



Background document to the FAO e-conference on “The Role of Small Farms Within a Larger Context of Food Security”

This is the second e-conference providing input to the EU-funded Horizon 2020 research project “Small Farms, Small Food Businesses and Sustainable Food Security” - [SALSA](#). The conference is intended to focus the attention of researchers, educators and a wide spectrum of food chain/food system actors and entrepreneurs, as well as policy makers and administrators at multiple levels, on the role of small farms within a larger context of food security.

Six overarching topics are covered in this e-conference, with specific questions open for discussion. The results of the e-conference are intended to provide further feedback on what has been learned so far from the work in the SALSA project and to identify key knowledge gaps as well as to share examples that will contribute to building the SALSA empirical base. Using this second e-conference, the SALSA team want to catalyse and foster an ongoing dialogue with relevant stakeholders.

The e-conference will run from 19 March to 9 April 2018, with participants contributing via email. The e-conference moderator will post weekly summaries to recap main points and stimulate further dialogue. A wrap-up document of the e-conference will be prepared, circulated to all participants, and distributed through the SALSA website and other communication channels.

This short background document is provided to help guide and contextualize the discussions. Questions to be discussed in the e-conference are detailed in Section 5 and information on how to join the e-conference is included in Section 6.

1. Global Context

Adopted in September 2015, the United Nations 2030 Agenda for Sustainable Development is a global vision for people, and the planet, that commits the international community to act together to overcome the multiple and complex challenges of the 21st century. It charts a plan that will shift the world onto a sustainable and resilient course with the aim of ending poverty and hunger while restoring and sustainably managing natural resources (FAO 2016). This ambition can only be fulfilled if agriculture and food systems become sustainable, so that food supplies are stable, and all people have access to adequate nutrition and health (FAO 2017(a)).

Food and agriculture lie at the very heart of the Sustainable Development Goals. While large, industrial agricultural operations are one way to produce the food needed to feed the more than nine billion people projected to live on our planet, there are, according to Lowder *et al.* (2016), about 500 million small farms (those with less than 2 ha) that also have a significant role in ensuring we have enough food that is diverse and nutrient-rich. Smallholder farms also play a substantial role in maintaining the genetic diversity of our food supply, which results in both benefits and risk reductions against nutritional deficiencies, ecosystem degradation, and climate change (Fanzo, 2017).



Small farms are particularly important for low-income and lower-middle income countries, where they occupy most of the farmland, are responsible for most of the food produced, and are an important part of the socio/economic/ecological landscape. As noted in the 2013 Report by the High Level Panel of Experts to the Committee on World Food Security (CFS), there is no “one size fits all” in regard to smallholder farms and the food systems within which they operate. The report highlights the variety of different definitions of “smallholder agriculture” and the implications this has on the understanding of the needs of smallholders.

The CFS has discussed the role of smallholders in various contexts related to food security and improved nutrition (FSN) and has endorsed several policy recommendations, specifically related to investing in smallholders, such as:

- How to Increase Food Security and Smallholder Sensitive Investments in Agriculture (2011)
- Investing in Smallholder Agriculture for Food Security and Nutrition (2013)
- Connecting Smallholders to Markets (2016)

International fora have emphasized the importance of small farms and food businesses to food and nutritional security, and the contribution of the world’s small-scale food producers could certainly be increased further (CFS, 2017). It is therefore important to gain a better understanding of smallholder farms and businesses and their particular contribution to FSN.

2. The SALSA Project

The project “Small Farms, Small Food Businesses and Sustainable Food Security” (SALSA, www.salsa.uevora.pt/en/) aims to provide a better understanding of the current and potential contribution of small farms and food businesses to sustainable FSN. Supported by the EU-funded Horizon 2020 program, a coalition of 16 European and African partners are collaborating in assessing the role of small farms and small food businesses in delivering a sustainable and secure supply of affordable, nutritious and culturally adequate food.

The four-year SALSA project began in April 2016. The project the partners have adopted a novel, transdisciplinary, multi-scale approach across 30 regions in Europe and Africa that builds on and connects relevant theoretical and analytic frameworks within a food system approach. Using this perspective, the project is looking beyond production capacity, and investigating food security in terms of the availability of nutritious and safe food, food access and control (including affordability), food utilisation, and food stability. A graphical representation of the food system, as conceptualized in SALSA, is included as Figure 1 in the SALSA Conceptual Framework (Grando *et al.* 2016). SALSA is unravelling the complex interrelationships between small farms, small food businesses and FSN, and is shedding light on the role played by small farms in (a) the balance between the different dimensions of sustainability, (b) maintaining more diverse production systems, (c) supporting the urban/rural balance in terms of labour and (d) facilitating territorial development in countries facing strong rural population growth.



To date the SALSA project has delivered:

- An initial Conceptual Framework (Grando *et al.* 2016) that provides definitions of key terms and topics for the project, a conceptualization of the food system and a starting point for the final empirically grounded outcomes of the project.
- Building on this Conceptual Framework, SALSA published its Analytical Framework (Brunori *et al.* 2017) identifying the rationale, objectives and methodological steps for data collection and analysis.
- Using an advanced multivariate statistical analysis and expert consultations, 25 European reference regions have been selected. This has resulted in more than 30 maps indicating the distribution of small-scale farms (considering both structural and economic dimensions) within Europe (SALSA 2017).
- Data from 10 regions (9 in Europe and 1 in Africa).
- A SALSA-developed toolkit that maps food systems in stimulating high interactive and very goal-oriented discussions in multi-actor stakeholder groups. From this testing, the approach will be used to analyse the food systems in the 25 European and 5 African reference regions to gain an entry point for in-depth qualitative and quantitative assessments.

SALSA is paying particular attention to effectively fostering stakeholder involvement, knowledge exchange and joint learning at local, regional, national and international levels. Since starting in April 2016, SALSA has convened two workshops at international conferences (XXVII European Society for Rural Sociology Congress (Nov. 2016) and the 2017 Global Food Security Conference in Cape Town) to raise awareness and solicit input to the project's research. There have been SALSA project meetings (Cabo Verde, Valencia) facilitating dialogue and sharing of research and results among the partners. Regional workshops in many of the reference regions are building SALSA communities of practice, and the SALSA partners themselves are engaging in online discussions facilitated through the TECA platform. A key strategy to support communications, information sharing, and learning are SALSA-moderated e-mail conferences.

3. The first SALSA e-conference

In October 2016, FAO, a partner in SALSA, hosted the first e-conference "*Exploring the contribution of small farms to achieving food security and improved nutrition*" (Ruane 2016). Participation was open to everyone, and those that joined came from different parts of the world and different walks of life. The e-conference aimed to take a fresh look at the contribution of small farms to food security and improved nutrition, allowing stakeholders to share their experiences and up-to-date knowledge on the topic.

Over its two weeks, 462 individual participants subscribed to the e-conference, of which 59 provided 99 contributions to the dialogue. Based on a background document prepared for the e-conference (Ruane and Knickel 2016), questions explored how we define small farms; the role of small farms in FSN; how they contribute to FSN using a food systems approach and how this can be done in a sustainable way.



Participants widely agreed that defining small farms is an interesting question. Although physical farm size may be universally appealing, it does not capture the complexities of farming, and so additional criteria for farm size are required - such as indicators of farm economic output. In response, the SALSA project has used an advanced multivariate statistical analysis with a whole range of indicators including contextual ones, all based on expert consultations.

The voices of developing country participants underlined the important contribution that small farms make to food security and improved nutrition, producing abundant quantities of nutritious food which feed families and communities in the rural areas of their countries. Participants highlighted the contribution of small farms not only to FSN but also to food availability and food stability, noting the buffering capacity in times of economic turbulence and the supplementary benefits of off-farm income. A further dimension of small farms raised during the e-conference was the wide diversity of crops and livestock associated with small farming. The discussions confirmed the approach that the SALSA project has developed and is now applying in all empirical work.

The questions on how precisely a food systems approach can be used to study the contribution of small farms to food security and improved nutrition received little attention in the conference, suggesting that more research is required in this area.

For more information on the previous e-conference, the main input and summary can be found [here](#).

4. The focus of the second e-conference

The SALSA project addresses multiple audiences including researchers, educators and a wide spectrum of food chain/food system actors and entrepreneurs as well as policy makers and administrators at local, regional, national and international levels. All of these are important stakeholders in SALSA.

To raise awareness of the issues of small farms, small farm businesses and FSN requires joint knowledge-sharing and learning. SALSA has taken a reflective research approach and the use of feedback loops with national and international stakeholder groups. Among several communication channels (SALSA website, FAO's TECA platform, European and African platforms, workshops, and other events), SALSA is using e-conferences as a key strategy to engage stakeholders in dialogue and information sharing.

The project's upcoming second e-conference on The Role of Small Farms Within a Larger Context of Food Security is intended to provide further feedback on what has been learned so far from the work in the SALSA project, and to identify key knowledge gaps as well as to share examples that will contribute to build the SALSA empirical base. Using this second e-conference, the SALSA team intends to catalyse and foster an ongoing dialogue with relevant stakeholders.



The e-conference will run from 19 March to 9 April, with weekly summaries posted by the moderator to recap main points and stimulate further dialogue. This short Background Document is distributed to participants to provide information to help guide and contextualize the discussions.

5. Main questions for discussion in the second e-conference

The e-conference invites participants from around the world to share and discuss their experiences, lessons learned and perspectives on the role of small farms within a larger context. Six overarching topics are covered in this e-conference with specific questions to be discussed by participants. When addressing specific questions, it would be good if participants could discuss specific examples from their own work, experience or region, as well as any lessons learned.

Topic #1: Cooperation among small farms

Cooperation is common practice among farmers. It occurs in a variety of ways, ranging from informal collaboration with relatives and neighbours at times of high workload (e.g., hay harvesting) to farmer associations where farmers purchase production inputs, process primary products (like farmer-owned dairies) or market their produce together (Lutz *et al.*, 2017). In the wider context of rising competition from industrial farming and other challenges and risks, horizontal cooperation (among farmers and/or among processors) as well as vertical cooperation (among actors in the food chain) has been shown to have critically improved the situation of individual producers and of groups of producers (Colombo and Perujo-Villanueva, 2017; Cush and Varley, 2013; Ginder *et al.*, 2008).

Through cooperation, small farms can have more individual power and control over production, can reduce production costs (De Roest *et al.*, 2018; Motiram and Vakulabharam, 2007), and strengthen their position in the market. In addition, social capital and social control are benefits of cooperation (Rivera *et al.*, 2018; Schwettmann, 2014).

Data from the first 10 reference regions studied in the SALSA project shows that vertical cooperation may mean that small farms need to produce in particular ways, requiring changes in practices. This potentially reduces small farmers' decision-making freedom, while remaining more autonomous, which is normally is one of their main concerns (Šūmane *et al.*, 2018).

Questions:

- 1.1. What are different experiences of small farms' cooperation in other regions?
How has this changed over the past 10 years?
- 1.2. Could you provide specific examples of the advantages and/or disadvantages of cooperation among small farms?
- 1.3. Are there any forms of collaboration between small farms that work particularly well? Why? How does the size of the farm affect cooperation?



- 1.4 In what way does gender influence cooperation among small farms? Please share experiences from your region.

Topic #2: Small farms' contribution to resilience of the food system

Food systems are intrinsically complex, being comprised of many different processes, value chains, actors and interactions. As such, they are hard to predict and manage. With so much uncertainty and complexity, it is challenging to make food systems more sustainable and resilient given unpredictable drivers of change (Ashkenazy *et al.*, 2018).

In the SALSA project's Conceptual Framework (2016), the idea of the food system extends beyond the production side and considers opportunities within food system activities to attain more resource efficiency and more stability. This leads to a more balanced consideration of food supply and demand within the context of actors, institutions and governance. The project also notes that the arrangements farmers develop with other farms and with other actors shape the properties of the food systems to which they are connected. Thus, the contribution of small farms to FSN can strongly depend on the way they are connected to their surrounding food systems.

Evidence to date in the SALSA project shows that small farms contribute to the resilience of the food system by providing a more diverse product range and by using a varied range of marketing channels and exchange relations. Examples are selling through farmers' markets, through intermediaries, directly to retailers, and using labour in a more flexible manner, non-monetary exchanges, direct supplies in the enlarged family (including urban-rural) and marketing to other consumers. Diversity can apply to many aspects of the food system – crops (and animals) on the farm, crop rotation schedules, production techniques, water systems, farm input sources (e.g. seeds, fertilizers, irrigation, feed) and consumption habits (De Roest *et al.*, 2018; Dell, 2015)

Questions:

- 2.1. What are the ways that small farms contribute to the resilience of the food system in your region? Please provide examples.
- 2.2. Have small farms been more resilient compared to large farms in your region? What were the main factors that determined their resilience? Please provide examples.
- 2.3. What examples can you share where having more diverse product ranges and diverse channels have contributed to the resilience of small farms.

Topic #3: Strategies used by small farms to overcome challenges – a view of the past

Despite their significant contribution to food and nutrition security, small-scale farms all over the world face many common biophysical and socio-economic challenges that impede their ability to



be resilient in the face of shocks. These shocks can vary in type based on region or country but usually fall into one or more of the following categories:

- Governance mechanisms (formal and informal)
- Digital technology (e.g. mobile phones, apps, other decision support systems)
- Innovations in production, marketing, distribution etc.
- Finance (e.g. bank, credit, subsidies, off-farm income)
- Fluctuations in markets (formal and informal)
- Political environment
- Environmental hazards
- Human and social capital (e.g. farmer knowledge, labour requirements, succession, tenure, representation, cultural values)
- Climate variability

Many organizations, at various levels, are committed to working with small farms on these issues. IFAD advocates a bottom-up approach that has helped farmers build strong organizations that give them more power in the marketplace and a greater voice in decision-making. IFAD have supported innovations in inclusive partnerships, rural investment, and focusing on diverse crops that contribute to a high-quality diet and help small farmers cope with the various challenges they are confronted with (IFAD 2014). FAO integrates prevention, preparedness and response to emergencies in their work to enhance resilience of small farms (FAO 2017(b)).

Small farms are still a critical element of the European agricultural system. In spite of the fact that across Europe small farms are disappearing, they can be economically viable, and their sustainability is highly desirable because of the benefits to both communities and society as a whole (Fienitz 2017; Knickel *et al.*, 2018).

On 29 November 2017, the European Commission presented a communication outlining ideas on the future of food and farming. The communication comes after a consultation on the future of the common agricultural policy (CAP) in order to better understand where the current EU policy can be simplified and modernised.

In Africa, as in most if not all areas of southern and eastern European countries, the majority of farms are small, family-run units, and are critical to rural development.

Considering the importance of small farms for the livelihoods of a very large number of families and entire rural communities, and the particular challenges that small farms face, NEPAD has been supporting innovations that will increase production, promote diversification, encourage efficient and more equitable value chains, develop regional markets and design structural policies and instruments that are intended to help address challenges to small farms.

Questions:

- 3.1. Identify the three main challenges which small farms, in your region, have faced in the recent past.



- 3.2. Share specific examples of what types of adaptations and innovations have helped small farms to cope with these challenges.

Topic #4: How small farms address future challenges

The challenges facing small farms – not only in Europe and Africa – will have a consequence on food production and food systems (Wiggins *et al.*, 2010; Hazell *et al.*, 2006; Knickel *et al.*, 2018). Recognizing that future challenges may be different than those faced by small farms in the past, thinking about the prospects of small farms can offer a way to assess alternative futures for food.

Decisions for farm management are taken at farm scale, but in aggregate may well have an impact upon regional sustainability (Gutzler *et al.*, 2015). With the multiple actors involved in the food value chain, SALSA is undertaking participatory foresight analysis to assess the adaptation of small farms to foreseeable challenges, potential increases in food production, food access and utilisation, and the challenges related to urbanization and growing rural densities in some areas of less developed countries.

Within the territorial food systems focus of the SALSA project, the farmers interviewed to date have identified many of the challenges already noted. The SALSA project is interested to learn what small farms in other regions are doing to address their future challenges.

Questions:

- 4.1. Within your region, what are the three main challenges that small farms face in the future? Why? Are these different from past challenges? If so, why?
- 4.2. To cope with these future challenges, do small farms require new innovations and adaptation techniques? And if so, which?

Topic #5: The importance of food businesses to small farms

In the SALSA Analytical Framework (2017), food businesses are defined as processors, distributors and retailers. A particular interest of the project is the type of relations which these businesses have with small farms and the wider regional food systems, and the role they play in the viability and development of small farms.

Small food businesses may actually also play an important role for food and nutrition security, as they can be a significant partner with small farms (SDG Compass, 2015). Within agri-business value chains, there is a wide range of activities. These can include input supply, farmer organizations, farm production, post-harvest handling, processing, provision of technologies, grading criteria and facilities, cooling and packaging, post-harvest local processing, storage, transport, finance and information feedback from markets (Norton 2014).

Small food businesses may also source or sell globally, and thus be in large part disconnected from regional systems of production, but they may still be of interest for their connections to local farmers.



Connections between small farms and small food business can take place in the context of both market transactions and informal non-monetary exchanges based on reciprocity, barter, parental relations etc., thus encompassing activities beyond what is meant *strictu sensu* by "business".

The data collected so far in the SALSA project shows that the role of small food businesses in the regional food systems, and their contribution towards the resilience of small farms, differ a lot between regions and products. In some regions, these small food businesses do not exist, and therefore play no role. In other regions, it is possible to observe different types of small food businesses. Some are within or alongside the farm, where farmers sell both their own raw and processed products and products obtained from other local farmers; other small farm businesses buy products directly from farms and then process and sell them; others buy through intermediaries who have already processed farm-sourced products.

Questions:

- 5.1. What kind of food businesses are important to small farms in your region? Which of these are small food businesses? Please also explain how you define *small* food businesses.
- 5.2. Do food businesses in your region play an important role within the food system? How? Please provide specific examples.

Topic #6: How can policies affect small farm activities and their resilience?

There is a tremendous diversity of small farms around the world. With this in mind, there is a need for context-specific policies that can support them. In Graeub *et al.*, (2016) the regional diversity and complex challenges facing small farms and smallholders were examined, noting that distinctly different approaches to providing support for smallholders are required.

A successful strategy for sustainable agriculture requires significant improvements in the mixture of policies and in the way they affect farm strategies and the related decision making (Bioversity *et al.*, 2012; Knickel *et al.*, 2018). Hazell and Bernstein (2013) indicate that there is for example a gap in policies for helping small farmers manage risk, and that with the changing economic landscape there is a need to find policy interventions that can help more small farms to link successfully to consumers and or relevant value chains.

The SALSA project is addressing the influence of policies and regulations with specific regard to small farms and small farm businesses, and their role in food and nutrition security. The project is particularly interested in policy measures that can improve the contribution of small farms to making the food system more resilient, and to meeting food security challenges.

Based on earlier research and current findings from SALSA in the 10 reference regions studied so far, we think that there are some policy areas that affect small farms more than others. They



include policies that affect the viability and development of small farms, small farms’ decision making regarding the amount and type of food produced and their ambitions regarding market integration, and policies that affect their market transactions and informal non-monetary exchanges.

Questions:

- 6.1. What are the policies (international, national or local) in your region that affect the viability and development of small farms, and small farms’ decision making regarding the amount and type of food produced and their ambitions regarding market integration?
- 6.2. Can you give specific examples of how these policies have affected small-farm decision-making?
- 6.3. What are the most critical policies that are needed in your region to support small farm development and increase their role in food and nutrition security in the (regional) food system?

6. How to participate in the second SALSA e-conference?

The e-conference is open to all who wish to share their insights and discuss “*The Role of Small Farms Within a Larger Context of Food Security*”.

To start, we will re-use the list of participants to the first SALSA e-conference, and will encourage others to join in this new e-conference, so that we can further expand the project’s reach, scope and discussion depth.

Anyone wishing to join the e-conference should send a short email to “AIS@fao.org”, specifying:

- Their email address to be registered on the list
- Their full name
- Organisation, institute, company they work with, and their function (or simply note “private” if they want to participate on their own behalf).

These are the basic guidelines to contribute to the e-conference:

a. Contributions to the e-conference should be sent to “AIS@fao.org”. Your input will be screened by the moderators and reposted to the entire group. The “screening” will be done to ensure contributions are clear and on-topic.

b. As the e-conference tackles a diverse set of questions and issues, and to enable all participants in keeping track of the discussions, we encourage you to send one email per question or per reply on previous inputs, and not to combine several questions in one email. We suggest that you always refer to the question you give input on, by its question reference number.



- c. In their first contribution, participants should introduce themselves briefly (2-3 sentences) in terms of their main interest, position, experience, etc.
- d. Contributions should not exceed 600 words, and should be in English (if you are not fluent in English, the moderator will assist with grammar/syntax problems)
- e. People posting contributions are assumed to be speaking on their own behalf and not on behalf of their employers (unless they indicate otherwise)
- f. Participants may not post libellous, insulting or defamatory messages or materials, or links to such materials. Please exercise tolerance, respect other participants whose views may differ from your own and remain courteous at all times.
- g. Participants should not post contributions in which they offer their commercial services to other participants, nor should they simply re-post material (such as press releases) that they or someone else have already published elsewhere.
- h. The moderator retains the right to refuse to post or to modify any contributions that they consider to be in violation of these guidelines. Participants expressly authorize the moderator to reference, summarize, quote and disseminate all or part of their contributions to the e-conference in a summary or other document(s) that may be subsequently prepared. Participation in the e-conference is contingent upon and constitutes acceptance of these guidelines by participants.

Any questions or remarks prior or during the e-conference can be sent to the moderator at AIS@fao.org.

7. References, abbreviations and acknowledgements

REFERENCES

Ashkenazy, A., Calvão Chebach, T., Knickel, K., Peter, S., Horowitz, B. and R. Offenbach. 2018. Operationalizing resilience in farms and rural regions – Findings from fourteen case studies. *Journal of Rural Studies* (xxx) 1-11.

Bioversity International; CGIAR Consortium; Food and Agriculture Organization of the United Nations; International Fund for Agricultural Development; International Food Policy Research Institute; Inter-American Institute for Cooperation on Agriculture; Organisation for Economic Co-operation and Development; United Nations Conference on Trade and Development; United Nations High Level Task Force on Global Food Security; World Food Programme; World Bank; World Trade Organization. 2012. *Sustainable*



Agricultural Productivity Growth and Bridging the Gap for Small-Family Farms:
Interagency Report to the Mexican G20 Presidency. Washington, DC: World Bank.

- Brunori, G., Grando, S., Galli, F., Fastelli, L. and F. Di Iacovo. 2017. Analytical framework and criteria for the identification of small farms and for their differentiation. SALSA Project. http://www.salsa.uevora.pt/wp-content/uploads/2017/05/D1_2-Analytical-Framework.pdf
- CFS. 2017. Global Strategic Framework for Food Security and Nutrition (GSF). <http://www.fao.org/3/a-mt648e.pdf>
- Colombo, S. and M. Perujo-Vilanueva. 2017. Analysis of spatial relationship between small olive farms to increase their competitiveness through cooperation. *Land Use Policy*, 63(April), 226-235.
- Cush, P. and T. Varly. 2013. Cooperation as a survival strategy among west of Ireland small-scale mussel farmers. *Maritime Studies* 12(1), 11.
- De Roest, K., P. Ferrari, K. Knickel. 2018. Specialisation and economies of scale or diversification and economies of scope? Assessing different agricultural development pathways. *Journal of Rural Studies* (59) (in print)
- Dell, W.M. 2015. Pathways to Resilience: Obstacles and Opportunities for Small-Scale Agriculture and Local Food Systems in British Columbia. Master of Arts Thesis, University of Victoria.
- European Commission. 2017. [Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee and the Committee of the Regions. The Future of Food and Farming.](#) European Commission.
- Fanzo, J., 2017. From big to small: the significance of smallholder farms in the global food system. *The Lancet Planetary Health*, 1(1).
- FAO. 2016. *Food and Agriculture. Key to achieving the 2030 Agenda for Sustainable Development.* <http://www.fao.org/3/a-i5499e.pdf>
- FAO. 2017(a). *The State of Food Security and Nutrition in the World.*
- FAO. 2017(b). *Averting Risks to the Food Chain. A compendium of proven emergency prevention methods and tools.* FAO.
- Fienitz, M. 2017. *Small Farms in Europe: Viable but Underestimated.* Access to Land. <http://www.accesstoland.eu/Small-farms-in-Europe-viable-but-underestimated>
- Ginder, R. and G.M. Artz. 2008. Cooperation: A survival strategy for small and medium-sized farms. Leopold Center Completed Grant Reports. 312.
- Graeub, B., Chappell, M.J., Willman, H., Ledermann, S., Benzer Kerr, R. and B. Gemmill-Herren. 2016. The State of Family Farms in the World. *World Development* (87), 1-15.



- Grando, S., Brunori, G., Knickel, K., Pinto-Correia, T. and L. Sutherland. 2016. Initial Conceptual Framework. SALSA Project. http://www.salsa.uevora.pt/wp-content/uploads/2017/05/D1_1-Initial-Conceptual-Framework.pdf
- Gutzler, C., Helming, K., Balla, D., Dannowski, R., Deumlich, D., Glemnitz, M., Knierim, A., Mirschel, W., Nendel, C., Paul, C., Sierber, S., Stachow, U., Starick, A., Wieland, R., Wurbs, A., and P. Zander. 2015. Agricultural land use changes – a scenario-based sustainability impact assessment for Brandenburg, Germany. *Ecological Indicators* (48) 505-517
- Hazell, P., and J. Bernstein. 2013. *Feed the Future Learning Agenda Literature Review: Improved Agricultural Productivity*. Rockville, MD: Westat.
- Hazell, P., Poulton, C., Wiggins, S. and A. Dorward. 2006. *The Future of Small Farms: Synthesis Paper*. Washington, DC: World Bank.
- HLPE. 2013. Investing in smallholder agriculture for food security. www.fao.org/cfs/cfshlpe/reports/en/ (in English, Arabic, Chinese, French, Russian and Spanish).
- IFAD. 2014. *Food Security: Mapping Risks, Building Resilience, Stabilizing Supply*. [Statement of IFAD President at Chatham House](#).
- Knickel, K., Redman, M., Darnhofer, I., Ashkenazy, A., Calvão Chebach, T., Sumane, S., Tisenkopfs, T., Zemeckis, R., Atkočiūnienė, V., Rivera, M., Strauss, A., Kristensen, L.S., Schiller, S., Koopmans, M.E. and E. Rogge. 2018. Between aspirations and reality: Making farming, food systems and rural areas more resilient, sustainable and equitable. *Journal of Rural Studies*, Vol. 59 (in print).
- Lowder, S., Scoet, J. and T. Raney. 2016. The number, size, and distribution of farms, smallholder farms, and family farms worldwide. *World Development* 87, 16-29.
- Lutz, J., Smetschka, B. and N. Grima. 2017. Farmer Cooperation as a Means for Creating Local Food systems – Potentials and Challenges. *Sustainability* 9 (6), 925
- Motiram, S. and Vakulabharanam, V. 2007. Corporate and Cooperative Solutions for the Agrarian Crisis in Developing Countries. *Review of Radical Political Economics*, 360-467.
- Norton, R. 2014. [Agricultural value chains: A game changer for small holders](#). Devex.
- Ruane, J. 2016. [An FAO e-mail conference on exploring the contribution of small farms to achieving food security and improved nutrition: The moderator's summary](#). FAO.
- SALSA. 2017. [Summary Report The 25 European reference regions in SALSA](#). WP2. SALSA Project.



Schwettmann, J. 2014. *Cooperatives in Africa: Success and Challenges*. International Symposium on Cooperatives and Sustainable Development Goals: The Case of Africa.

SDG Compass. 2015. [The guide for business action in the SDGs](#). GRI, United National Global Compact, WBCSD.

Syngenta. 2017. *The Future of Small Farms*: Report on an international conference. Syngenta

Wiggin, S., Kirsten, J. and L. Llambi. 2010. The Future of Small Farms. *World Development* 38(10), 1341-1348.

ABBREVIATIONS

CFS = Committee on World Food Security; FAO = Food and Agriculture Organization of the United Nations; FSN = Food security and improved nutrition; HLPE = High Level Panel of Experts (advises the CFS); SALSA = Small Farms, Small Food Businesses and Sustainable Food Security (a Horizon 2020 research project); SDGs = Sustainable Development Goals

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