



## **“The Farmers’ Route to Sustainable Food Systems”**

*Contribution of WGs Value Chain, Food Security and Climate Change*

### **1. INTRODUCTION – Why a Food Systems’ approach**

*“[The food system is] an interconnected web of activities, resources and people that extends across all domains involved in providing human nourishment and sustaining health, including production, processing, packaging, distribution, marketing, consumption and disposal of food. The organization of food systems reflects and responds to social, cultural, political, economic, health and environmental conditions and can be identified at multiple scales, from a household kitchen to a city, county, state or nation”<sup>1</sup>*

In other words, a food system can be described as process, whose main aim is to create a direct link between producers and consumers, the first and last link of the food value chain. However, in order to achieve and valorise the efforts towards **the necessary transition from Food Systems to “Sustainable” Food Systems**, in line with the 17 Sustainable Development Goals (SDGs), a holistic, fair, and coordinated approach along the whole food value chain must be ensured.

The year 2020 represents the start of the last useful decade for the implementation of the 2030 Agenda for Sustainable Development and the SDGs<sup>2</sup>. This decade has also been largely defined as the “Decade for Action”, in which Governments and Stakeholders commit to make the implementation of the 2030 Agenda effective and pragmatic. It is important to mention that **SDG 17 clearly refers to a partnership-based multi-stakeholder approach for the implementation of the 2030 Agenda**.

In recent years’ discussions on how to boost the 2030 Agenda implementation, the international community has seen a rising debate around the concept of Food Systems and how it can be defined. Various stakeholders have proposed different definitions and approaches, although all the actors involved feel that a decisive transition towards a whole Sustainable Food Systems’ approach is needed.

Looking at the literature on Food Systems, the first thing that emerges is its complexity, as it comprises not only the “Farm to Fork” approach, but the whole food ecosystems: from inputs management, to production patterns, food losses and waste, policy making at all levels has to guarantee enough food for an increasing world population, coping with the effects of climate change, resource depletion, and malnutrition, among the others.

The food system approach stands at the intersection of all these elements that characterize the whole global agricultural and food sectors, as it was generally agreed that a more holistic framework was needed to address the interconnection among often competing challenges, like ensuring food and nutrition security, fighting against climate change, improving healthier consumption habits, reducing food loss and waste, while coping with the productivity of the agri-food sector.

While components of the food value chain have traditionally been approached in silos - trying to improve each one with the assumption that this would also improve as well and as a direct consequence the efficiency

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<sup>1</sup> Grubinger, Vern, Linda Berlin, Elizabeth Berman, Naomi Fukagawa, Jane Kolodinsky, Deborah Neher, Bob Parsons, Amy Trubek, and Kimberly Wallin. University of Vermont Transdisciplinary Research Initiative Spire of Excellence Proposal: Food Systems. Proposal, Burlington: University of Vermont, 2010.

<sup>2</sup> <https://sustainabledevelopment.un.org/?menu=1300>



of the system as a whole - global challenges show that a radical shift in the overall food systems approach requires as the key ingredient, **a coordinated, mutually beneficial and trustworthy engagement** of the different stakeholders in different sectors of the whole food value chain at multiple levels.

To this extent, the United Nations has planned to organize a **Food Systems Summit**, which will be held in September 2021, and the outcome of which will lead the transition towards an **integrated, fair and shared Sustainable Food Systems' approach**, which is able to catalyse the efforts of the actors at all levels, and in which Sustainability is enshrined as the strategic priority for the years to come. WFO has been called to be part of this process, hence the need to equip itself with a policy paper on the matter that provides the Organization with a political mandate for action.

## **2. PRINCIPLES OF ENGAGEMENT – Transition towards Sustainable Food Systems: Why Farmers' role is at the heart**

As underlined by the FAO (2018) *"the overall performance of the food system, measured in terms of sustainability, is the result of the intertwined conduct of all actors in the system. Firms, farms, consumers, for instance, all can have the power to influence food system performance and initiate change"*.

Farmers play a major role in the process to shape Sustainable Food Systems, as they stand at the heart of any process related to the system: farmers are the ones who feed the world with healthy and nutritious food, and deliver at the same time multiple economic, social and environmental benefits to the society as a whole. At the same time farming is a business and farming families all over the world have to live from what they grow, either directly or indirectly. For a sustainable shape of the global Food Systems an economical benefit for the farming families is indispensable.

Furthermore, it is relevant to underline that farmers' role, together with the overall vision of agriculture, has evolved throughout the last decades. A farmer should not be seen as only the "land-keeper" or the one who grows crops and raise livestock to provide the society with food. It is way much more than that.

The **multidimensional nature of farming activity** has taken centre stage and it replaced the old vision of agriculture as a simple "provider of raw material". Therefore, if we aim to align and lay the foundations for a necessary shift towards Sustainable Food Systems, this element has to be emphasised and mostly valorised, in order to exploit the full potential of such an approach.

Why?

**Because, without Agriculture and Farmers' role in ensuring quantity, quality and diversity of food, while at the same time driving major economic, environmental and social changes worldwide, there can be no Food Systems at all.**

It is relevant to highlight at this point what the FAO clarifies in its definition of **Sustainable Food System**<sup>3</sup>:

*"A sustainable food system (SFS) is a food system that delivers food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised"*.

*This means that:*

- It is profitable throughout (economic sustainability);*
- It has broad-based benefits for society (social sustainability); and*
- It has a positive or neutral impact on the natural environment (environmental sustainability)".*

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<sup>3</sup> <http://www.fao.org/3/ca2079en/CA2079EN.pdf>



At the same time, the agricultural and food sector is a complex interrelated system in itself, where farmers stand at the heart of a diverse ecosystem, made up of multiple actors, cross-cutting global challenges and innovation dilemmas.

Against this backdrop, the well functioning of food value chains, where **the interdependencies of both actions and actors represent the engine of the Sustainable Food Systems' concept** overall, and where **Trust is the key ingredient to make it work**, deserves further analysis.

**Farmers are the key to shifting to sustainable food systems in interconnected value chains:** the sustainability of food production is a necessity and farmers at all latitudes have a strong self-interest in produce in a sustainable way. Nevertheless, a food system approach calls for a thorough understanding of the interconnections among all the aspects of the system. Production, distribution and consumption of food, as well as the social-economic and institutional elements are interconnected and have an influence on each other, affecting the access, quantity and quality of food supply. In this context, it must not be forgotten that consumers play a key role together with farmers, as they can affect the entire food value chain with their dietary choices.

### 3. POLICY RECOMMENDATIONS / *Our Call for Action* for Farmers-driven solutions

Farmers have a long-lasting experience in natural-based work. The systems of family farms ensures the knowledge transfer of good agricultural praxis. **However, agriculture has changed, is changing and will change in the future.** An adaptation to natural circumstance is one of the biggest challenges for agriculture. This includes the reshaping and adjustment of its own working practices.

The agricultural sector is willing to do that.

However, **the responsibility for taking action** spans all the stages, from the production, to the processing, the distribution and the consumption of Food. Therefore, the following ***Call for Action*** is presented here below:

#### **ACTION 1 – Involving the whole VALUE CHAIN**

- Building on the multidimensional nature of farmers' role in the whole food value chain, one solution that stands out is the creation of "**new business models**" that are able to link farmers, business, retailers and consumers, and which can therefore be a true catalyser for a food system approach which is able to involve all the actors. Value chain contracts represent an example of the above mentioned "new business models" that are able to put farmers at the same level of industry, enhancing at the same time their bargaining power, promoting fair trading practices and prices. The main strength of this approach, is that it ensures a closer relationship between farmers and industry, which must work closer in order to build contract relations that guarantee to farmers a medium-long term stability and certainty and to industry assurance of safe raw material. This is linked with the concept of sustainability as a direct consequence: **the sustainability of farming is necessarily linked to a better cooperation between the actors of the chain.**
- Ensuring **transparency and mutual Trust** among the various actors along the chain, and consequently creating proximity between producers and consumers by establishing deep ties between production and territories, is therefore of paramount importance.
- Secondly, and linked to the previous point, in view of ensuring a closer, transparent and trustful relationship between farmers and consumers (the first and final stage of the food value chain), the **farmers' value added in the whole approach must be not only valorised but also restored.** In this regard, transparency is key. In particular, it is of the outmost importance to make it easy for the



consumer to trace the food they consume. As a direct consequence, farmers can be rewarded by the market for the quality of the products they produce. Practices such as local market and **direct selling** should be promoted as they connect consumers directly to farmers, benefiting both. Furthermore, this closer relationship between the first and final “link” in the supply chain, is instrumental in boosting local economies and empowering consumers to play an active part in the economic development of their local area. Consumers have better access to fresh, healthy, seasonal produce, restoring in this way farmers' value added and incentivizing the adoption of production methods in line with shifting consumers' tastes and preferences. This goes hand in hand with the aim to curb **food waste and losses** along the entire supply chain. A responsible citizen, who understands the value of food and how food is sustainably produced, is a citizen who does not waste it.

- **Food losses and waste**

- Farmers can play a positive role in reducing food losses at the farm gate, which will have a direct impact on the ecosystem. Post-harvest losses have to be reduced at all stages of the food supply chain. For this, technologies as well as a better knowledge transfer is needed. This begins on a local level (local markets in rural areas) and ends at the stage of retailers as well as on the consumer level. Related to this, ensuring plant and animal health in the production chain, together with better quality criteria for raw materials, are elements that could be addressed by valorising the positive impacts **of direct selling practices**.
- Agriculture does not normally “waste”, given that (i) it has no interest in eliminating a product that has an economic value; (ii) it uses the maximum possible amount of products for processing, to fertilize the soil, to feed animals and to produce energy: e.g. biomass, biogas, etc.

In conclusion, the **development of new structures** (e.g. new business model) and the **strengthening of closer and fairer relationships** between agricultural production, food storage and transport, processing and transformation, retail and finally consumption, in short among each actor of the value chain, together with **developing different networks of distribution and exchange**, could bring concrete solutions to global challenges contributing at the same time to **the sustainability of food systems and security of food supply**.

#### **ACTION 2 – Addressing CLIMATE CHANGE:**

- A sustainable food production can have an impact on a changing climate, however climate change is affecting food production;
- Agriculture is surely a carbon emitter but has a huge untapped potential as carbon sink: referring to 23% of the total GHG emissions as provoked by agriculture is not considering the carbon sink role of agricultural land, crops and soil health. If we look at the whole concept of food system approach, although farmers are the first to suffer from climate change impact (e.g. extreme climate hazards, pests and diseases) they are already doing a lot to address it. However, agriculture is based on natural processes which will always implement the emission of greenhouse gases.
- Climate change has been indicated as the most important challenge that needs to be addressed, since it affects severely food security and people livelihoods globally. Agriculture has the potential to be an important part of the solution through carbon sink for mitigation, risk-sensitive agriculture practices and Farmers have already implemented solutions to effectively cope up with a changing climate. The Climakers best practices show a clear evidence of the actions that farmers are taking already to mitigate climate change as well as



to develop their resilience and adapt to it. Those practices should be scaled up or replicated to boost climate smart agriculture practices worldwide, [www.theclimakers.org](http://www.theclimakers.org).

### **ACTION 3 – Structuring DISASTER RISK MANAGEMENT**

- The growth of disaster risk in agriculture, means there is a need to strengthen disaster preparedness for response, take action in anticipation of events, and ensure capacities are in place for effective response and recovery at all levels. The recovery, rehabilitation and reconstruction phase is a critical opportunity to build back better, including through integrating disaster risk reduction into development measures.
- Disaster risk governance at the national, regional and global levels is very important for prevention, mitigation, preparedness, response, recovery, and rehabilitation. It fosters collaboration and partnership.

### **ACTION 4 – Attaining GLOBAL NUTRITION SECURITY**

- Agriculture (from crop farming to forestry, fisheries and livestock) is crucial to achieve healthy diets: food systems transition towards sustainability in all its aspects, requires (1) a shift towards healthier diets, (2) the end of malnutrition in all its forms, by achieving in this way, not only food but also nutrition security. This is something which is affecting the existence of the food systems as a whole. Farmers have a key role to play as both producers of healthy and nutritious food, and stewards of local food habits, traditions as well as biodiversity.
- A key aspect is the “education/information to consumers” dimension and its role in encouraging them to choose healthier and quality foods. The proliferation of nutritional labelling systems that tend to mislead consumers, without properly informing them, goes against the overall objective of ensuring a shift towards valorising nutritious food and healthier diets, hampering as a consequence farmers’ efforts and work.
- Farmers should be rewarded by the market for the quality of the products they produce, therefore it is of the outmost importance **to ensure a full traceability** of the food consumers buy. Furthermore, origin labelling of food ensures at the same time more value added for producers and overall development of local economies. In the same way, we need to avoid misleading labelling systems that risk influencing the choice of consumers instead of informing them on the real characteristics of the products.

### **ACTION 5 – Nurturing RESEARCH AND INNOVATION**

- **R&I in agriculture is a driver of sustainable transformation of food systems:** innovation in agriculture represents a huge opportunity to enable a food systems shift towards sustainability. With this potential lies the challenge of building innovation systems that puts Farmers at the center of the development and scaling up of appropriate technologies, to ensure that these are truly and effectively adopted. A Food System approach requires as well innovative solutions to help the collaboration across actors in the food system.
- **10. The gap between farmers and research also needs to be closed so that science is able to provide farmers with practical answers to ensure improved sustainability. The gap between farmers and research also need to be closed so that that science is able to provide farmers with practical and proper answers to ensure improved sustainability.** Farmers have to be at the center of the development and scaling of appropriate training, tools, and field-testing of practices, tools and technologies to ensure that these are truly and effectively adopted. Trainings should be available for the farmers to access relevant information and



tools as they get developed along the way. These must include establishing a reinforced dialogue between scientists and farmers' organizations. To teach and monitor through Evidence Based Precision farming the wisest agricultural strategies, and to test them directly on the field, thus enabling, with the feed-back of information to improve them as well. The need for public funding to set up advisory service is necessary. It should not be only private sector based.

- Agriculture relies on innovation especially when it comes to address future challenges and devise strategies to ensure adaption (climate change with all strings attached). That's why, agricultural innovation technologies, such as precision and digital farming including the use of New Breeding Techniques, IoTs etc., alongside innovative "climate-smart" farming practices, are instrumental in addressing adverse effects of climate change, increasing resilience and reducing vulnerability.

#### **ACTION 6 – Protecting BIODIVERSITY**

- Biodiversity loss is one of the challenges of food production and farmers have a central role to play in its conservation and restoration, which goes hand in hand with a sustainable handling of the nature. In order to ensure a transition towards sustainable food system, farmers' role, which was originally viewed only as "producing food", should be valorised in view of its gradual shift towards a more encompassing and evolved role in the society as a whole. However, the farming sector faces the challenge to produce enough food to feed the world and simultaneously protect the environment. Two points which are equally important but often lead to conflicting goals. In order to combine environmental protection measures and a economical production of food, compensation and incentive systems for farming families world wide are needed.

#### **ACTION 7 – Deploying INVESTMENTS AND INCENTIVES**

- Mobilizing financial actors and promoting public and private investments, as well as, market incentives for the farmers.
- Investments for the transformation of Food Systems must **include appropriate incentives for Farmers to become more sustainable**: farmers are at the forefront for achieving the sustainability of food systems. Therefore an enabling investment framework for Farmers is needed: farmers must be involved in the strategical decision -making process for investments directed to the sustainability of the farming sector.
- Ecosystems protection role that farmers have on a daily basis should be recognized.
- Farmers should be actively involved in projects and programmes on Food Systems transformation.

#### **ACTION 8 – Recognising the LIVESTOCK SECTOR's role**

- **The livestock sector** is considered as one of the main contributors of climate change but the role of livestock in the management of drylands and grasslands has a positive impact on the carbon cycle. Nutrient circulation and the role of livestock for producing natural fertilization has to be also emphasised.
- Furthermore, a balanced and healthy diet includes consumption of meat.

#### **ACTION 9 – Achieving FOOD SECURITY**

- Farmers are instrumental for the achievement of food security. Farmers worldwide need access to a broad toolbox of inputs. Especially in rural areas with great development potential a sustainable intensification of agricultural production is needed. Therefore the accessibility



to new innovations as well as conventional agricultural equipment is essential. Food and nutrition security depend on Farmers.

- Fair and sustainable trade delivers a opportunity to increase food security worldwide. It delivers economical prosperity and ensures a food supply. It is clear that Farmers are key actors in the food systems and they must be an active part of the decision-making, at every level: local, national, regional and international. If there is no farming, there is no future for the planet: a world without farming is a world without future.

### **ACTION 10 – Valuing the role of FARMERS ORGANISATIONS AND COOPERATIVES IN THE FOOD SYSTEM**

- **Farmers’ Organizations must play a key role to play in dialogues and liaising with decision-makers** to look for farmers-driven solutions to food systems transformation and to reach out to the farmers at grass roots level to promote sustainable innovation and foster the transition.
- **Cooperatives plays a key role in the whole strategy:** agricultural cooperatives play a crucial role in improving food security, generating incomes and building local communities thus strengthening farmers’ position in the markets, increasing their income and improving their ability of producing more in a more sustainable and resilient way. This agenda should be developed under the specific angle of generating positive impact on the value chain and the food system.

### **ACTION 11 - Promoting INCLUSIVENESS IN FOOD SYSTEMS**

A special place in developing sustainable food systems must be reserved for women and youth and family farms in rural areas:

- **Young farmers should be supported and empowered in order to remain in the agricultural sector and to play a central role in building resilient and sustainable food systems:** the world is facing a huge demographic change, especially in youth populations from developing countries, with a consequent higher demand for a more sustainable food production. By 2050, it is estimated that a 49% increase in food production will be necessary to meet the needs of this growing population<sup>4</sup>. Also, in many countries agriculture is the main economic sector and source of income.
- **Women worldwide play a key role in the agricultural sector (i.e. harvesting crops, preparing food and feeding the family, caring for traditions and biodiversity) even though their role is too often unknown or not appropriately recognized.** This without considering their equally important and parallel role of caretakers of the households. Hence, women deserve to be empowered and provided with the same resources that men have in terms of i.e. access to land, inputs, finance, education, to maximize their contribution towards a more resilient food systems.

### **THE UNITED NATIONS FAMILY FARMING (2019-2028)**

The overall Food Systems transformation process should be in line with the principles and framework of the United Nations Decade on Family Farming 2019-2028 - <http://www.fao.org/family-farming->

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<sup>4</sup> FAO'S WORK ON CLIMATE CHANGE, United Nations Climate Change Conference 2019, FAO 2019  
[http://www.fao.org/3/ca7126en/CA7126EN.pdf?utm\\_content=buffer46d63&utm\\_medium=social&utm\\_source=linkedin.com&utm\\_campaign=buffer](http://www.fao.org/3/ca7126en/CA7126EN.pdf?utm_content=buffer46d63&utm_medium=social&utm_source=linkedin.com&utm_campaign=buffer)



decade/home/en/. Family farmers hold unique potential to become key agents of development strategies. Family farming is the predominant form of food and agricultural production<sup>2</sup> in both developed and developing countries, producing over 80 percent of the world's food in value terms.<sup>3</sup> Given the multidimensional nature of family farming, the farm and family, food production and life at home, farm ownership and work, traditional knowledge and innovative farming solutions, the past, present and future are all deeply intertwined.