FAO's website, online consultations, newsletters and short videos.



Small Farms & Food Systems

Defining Small Farms

The concept of “**smallness**” is a relational concept, related to its geographical or sectorial context.

A farm can be considered “small” when the size of one or more of its resources (land, labour, capital) put the farm in a disadvantaged position compared to bigger sized farms.

Small farms contribute to **Food and Nutrition Security** (FNS) by filling the gaps of industrialized chains in terms of land exploitation, local varieties and local market channels.

As an indicative threshold for data collection to identify small farms, SALSA adopted a limit of **5 ha** (hectare) or **8 ESU** (Economic Size Unit), equivalent to €9,600 of standard gross margin.

SALSA acknowledges that this is not an absolute or universal value: there are context-specific variations.

From a conceptual to an analytical framework

The SALSA Conceptual Framework (CF) defined the key terms and categories to be used in SALSA's research, together with a conceptualisation of the food system used as a frame in the rest of the project.

The Analytical Framework (AF) built on the CF to identify objectives and methodological steps and to guide data collection and analysis.

Lastly, an Empirically Grounded CF has been produced. This is founded upon the SALSA project outcomes which have been used to integrate, refine and in some cases, revise the early assumptions of the initial CF.



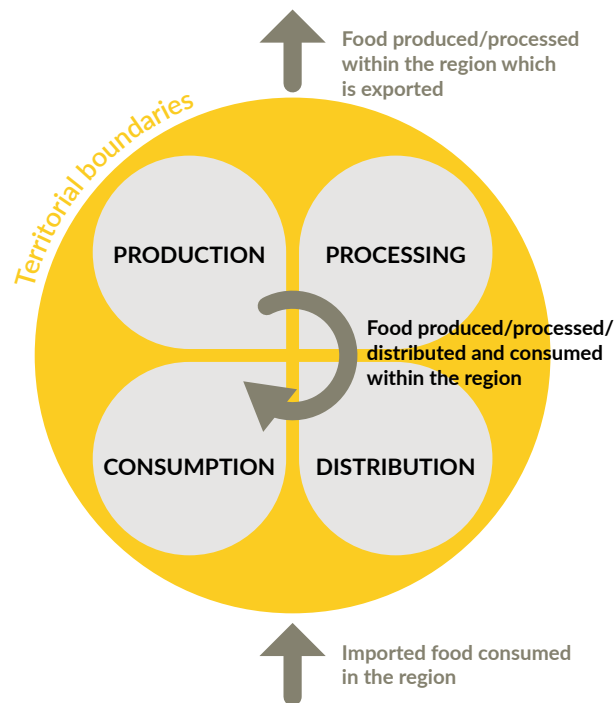
SALSA uncovered regional consumption patterns throughout all the stages of the food system

SALSA focused on small farms and small food businesses in regards to their position in their **REGIONAL FOOD SYSTEM** and their contribution to **FOOD AND NUTRITION SECURITY**.

Food systems were approached through the use of two dimensions:

Functional - infrastructures and the actors related to production, processing, distribution and consumption.

Territorial - flows of food between production and consumption within the territory of the region.



Four dimensions define food and nutrition security: **availability, stability, access** and **utilisation** (FAO definition of 2008). FNS was analysed both at the farm and at the regional level.

SALSA adopted a **territorial perspective** to the analysis of the food system, by identifying the characteristics of each of the food system for single products, within the regional boundaries. Such a **systematic and territorial approach** allowed the SALSA researchers to highlight the way in which small farms and small food businesses contribute to the functioning of the regional food system in terms of food provision, food availability and food access.

Working in reference regions, developing guidelines at multiple levels

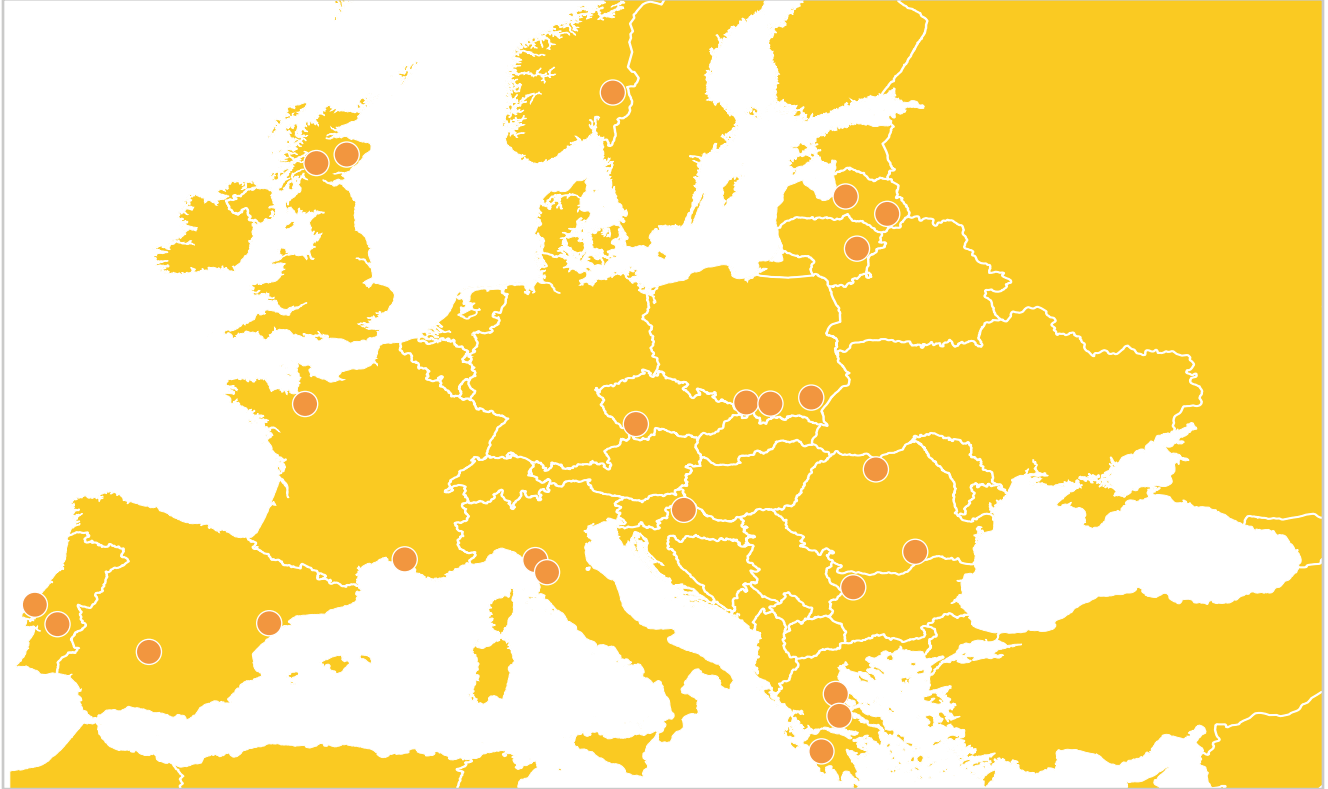
SALSA has produced empirically-grounded knowledge that can guide public intervention at all levels, including local, regional and national, to improve food and nutrition security in these regions.

- The analysis was conducted in **30** regions across **19** countries in Europe and Africa.
- SALSA researchers **collected data** from the selected reference regions through a combination of desk work and interviews with experts of regional food systems, small-scale farmers and representatives of small food businesses.
- **892** small farmers were interviewed and **109** regional food systems analysed.
- In each region between **2 and 4 key products** were selected for in-depth analysis of regional food systems and small farms, each of them with acknowledged regional economic and cultural relevance.
- Detailed **regional food system maps** were produced and validated in **focus groups** and **regional workshops**.
- Findings were grouped into **four macro-regional areas**: Africa, Central & Eastern Europe, Northern Europe and Southern Europe.

The level of small farms' contribution to regional FNS is found to depend upon the nature of their connection with the regional food system. Small farms in African (AFR) and Eastern European (EE) studied regions contribute more to regional food availability via self-provisioning and local sales (both formal and informal). In Northern (NE) and Southern Europe (SE), small farms do not contribute significantly to the total amount produced regionally either due to their low numbers (NE) or because they export their produce outside of the region without consuming much within the household (SE).

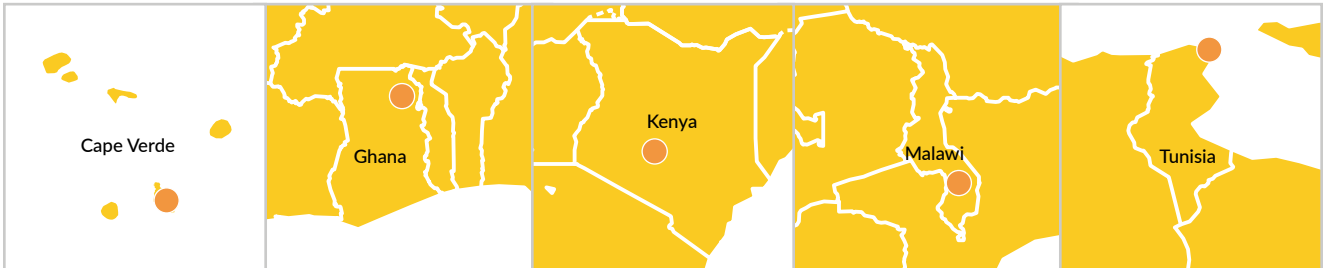
Reference regions

Europe: Bulgaria, Croatia, Czech Republic, France, Greece, Italy, Latvia, Lithuania, Norway, Poland, Portugal, Romania, Spain, UK



Source: EU - adapted by SALSA

Africa: Cape Verde, Ghana, Kenya, Malawi, Tunisia



Source: UN - adapted by SALSA

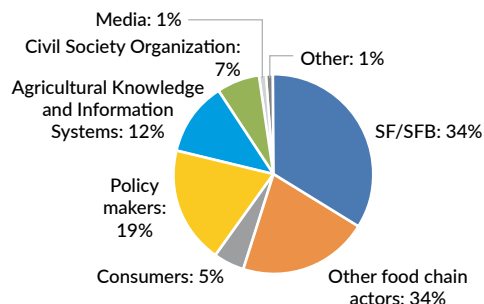
The maps in this publication are stylized and not to scale. They do not reflect a position by SALSA on the legal status of any country or territory or the delimitation of any frontiers.

A participatory process: enhancing joint knowledge on small farms

SALSA has fostered knowledge and information sharing between stakeholders by engaging networks and influencing policy and practices related to small farming, enabling synergies between food system actors and researchers.

- **SALSA community of practice (CoP)** has been a key element in SALSA communication and learning activities
- Salsa CoPs have operated as a **multi-stakeholder learning and policy dialogue platform** aimed to consult, advance, validate and disseminate SALSA research.
- **Regional and national CoPs** have focused on issues that are relevant for small farms and small food businesses at regional or national level.
- **International CoPs** have mobilised international stakeholders, including project's partners, members of SALSA Expert Stakeholder Panel, experts from other relevant networks and interested parties.

Composition of regional/national CoPs



SALSA partner FAO organized two e-mail conferences engaging over 1000 participants

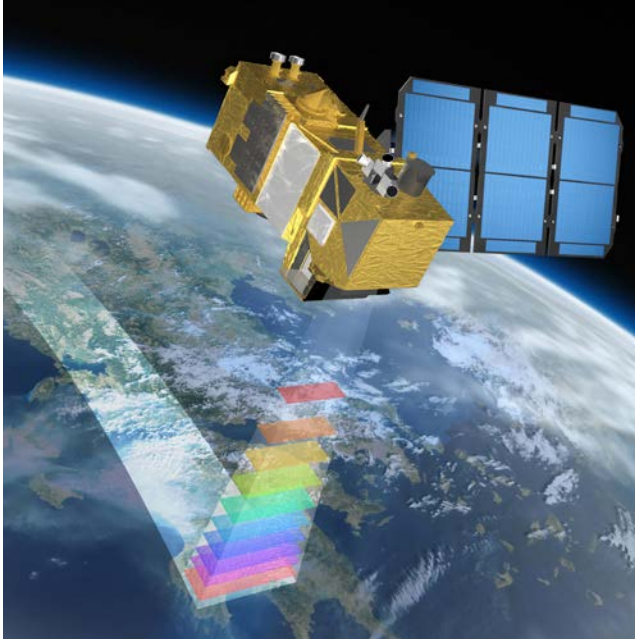
- October 2016 - "Exploring the contribution of small farms to achieving food security and improved nutrition"
- April 2018 - "The Role of Small Farms Within a Larger Context of Food Security"

Places of meeting and knowledge exchange between different stakeholders, the CoPs have helped to integrate SALSA work with existing policy and practice discussions, and to identify and support new market and policy arrangements.



Typically, participants in regional CoPs were small farmers, small food businesses, NGOs, policy makers, researchers, advisors and others.

An innovative methodology to identify, assess and monitor crop production data



© European Space Agency

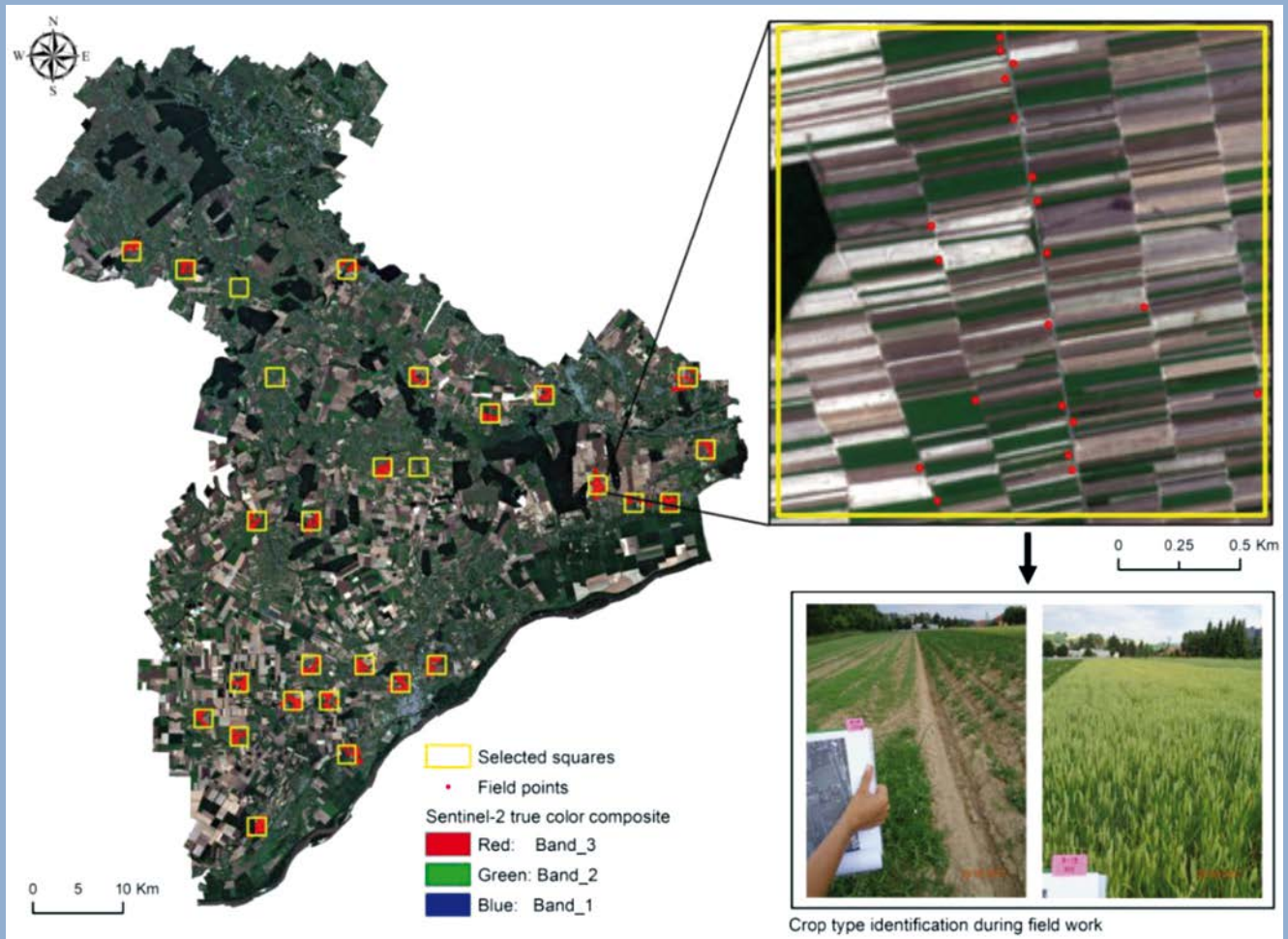
Using a transdisciplinary and participatory approach, SALSA combined the most recent satellite technologies, novel remote sensing data analysis protocols and methods, field assessments, social science inquiry and systemic approaches, participatory construction of knowledge, transdisciplinary theory building, and joint foresight analysis.

The developed and validated SALSA methodology can be used for identification of small farms crop types, crop area and production estimates, as well as regular monitoring of small farms' production.

Sentinel 2 data were used to produce crop type maps and derive a set of quantitative results about the relative importance of small farms in terms of food production at regional level. **Based on an average of 509 crop plots visited in each reference region a total of 124 crop types were registered over 21 regions.**

More than **12,230 crop plots** were visited in the field; **390 key informants**, **892 small farms** and **233 small food businesses** were interviewed; and **758 people** took part in **focus group** discussions.

Example of selected squares and spatial distribution of field points for crop types' identification, in one Reference Region



Crop areas data from existing statistics and Sentinel data sources were compared and showed very high correlation demonstrating the suitability of Sentinel data in producing crop area estimations for small scale farms

Small farms produce an important part of the overall crop production in many of the regions studied:

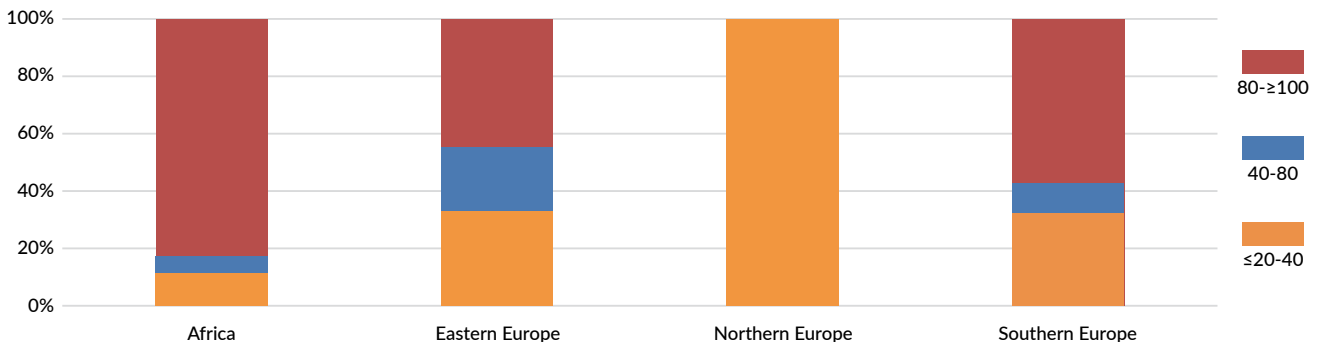
- Small farms are responsible for a very high percentage of the total regional production for a set of crops.
- In the studied regions small farms produced an average of 19.5 ton/ha/year of fruits, 17.0 ton/ha/year of vegetables, 5.2 ton/ha/year of oil crops, and 4.0 ton/ha/year of cereals.
- The regions presenting the lowest mean farm size (0-5ha) were the ones with the highest crop diversity values.

The potential of small farms to meet food demand varies depending on the context at a macro-regional level

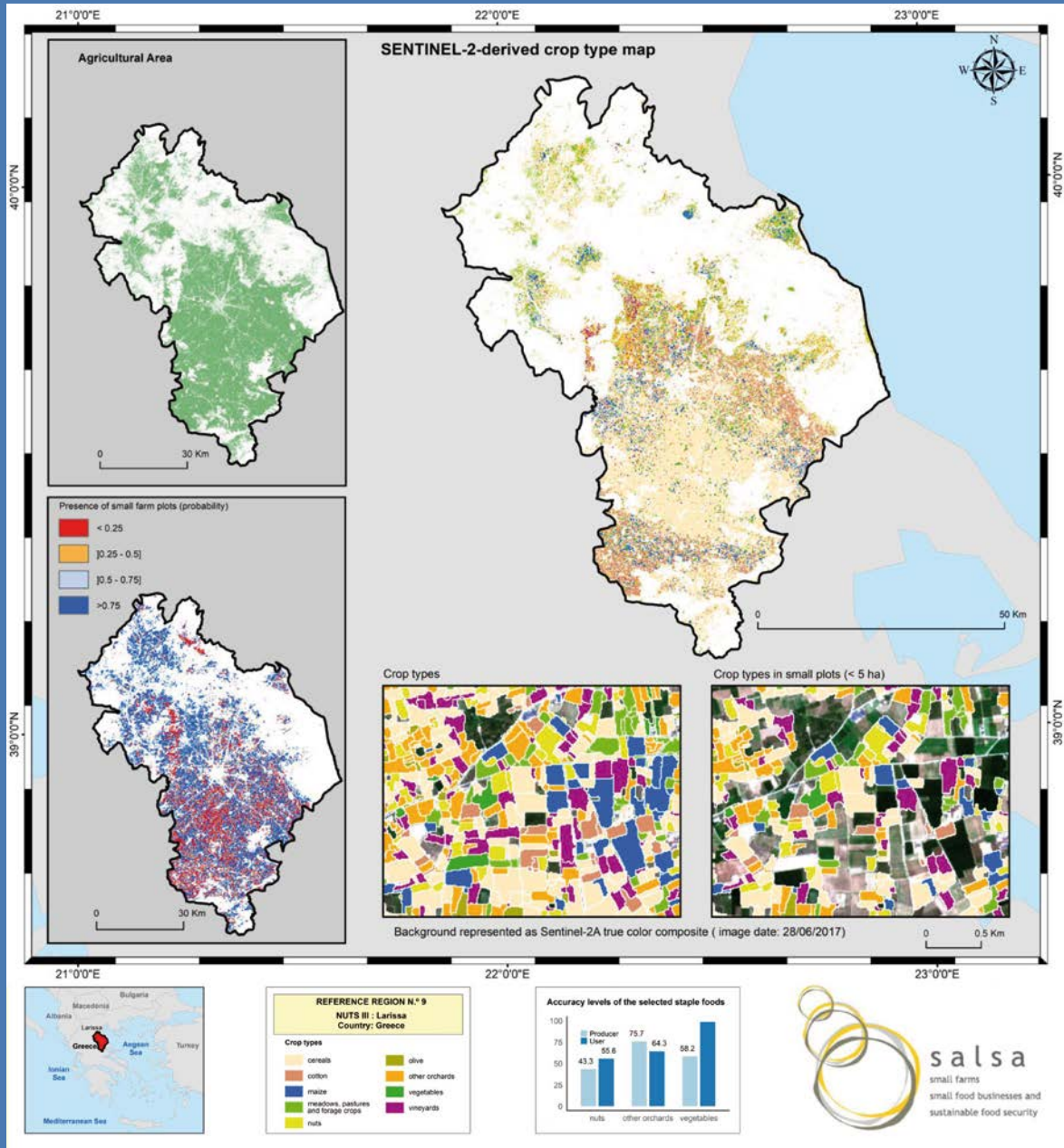
To highlight the different levels of small farms contribution in the total regional food production four macro-regions were considered: Eastern Europe, Northern Europe, Southern Europe and Africa.

While in the African regions small farms have the potential to cover 80-100% of the regional food demand, in the Northern European regions small farms would only be able to substitute less than 40% of the demand for the key crops studied under equivalent conditions.

Potential small farms have to cover regional food demand (%)



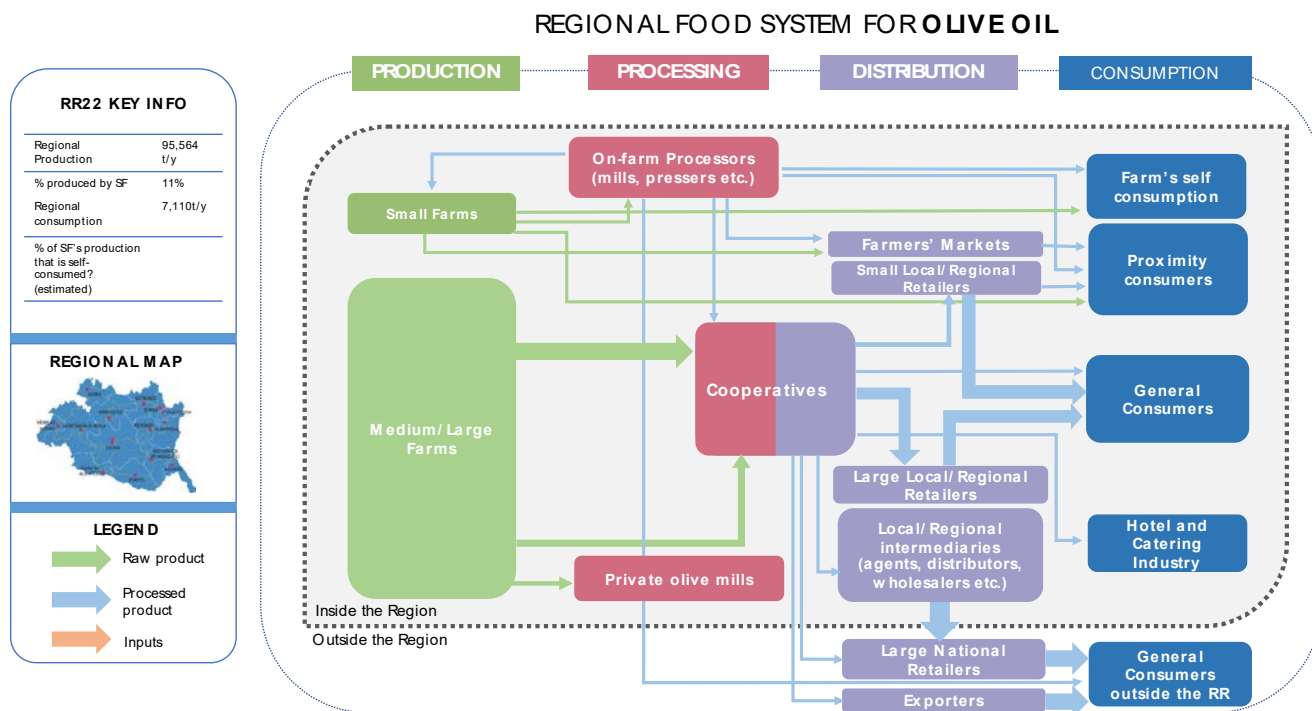
Example of a crops type map, from Larissa (Greece)



Food system maps to unveil small farms' market linkages

Along with the quantification of the small farms' production at regional level, the functioning of the food systems was systemised and **109 Food System maps** were developed. The food system analysis reveals a wide diversity of integration patterns of small farms in the regional food system.

Example of a regional food system map for a key product, from Alentejo, Portugal

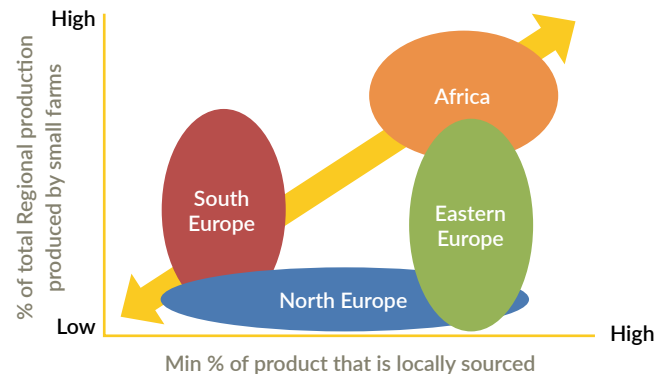


The SALSA project estimates that in just under half (44%) of the regional food systems analysed – especially in African, Southern and Eastern European regions - the production from small farms could cover 100% of the regional food demand and in some cases even generate surplus.

The market linkages of small farms determine the amount of small farms' production that stays in the region, specifically the first actor that links small farms to the food system. Small farms that sell most of their production to cooperatives are usually part of export-oriented food systems, while small farms that sell to local markets or directly to consumers will have a much larger impact on the regional food availability.

In **Africa** the food systems are mainly locally oriented; in **Southern European** regions, the small farms production is mainly for export; in **Northern European** some of the food systems are export oriented and some are locally oriented; in **Eastern European** food systems are mainly locally oriented.

The macro-regional differences found in terms of small farms' contribution to local food availability



Small farms contribute to regional food systems partially with food that never reaches the formal market. This includes food produced in the farm and consumed by the household, given away to family relatives and neighbours, or sold informally to local consumers. Various degrees of food self-provisioning are also found among those small farms that are specialized and well connected to the market.

The balance between self-provisioning and market integration frames the analysis of small farms' connections with the food system, as a key lens to understand small farms' contribution to FNS. Small farms produce a high diversity of products, combining often different products for the market and for self-provisioning. This diversity of production also potentially contributes to the enhancement of rural landscapes and biodiversity.

Five small farm types

A novel typology reflecting different ways and levels of market integration of small farms

Five types of small farms were identified using a set of farm level indicators related to the different backgrounds, governance mechanisms, strategies and future expectations of small farms in Europe and Africa. All types of small farms are present in all the 30 regions analysed, however their contribution to FNS differs depending on the type: Types 1 and 2 are those that most contribute to regional food availability, while 3 and 4 contribute the least. Farms of Type 5 can also give a significant contribution to regional food availability, even if they have a strong market orientation.

SALSA findings on the contribution of small farms to Food and Nutrition Security

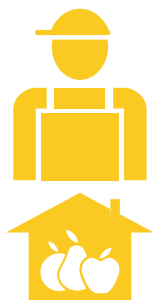
In one way or another all small farms are integrated into the market and keep part of their production for self-provisioning. Self-provisioning is more important in poorer regions such as those found in Africa, and, to a lesser extent, in Eastern Europe. This also occurs in the food systems which are export oriented, as many of those studied in Southern Europe. The types of small farms where self-provisioning is a more important strategy are: “business specialized”, “conventional strugglers” and “ part-time farmers” , who keep, respectively, 15%, 35% and 35% of the total production.

The type of produce is important for the strategy followed by the small farms. It affects their link to the

SALSA analysed data from 892 interviews to small farms, that included information on the farmers and their family, production, market linkages and household consumption. The interviewed small farmers were selected according to pre-identified crops and products. The data combined through an advanced cluster analysis.

The SALSA research showed that small farms from very different contexts can and do share characteristics that bring them together and differentiate them from other farms. The variety and novelty of these differentiating attributes suggests that small farms across Europe and Africa, in their diversity, share some common drivers and face some common challenges.

SALSA typology of small farms



1. Part-time farms

Farming appears to be a secondary activity that supplements other sources of income, by generally young farmers, who started farming as their own option; a high proportion of production stays in the household



2. Conventional strugglers

Second poorest cluster, and oldest; farming is rooted in tradition; agriculture accounts for a high proportion of income; high household self-consumption



3. Conventional entrepreneurs

Relatively wealthy, relatively old and established in farming; rely on family labour; access markets through cooperatives



4. Business specialised

Wealthiest group, relatively old and established in farming; extensive use of hired labour; access to markets through cooperatives, invest in certification



5. Business multifunctional

Wealthy, relatively young and new to farming; extensive use of hired labour; diverse portfolio of buyers

market and therefore their contribution to regional availability, i.e. product that require processing, such as olive oil, wine and dairy market through cooperatives, which are generally export oriented. However, products that require no processing, such as vegetables, potatoes or eggs are part of local and shorter value chains, meaning that most of that production remains in the region.

The diversification of crop production is a strategy to develop the resilience of small farms and therefore to contribute to food stability. The number of crops sold is the highest for the “conventional entrepreneurs” in Northern Europe and for the “part-time farmers”

in Southern Europe (about 6 products per farm). The diversification of the products for self-consumption is the highest in Eastern Europe for the “part-time farmers” who produce in average 8 different products.

Small farms durably ensure regional food production across time. Most of small farmers exist because of a family’s heritage and tradition in all the macro-regions. But there is also a significant proportion of farmers who started new business activities, as well as others looking for a lifestyle change. This new model is mainly present in Northern Europe where relatively fewer “conventional strugglers” are observed.

Women as small farmers



SALSA research found that women are more commonly active in certain types of small farm. These are:

- Part-time farms, which are characterised by younger farmers who have weak market integration.
- 'Strugglers': older and poorer farmers, with weak market integration.
- Multifunctional smallholdings, which produce a variety of commodities and use hired labour.

SALSA investigated the role of women in small-scale farming, particularly in relation to governance frameworks associated with food and nutrition security. Findings are based on a methodology including literature review; regional workshops and; statistical analysis of interviews from the reference regions. A common finding between African and European Reference regions is that when women lead farms (i.e. are identified as the primary decision maker), they are more likely to do so at smaller scales than when men lead farms.

In both Africa and Europe, small-scale farms are most commonly led by family units, comprising both men and women.

Female-led farms are quite common in some parts of Europe (e.g. 45% of Latvian farms and around 30% of Polish, Portuguese and Italian farms are led by women). In Africa female-led farms are much less common than male-led farms.

Female-led farms are more likely to be located on marginal land and are more likely to be focused on self-provisioning than male-led farms.

In Africa, women leading farms also tend to be less educated than male leads. Here female-led farms are identified as less productive than male-led farms, owing to lower access to inputs, equipment and labour.

Closing the gender gap

- 1** Support women-only organization or incentivize women leadership of mainstream farming organization.
- 2** Enable access to key resources (capital and land) for both men and women.
- 3** Address the traditional cultural and legal barriers that prevent farm succession for daughters.
- 4** Enable access to childcare to allow women to work on farms.
- 5** Support direct marketing and value-added processing initiatives where women are more involved and recognized as contributing more to positive impact, especially in Africa.
- 6** Collect more gender-disaggregated data to increase the visibility of women in agriculture.



The future potential role of small farms in FNS in 2030 and 2050

Results of a foresight assessment

Participatory foresight workshops were conducted in 13 different regions in Europe and Africa mobilizing more than 240 participants to assess the capacity of small farms and small food businesses to contribute to FNS under alternative future scenarios for 2030/50, and to identify the main determinants of the capacity to respond.

The workshops identified **priority objectives** for the future. These objectives have been formulated as outcomes, as they become the targets of the actions plans developed by the participants in the workshops.



Six key objectives to enhance the potential contribution of small farms (SF) and small food businesses (SFB) to regional FNS

- 1 SF and SFB have knowledge and access to inputs, technology and innovations.
- 2 SF and SFB have access to value-addition processes.
- 3 SF and SFB produce a significant share of the regional food supply for given products and are well connected to diverse markets.
- 4 Many more consumers are aware of regional SF products and value them.
- 5 SF and SFB are empowered (politically, economically and socially) and receive financial and technical support from the public sector.
- 6 SF and SFB contribute to environmental protection and climate change adaptation through sustainable production, diversification and preservation of the genetic heritage.



“The scenario exercise reminded the participants how complex food systems are, and how important it is planning actions to arrive at a desirable future. Such a visioning exercise is helpful for strategic planning in any field, be it policy or farming”

- S. Šūmane
(Baltic Studies Centre)

Governance analysis and policy tools

SALSA examined relevant governance systems related to the organisation of small farmers and food chains and proposes tools to guide decision-makers in enhancing the contribution of small farms and food businesses to food and nutrition security

Small farms and small food businesses are impacted by a whole array of regulations, public policies, cooperative associations, social and network norms, and financial realities. SALSA identified governance arrangements that better enable small farms (SF) and small food businesses (SFB) to participate in regional food systems.

The ways in which SF and SFB thrive under various governance arrangements is highly varied across regional and national contexts, across agricultural and farming sectors, and across different types of small farms. SALSA identified enabling governance arrangements for the following parameters:

- Regulatory/legal frameworks
- Public policies & programmes
- Private food chain governance

- Local or traditional arrangements
- Collective action/cooperative arrangements
- Subsidy & other financial support

Results show that small farms make the most significant contribution to FNS when they are subsistence based, or when mixed commercial farms contribute to family income in less developed economies.

SF and SFBs face multiple challenges in terms of land access, production support and access to markets.

The analysis showed that with an increase of subsidy uptake, more developed governance structures emerged and more active participation surfaced. Small farms in most European regions are highly dependent on EU and State monetary support. Less developed economies, where subsidy uptake is low and regulatory frameworks are less evident, are more reliant on cooperatives and help from neighbours.

What are the enabling conditions for small farms?

SALSA developed an empirically based and stakeholder validated conceptual framework for multi-level decision makers. Its purpose is to offer recommendations on support mechanisms appropriate for maintaining and enhancing the contribution of small farms to sustainable Food and Nutrition Security in the European and African context.



The SALSA Strategic framework offers recommendations suitable to both the level of intervention of the policy makers (European/ National/Regional), as well as the territorial characteristics of each of the four macro-regions studied within the project (Eastern Europe, Southern Europe, Northern Europe and SALSA's African countries).

The territorially based recommendations are developed through three specific sub-frameworks, providing recommendations appropriate for a) small farms' needs, b) the main SALSA small farm types, and c) the main food system types identified through the research.

While macro-regional and regional variations exist (and must be taken into account) a number of broad needs related to the enabling environment for small farms emerges.

If small farms are to continue making a contribution to the societal challenge of meeting the growing demand for food, they will need a favourable “enabling environment” (policies and other mechanisms) that addresses their broad range of practical day-to-day needs.

Key enabling conditions

For small farmers to thrive and contribute to FNS three types of enabling conditions need to be present: those to **exist**, to **produce** and to **market**.

Enabling condition to exist

- Provide **incentives to remain in rural areas**.
How? Investing in infrastructure, in better rural services/utilities and increased access to internet.

Enabling conditions to produce

- Improve **access to land** for new entrants and greater security of land tenure.
How? Intervening in land regulations, taxation, inheritance laws or territorial planning.
- Better **access to finance**.
How? Well-designed finance schemes exist – especially for attracting young farmers and facilitating business development in rural areas.
- Foster **climate change adaption**.
How? Support via farm advisory providers and knowledge exchange activities to develop small farms' resilience.

Enabling conditions to market

- Reliable **access to markets**.
How? Taking a strategic approach to facilitate market integration.
- Increase **future viability**.
How? Gaining better prices through 'added value' products. There is an urgent need especially for better food hygiene regulatory standards, both in Africa and Europe.
- Foster **cooperation** between small farms and small food businesses.
How? Through frameworks for value chain strategies promoting greater coordination, more equitable distribution of power and financial benefits in the supply chain.

Cross-cutting objective

- Greater **access to information, training and innovation**.
How? Through public-funding for stronger and more integrated systems of knowledge exchange and innovation support (e.g. increased number of advisers/extension officers; education and training facilities; peer-to-peer mentoring; etc.)

In **Africa** there is a special need to **enhance productivity issues** that exist at farm level. This is an essential first step towards household/regional FNS and the longer-term vision of greater market integration.

The Policy Briefs

SALSA produced five briefs with policy lessons and recommendations that target decision makers in the reference regions countries as well as the EU policy level, paying particular attention to the Europe-Africa dialogue.

In the 30 regions studied by the SALSA project small farms are found to contribute to a large share of the overall regional production.

The SALSA research policy interventions should be more territorially based and take into account both the characteristics of regional food systems and the different types of small farms.

Two overriding policy recommendations of relevance to all regions studied:

- **Introduce appropriate combinations/mixes of policy interventions to help small farms add value to their produce** since they are more productive and profitable when they specialize in quality produce and processing. This may include support to some small farms that are mainly self-provisioning, but who have the ambition to commercialise.
- **Foster and facilitate cooperation** as the most enabling and empowering form of governance for small farms and small food businesses. This includes the introduction of appropriate frameworks for value chain strategies/contracts that promote greater coordination and the more equitable distribution of power and financial benefit between small farmers and other supply chain actors.



The Policy Briefs and all the other SALSA publications are available at www.salsa.uveora.pt



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Further information:

- www.salsa.uevora.pt
- www.fao.org/in-action/small-farms-businesses-sustainable-food-nutrition
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