

73. LOWERING CARBON FOOTPRINT OF FARMS WHILE COPING WITH COVID 19 IN NEW ZEALAND

ACTION AREA	CLIMATE RESILIENT DEVELOPMENT PATHWAYS
SOLUTION CLUSTER	CLIMATE ADAPTATION, MITIGATION & RESILIENCE
THEMATIC AREA	INNOVATION ON CLIMATE MITIGATION
SUBMITTED BY	FEDERATED FARMERS OF NEW ZEALAND

WHAT ARE THE KEY THEMES THAT NEED TO BE CONSIDERED TO ADDRESS FOOD INSECURITY AND ENHANCE FOOD SYSTEMS RESILIENCY?

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

Reference: WFO-Policy-Paper-on-Sustainable-Food-Systems_approved-by-the-WFO-2020-GA_EN.pdf (wfo-oma.org)

WHAT DO YOU THINK CONSTITUTES SOCIAL RESILIENCE, ENVIRONMENTAL RESILIENCE AND ECONOMIC RESILIENCE IN FOOD SYSTEMS? WHAT ARE THE CROSS-CUTTING SOLUTIONS BETWEEN ECONOMIC, SOCIAL AND ENVIRONMENTAL RESILIENCE?

Ensuring social, environmental and economic resilience in food systems means recognizing the multidimensional nature of the farming activity replacing the old vision of agriculture as a simple "provider of raw material". Farmers ensure food security providing quality food; they are at the forefront of combating climate change; they preserve and promote biodiversity; they are committed to nurture

farmer-driven research and innovation. This translates into social resilience, environmental resilience and economic resilience in food systems.

Therefore, if we aim to align and lay the foundations for the necessary shift towards Sustainable Food Systems, this role has to be emphasised and mostly valorised, putting farmers at the centre of the transition towards sustainability.

Within the World Farmers' Organisation, awareness of the centrality of agriculture and the responsibility this entails for sustainable food systems is clear and has been formalised with the adoption, in June 2020, of a policy document marking The Farmers' Route to Sustainable Food Systems" https://www.wfo-oma.org/wp-content/uploads/2020/07/WFO-Policy-Paper-on-Sustainable-Food-Systems_approved-by-the-WFO-2020-GA_EN.pdf

A route based on three guiding principles: inclusiveness, transparency and the centrality of farmers in every strategic process.

WFO proposes to focus future commitments on the following cross-cutting actions, with the central role of farmers in each of these actions:

- Involving the whole value chain
- Fighting climate change
- Structuring disaster risk management
- Attaining global nutrition security
- Enhancing Research and Innovation
- Protecting biodiversity
- Deploying investments and incentives
- Valuing the livestock sector's role
- Achieving food security
- Boosting the role of farmers' organisations and cooperatives
- Promoting inclusiveness: youth and women are key to succeed.

WHAT SOLUTIONS CAN WE PROPOSE TO ADDRESS FOOD INSECURITY AND PREVENT FUTURE SOURCES OF CONFLICT, MANAGE TENSIONS AND OTHER STRESSES IN FOOD SYSTEMS ?

The majority of farmers in New Zealand continued to produce even during the pandemic, although the situation affected many small cities and small local markets. Also, borders' closure led to lack of trained staff for specific activities i.e. to drive planting and harvesting equipments.

Here are some of the solutions implemented by the Federated Farmers of New Zealand: • Online trade

- Increased farm planting of trees
- Actions to increase biodiversity
- Riparian protection
- Stock shelter
- Researches conducted on sheep flocks
- Tools indexes available for farmers to check their ranking for methane and nitrogen efficiency for cows

WHAT IS THE POTENTIAL ACTION THAT COULD BE TAKEN?

Reducing farmers' vulnerabilities to climate change effects and other shocks like for example the Covid19 pandemic that cause global food supply chain disruptions, by boosting farmers' capacity to be prepared and respond to such events, to ensure continuous food production and selling and well-functioning of value chains even during exceptional crisis. This increases farmers' resilience and ensure farmers' income and livelihoods also for the entire rural communities.

WHO ARE THE MAIN ACTORS THAT WOULD PUT THIS ACTION INTO PLACE?

Policymakers (government), Private (businesses, etc.), Civil (NGOs, etc.), Farmers, Farmers' Organization / Cooperatives, Scientists

WHERE ARE MAIN AREAS IN WHICH THIS SOLUTION WOULD MAKE CHANGES

- Food supply chains - Inputs
- Food supply chains - Production
- Food supply chains - Storage & Distribution
- Food supply chains - Retail & Marketing
- Food environments - availability
- Food environments - Product properties (including safety)
- Consumer behaviour

WITHIN WHICH CATEGORY DOES THIS INTERVENTION MOST EASILY FALL?

- Regenerative agriculture
- Food research, processing, technology
- Supply Chain Infrastructure
- Cross-cutting
- Sustainability (three dimension) of Agriculture

IS THIS IDEA APPLICABLE TO A PARTICULAR GEOGRAPHY OR TYPE OF SETTING (E.G., SEMI-ARID AREAS, HIGHER- OR LOWER-INCOME COUNTRIES)?

The best practices are implemented in New Zealand with the potential to be replicated and scaled in other Countries.

WHERE IS THIS IDEA COMING FROM?

The best practice was first shared in the context of the initiative "The Climakers", the Farmers Driven Climate Change Agenda conceived by the World Farmers' Organisation and carried out with different partners, with the aim to be assessed by science against climate smartness criteria and be scaled up and replicated in other Countries.

Reference: https://www.theclimakers.org/wp/wp-content/uploads/2020/12/THE-CLIMAKERS_Stories-from-the-Field_COVID-19-Special-Edition-1.pdf

ANY OTHER COMMENTS, INCLUDING EVIDENCE OR ARGUMENTS IN SUPPORT OR AGAINST.

The best practice was assessed against Climate smartness criteria by CCAFS, with the following results: "These practices are focused on the increase of climate adaptation capacity, and productivity increase. The greenhouses and improved seeds tolerant to drought, pests and diseases allows production stability and farmers' incomes during seasons with high climate variability.

In the case of avocado crop, it is recommended to implement practices such as the use of grafts with patterns that are tolerant of drought or flooding (whatever the case may be) and others from those

identified by Sova et al., 2018. Likewise, for all the productive systems described, it is recommended to facilitate farmers' access to agroclimatic information, so they can understand climate behaviour and the relation with their crops. This will enable them to make decisions about planting dates, the type of varieties to use, and measures to implement to reduce their climate-related risks."

Reference: https://www.theclimakers.org/wp/wp-content/uploads/2020/12/THE-CLIMAKERS_Stories-from-the-Field_COVID-19-Special-Edition-1.pdf