"The Farmers' Route to Sustainable Food Systems"

World Farmers'Organisation

Approved by the WFO 2020 General Assembly

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PREAMBLE

This policy paper is formulated under the overall farmers-driven approach that was adopted by 2019 WFO General Assembly with the Farmers' Route Declaration. WFO position on issues that are not covered in this policy paper are treated in WFO policy documents that are currently in place (https://www.wfo-oma.org/policy-documents).

POLITICAL STATEMENT

The year 2020 marks a milestone in the implementation of the 2030 Agenda for Sustainable Development. With just 10 more years to go, we need to accelerate in order to achieve the SDGs. Before COVID19 outbreak, “protecting the Planet while ensuring Food Security” was priority number one in the international community. Now that this virus is here and it is meant to stay, at least for the foreseeable future, it is our duty not only to resume that work but to accelerate our action in the new era of COVID.

Meanwhile, we have realized that Food Systems are very complex and no matter the angle of intervention, the number of goals we have to achieve remains very high. From input management, to production patterns, food losses and waste, policy making at all levels has to guarantee enough food for an increasing world population, while coping with the effects of climate change, resource depletion and malnutrition, among others.

We, farmers and especially family farmers, anchor the food systems and take full responsibility for our part. We play an important role in creating jobs and economic development in rural areas. We are also indispensable as managers of the environment and ecosystems. We choose our inputs with care, we do our best in using resource efficient production methods, we deliver safe and nutritious food, we produce biomass and other renewable products, we help to mitigate climate change, we keep the soils healthy, we contribute to protect and restore biodiversity, we minimize waste and much more.

Farmers are also fully aware of the need to take better account of societal expectations: many efforts and changes are already engaged by farmers and we must be able to explain it better to citizens-consumers. However, the income that farmers generate is not always enough to allow them to earn their living: taking the cost of production into account in the selling price of agricultural products is often very difficult. We have a duty to make progress on this subject, on both a voluntary and binding level, avoiding excessive concentration and ensuring a fair share of the value across the different actors of the food chain.

It is now time for us, farmers, to have our say and propose our way towards sustainable development!

To this extent, WFO is committed to contribute to the 2021 Food Systems Summit design, preparation and implementation of its outcomes, to secure an opportunity for the voice of family farmers to be heard and for the world farmers to be kept at the heart of any sustainable food systems.

Key values

- **Inclusiveness:**

  Food systems differ based on geography. Therefore, there cannot be a one-size-fits-for all approach because circumstances and production realities differ from continent to continent and region to region. The approach should be based on common ground and inclusiveness, where no one will be left behind. All farmers, including women and young farmers deserve to be empowered and provided with the same resources in terms of i.e. access to land, inputs, finance, education, to maximize their contribution towards more resilient food systems, as well as to prepare the future farmers’ leadership.

- **Transparency:**

  Transparency of information is required at all levels from global to grassroots, as well as in feeding the international discussion with the farm level experiences and best practices that are ready for scaling up and replication in other countries. The flow of information must be timely and effective to allow all actors to make proper decisions and take robust actions for the benefit of the world farmers and the whole population. The digitalization has to be improved as an instrument of knowledge and transparency of the chain and at the same time the property of data has to be considered a priority for farmers.

  Transparent and trustful relationships between farmers and consumers (the first and final stage of the food value chain, where open traceability is available) must be promoted. The farmers' share of value added in the whole approach must be not only valorised but also restored.

- **Farmers' driven:**

  Farmers are at the centre of food systems. Therefore, any policy-making process that has an impact on the farming sector at local, national, and international levels should involve them, through their organized structures. Representatives of farmers' organisations and cooperatives must therefore also be partners in the discussion and decisions on sustainable food systems and the 2030 Agenda for sustainable development. This approach applies to decision-making processes and its implementation, monitoring and evaluation actions.

Farmers' contribution

- Farmers will utilise their knowledge and experience and new information to re-shape and adjust their practices as appropriate to their local circumstances.
- Farmers are ready to invest in the multifunctional nature of their role, for example through "new business models" that are able to link farmers, business, retailers and consumers.
- Farmers' organisations will play a key role in promoting farmers-driven solutions and in encouraging sustainable innovation by grassroots farmers to foster the transition.
- Farmers commit to keep on producing safe and nutritious food in order to contribute to the achievement of sustainable food security for a growing world population. Farmers continue the fight against poverty by creating employment and economic growth in rural areas. Farmers contribute to the circular economy, by producing more and more renewable products and reducing losses on the farm.
- Farmers will continue the work to adapt to and mitigate climate change.
- Farmers will continue to contribute to biodiversity. We will keep the farmland open, keep animals grazing, protect habitats and farms, and manage the forests, all with a balance between efficient farming and diversity of environments, species, and different kind of farming systems.

Recommendations

To Governments

- Agriculture is an important part of the solution to climate change, through carbon sink for mitigation and risk-sensitive agriculture practices. Farmers have already implemented these solutions to effectively cope with a changing climate. WFO calls up on governments to base the Nationally Determined Contributions for the implementation of the Paris Agreement to include farmers' best practices in their plan, so as to promote and invest in a true farmers-driven approach in the fight to climate change in agriculture.
- Consider the key role of farmers in producing nutritious and healthy food for all and commit to continual investment in agriculture and enhance consumers' trust through transparent labelling, ensuring more value added for producers, boosting local economies and sustainable development, guaranteeing a fair income to farmers.
- Support agricultural development and innovation through finance and investment and a policy framework that recognises the role of agriculture as a business and a driver of rural growth and social transformation. This predisposition by governments is key to unleash the potential of agriculture as a multifunctional sector. Particular attention should be devoted to digital technologies and their impact on the agricultural transformation.
- Policy support is needed to incentivize financial institutions in providing loans to farmers with a fair use of collaterals. Insurance schemes play an important role, most of all in relation to climate change and natural disasters that frequently occur at farm level. It is vital to raise awareness among farmers of the importance of mitigating risks through insurance schemes, while incentivizing insurance companies in providing insurances to farmers. The use of technologies could help engage both farmers and insurers, giving precise and up to date information and mapping (i.e. weather, crop and soil changes), helping farmers decide where to invest and insurer to know more precisely the risks linked to a specific insurance scheme.
- Amid the Covid-19 crisis, governments need to ensure that the production and supply of food and feed is not disrupted: If farmers cannot harvest, if seeds or fertilizers are not available, if global supply chains break and agricultural products from farmers and their cooperatives cannot reach markets, it will create dangerous food shortages. Governments and the international community must now act urgently, engaging with farmers and their cooperatives, to keep global agricultural trade flows open and prevent the Covid-19 crisis from transforming into a severe hunger crisis, causing unprecedented migratory flows that further endanger food security, when farmers leave their lands
- Governments should also help strengthening the position of farmers and their cooperatives in the food value chain and ensure a well-functioning food value chain.

To the private sector:

- Move away from a silo approach and adopt coordinated, mutually beneficial and transparent long-term relationships based on trust with the range of stakeholders across the whole food value chain.

- Farmers have a key role to play as producers of healthy and nutritious food, and stewards of both biodiversity and local food traditions. A key aspect is the "education/information to consumers" dimension and its role in encouraging them to choose healthier and quality food. Investments are needed to provide consumers with transparent information on product characteristics and nutritional values.
- The different components of the food supply chain must also engage in more virtuous contractual partnerships in order to better compensate farmers.

To multilateral and financial institutions:

- A huge investment is still needed for agriculture. This begins on the 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 effective supply chains.
- The approaches used, such as repair, remanufacture, reuse, recycling and valorisation of waste are all very tangible. However, they need to be promoted more by establishing financial and policy measures that support the farmers' work to implement a circular economy and boost the approach in the overall agriculture sector.
- In the context of Covid19 crisis, while we recognize the need to bring food to the table of hundreds of millions of people in the most vulnerable areas of the world, it is also important that the international organisations, and financial institutions partner up with farmers' organisations across the globe by making available soft financing. Such measures would cover for losses, especially those incurred under lockdown and to restructure their operations, to ensure that the food chains keep running and that farmers have a chance to be the foundation for economic reparation.

To the public and private research sector:

- 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. 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.
- Innovation in agriculture, starting from research, can only be producers-driven, which means based on producers' needs and knowledge, for their benefit and the benefit of the natural ecosystem they work in. Research topic identification, conception, design, implementation, dissemination and adoption should come from the involvement of local, sub-national, national, sub-regional, regional/continental and global producers' organizations, in order to be based on their real needs. If the strategy delivers on involving farmers and indigenous peoples, this could lead to the effective adoption of innovations by the communities.

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POLICY PAPER

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"*[1].

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 and also to improve food security and nutrition. 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[2]. Unfortunately, the Covid19 health crisis has given this year discussions even more centrality, focusing on sustainable food security for all, Least Developed Countries (LDCs) but also in the developed part of the world. What this tremendous pandemic shows is that food systems' resilience should be enhanced at all levels. We should therefore reflect on the weaknesses of our food systems, by building upon the lessons that stem from this crisis. We must reduce vulnerabilities to global food supply chain disruptions by strengthening the capacity of the farming sectors worldwide to react and ensure food security even during exceptional crisis. This decade has also been largely defined as the "Decade of 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. As such, policy making at all levels has to guarantee enough food for an increasing world population, while coping with the effects of climate change, resource depletion, and malnutrition among the others.

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[1] 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.

[2] https://sustainabledevelopment.un.org/?menu=1300

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

As mentioned above, the components of the food value chain have traditionally been approached in silos, with the assumption that improving each component would also improve the efficiency of the system as a whole. However, - global challenges show that a radical shift in the overall food systems approach requires **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 should 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.

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[3]. Family farmers hold unique potential to become key agents of development strategies. Family farming is the predominant form of food and agricultural production in both developed and developing countries, producing over 80 percent of the world's food in value terms. 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.

2. PRINCIPLES OF ENGAGEMENT: Why the Farmers' role is at the heart of Sustainable Food Systems

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 do, what they believe and grow, either directly or indirectly. For a sustainable global Food Systems to take shape, we must ensure economic benefits for farming families.

[3] http://www.fao.org/family-farming-decade/home/en/

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

The **multidimensional nature of farming activity** has taken centre stage and 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 the quantity, quality and diversity of food, while driving innovation and sustainability 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**[4]: *"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)".

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 deserves further analysis. **The interdependencies of both actions and actors represent the engine of the Sustainable Food Systems**. **Trust is the key ingredient to make it work**.

Farmers are key to shifting to sustainable food systems in interconnected and systemic value chains: the sustainability of food production is a necessity and farmers at all latitudes have a strong self-interest to 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. 1. Preparation that influences production, food quality, and the type of crops to plant (e.g. biofortification). 2. Production, 3. Harvest. 4. Distribution 5. Market 6. Conservation and 7. Consumption of food as well as the social-economic environmental/cultural 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.

[4] FAO, 2018, Sustainable Food Systems, a Concept note, http://www.fao.org/3/ca2079en/CA2079EN.pdf

3. OUR CALL FOR ACTION FOR FARMERS-DRIVEN SOLUTIONS

The systems of family farms ensure the knowledge transfer of good agricultural practices. **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.

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 promotion of well-functioning 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. Farmers' organisations should act independently and free from politics so to establish fair contracts for producers. 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 facilitating linkages 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 stages 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. As a direct consequence, farmers can be rewarded by the market for the quality of the products they produce. We call upon governments to establish policies and regulations that stimulate an effective value chain functioning for the benefit of the farmers worldwide. When transparent, effective and efficient, both short and long value chains, which are aiming at creating better relationship between producers and consumers, have proven to foster development of local and national economies worldwide. For instance, as far as the short chain is concerned, practices like local markets and direct selling are instrumental in boosting local economies and empowering consumers to play an active part in the economic development of their local area. Consumers can 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. At the same time, with regards to longer value chains, there is a need to enhance the transparency of the whole supply chain in a way that is viable for producers and trustworthy for the consumers. 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. There is major need for governments and partners to address Post harvest losses that are a big problem for farmers that have no means to transport or conserve their produce. A huge investment is still needed for agriculture. 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 farmers driven solutions.

  In conclusion, the development of new structures, enhancement of cooperative models, and the strengthening of 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.

- **Circular economy:** In the past years, the agricultural sector has made impressive steps towards the implementation of cycles that reduce at maximum any waste or loss. Farmers have acted as stewards of natural resources – soil, water, plants, fertilizers, wildlife and so on – for centuries. In this respect, farmers have been precursors of the circular economy approach – which encourages business models, which keep resources circulating in the economy at their maximum value. The approaches used, such as repair, remanufacture, reuse, recycling and valorization of waste are all very tangible, but need to be promoted more through the establishment of financial and policy measures that support the farmers' work to implement a circular economy and boost the approach in the overall agriculture sector.

ACTION 2 – Addressing CLIMATE CHANGE

- Food production has an impact on our climate, **farmers and forest owners are part of the solution and able to mitigate GHG emissions**, however climate change is also affecting food production, and there is a need for adaptation and fostering of resilience.

- Agriculture is a source of greenhouse gases, but it is also part of the solution as it has untapped potential as a carbon sink. If we look at the whole concept of food systems, 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. At the same time, agriculture can also provide and produce decentralised green energy that can generate an additional income for the farmer.

- Climate change is the most important challenge that needs to be addressed, since it has the potential to severely affect global food security and people's livelihoods. Agriculture has the potential to be an important part of the solution through carbon sinks for mitigation, risk-sensitive agriculture practices and Farmers have already implemented solutions to effectively cope up with a changing climate. The

Climakers[5] best practices show clear evidence of the actions that farmers are already taking to mitigate climate change as well as to develop their resilience and adapt to it. Locally appropriate practices should be scaled up and/or replicated to boost sustainability worldwide. But there is still a huge need to support farmers for adaptation mainly in some vulnerable countries. In some more vulnerable countries for instance, irrigation systems and/or water sources are needed to enable farmers to continue their farming year-round. Therefore, rehabilitation of existing lakes, rivers and canals should be a priority. Those practices should be scaled up or replicated to boost climate smart agriculture practices worldwide. Moreover, more climate finance must be mobilised for agriculture. Climate finance must be mobilised for agriculture. FAO has assessed that just 12% of Green Climate Fund (GCF) expenditure has benefited agriculture projects to date. Currently structural barriers hamper farmers' and cooperatives access to global climate finance.

- **Diversifying markets through biofuels:** Production of biofuels, like ethanol and biodiesel, can represent an alternative and additional market for farmers, providing extra farm income that can help to revitalize rural communities and support efforts to mitigate climate change impacts. Supporting biofuels provides farmers and consumers a way to reduce greenhouse gas emissions by producing and utilizing transportation fuels with lower lifetime emissions than transportation fuels derived from fossil sources. Incentives and government actions to increase the use of biofuels promote investments in sustainable land management and sound environmental practices such as nutrient stewardship, soil health, cover cropping, riparian buffer strips, precision agriculture and a myriad of other practices.

ACTION 3 – Structuring DISASTER RISK MANAGEMENT

- A more volatile climate 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 balanced diets, and 2) the end of malnutrition in all its forms by achieving both food and 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

[5] www.theclimakers.org

valorising nutritious food and healthier diets, hampering as a consequence farmers' efforts and work. We need to avoid misleading labelling systems that risk influencing the choice of consumers. We must instead inform them about the real characteristics of the products.

- Farmers should be rewarded by the market for the quality of the products they produce, therefore it is of the outmost importance to ensure consumers are properly informed about the characteristics of the products they are buying, which would allow them to make conscious and traceable choices. One of the available tools for farmers is the origin labelling, which ensures more value added for producers.
- Farmers' access to innovation and capacity building programmes should be empowered so they become better able to present products to attract new clients. Policies and regulations should grant favourable conditions for them to operate efficiently. Support from the donors would be key because with resources, farmers can create exchanges among the members of the value chain to help each other. A proper advisory service is important part of innovation system.

ACTION 5 – Nurturing RESEARCH AND INNOVATION (R&I)

- R&I in agriculture is a driver of sustainable transformation of food systems and represents a huge opportunity to enable a food systems shift towards sustainability. With this potential lies the challenge of building innovation systems that put Farmers at the center of the development and scaling-up of appropriate technologies, to ensure that these are truly and effectively adopted. A Food Systems approach also requires innovative solutions to help actors in the food systems to collaborate.
- 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. 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 the wisest agricultural strategies through Evidence Based Precision farming, and to test them directly in the field, thus enabling, with the feed-back of information to improve them as well.
- The need for public funding to set up advisory services 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. But we need to combine scientific and traditional knowledge. There is also a need to conduct research then take back the results to farmers as mentioned. It is very important to continue the involvement of youth so that they can help elders to better understand the needs of the future.

ACTION 6 – Protecting BIODIVERSITY

- Biodiversity loss is one of the challenges of food production, and farmers, forest owners and fisherfolks have a central role to play in its conservation and restoration. In order to ensure a transition towards

sustainable food systems, 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 of producing enough food to feed the world while simultaneously protecting the environment.

- These two points are equally important but often lead to conflicting goals. In order to combine environmental protection measures and the economical production of food, compensation and incentive systems for farming families world-wide are needed. Training farmers to conserve and create biodiversity can be a measure to overcome this problem. This is the time for transformation, and we will all need to change processes and systems, adopt new mechanisms and adapt to new circumstances.
- Maintaining and increasing biodiversity is an important task for the future. A first step in ensuring biodiversity is to focus efforts on the natural areas that already exist. It is well known that nature and biodiversity efforts should be based on preserving and strengthening existing natural values, and there is no doubt that improving biodiversity is possible by initiating and intensifying targeted management on areas already protected.

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 and 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.
- Ecosystem 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

- WFO strongly believes in a sustainable growth of the livestock production, meeting clear sustainability criteria, making strategic choices, and setting out specific roadmaps. Sustainable growth of livestock farming must be based on the three principles of improving resource efficiency, strengthening resilience and securing social equity and responsibility of livestock production systems.
- The livestock supply chain is often highlighted as a key contributor to climate change but the role of ruminant livestock in the management of drylands and grasslands can have a positive impact on the carbon cycle. Livestock has a very important role in nutrient cycling and recycling. Nutrient circulation and the role of livestock for producing natural fertilization has to be also emphasized.
- Livestock products are an important agricultural commodity for global food security because they provide 17% of global kilocalorie consumption and 33% of global protein consumption. In a context where arable land will be more and more scarce, livestock sector allows the valorization of difficult environments and the conversion of non-digestible biomass by humans into quality proteins and meat is a fundamental part

of a balanced and nutritious diet. Red meat is actually the first contributor to protein, zinc, vitamins B6, B12 and the second in B3 and iron intakes.

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 and conventional agricultural equipment is essential. Food and nutrition security depend on Farmers.
- Trade delivers an opportunity to increase food security worldwide in a fair and sustainable manner. It delivers economic prosperity and ensures a food supply. At the same time, trade must not undermine national food security.
- 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.
- Farmers are also major players in terms of animal and plan health survey and fight, ensuring agricultural production despite pests, diseases and pathogens, which ensure food security. Epidemiology and survey are essential links in understanding, preventing health risks, measuring their consequences, and must be held in close collaboration with public power and involved actors.

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

- Farmers' Organizations must have 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.
- Enabling farmers' organisations to participate in policy discussion is crucial, so that the government can hear directly the voice of farmers through their organized structures. Farmers' organisations must be involved in all related development programmes of the United Nations at country level thus, to provide services to farmer members through those supported projects/programmes. This will help strengthen the capacity of both farmers' organisations and farmer members to produce healthy food in sustainable manner.
- Cooperatives play 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 systems.

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 population6. 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. production, harvesting crops, transporting, selling in the markets, conserving in the seals, preparing food and feeding the family, caring for traditions and biodiversity) even though their role is too often unknown. 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 more resilient food systems.
- Rural women farmers should be empowered and supported through access to technology - such as solar panels and water infrastructure – that can reduce their daily workload, and through access to training that facilitates adaptation to changing climates and markets.

[6] 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