

# 9. SCALING UP OF CONSERVATION AGRICULTURE TO IMPROVE SMALLHOLDER FARMERS' RESILIENCE IN ZIMBABWE

ACTION AREA	FOOD SYSTEMS RESILIENCE
SOLUTION CLUSTER	INTEGRATED APPROACHES TO RESILIENT FOOD SYSTEMS
THEMATIC AREA	AGROECOLOGY FOR RESILIENCE
SUBMITTED BY	ZIMBABWE FARMERS' UNION

## 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](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 ?

One example comes from farmers in Zimbabwe. More than 70 per cent of the population in Zimbabwe relies on agriculture for its livelihood. This key sector is now under increasing threat from climate change.

Zimbabwe Farmers Union sought to harness this momentum to lead a transition to a climate smart agriculture by promoting large scale adoption (scaling up) of this practice. This intervention facilitated farmer led scaling up of conservation agriculture by smallholder farmers in Zimbabwe. Conservation Agriculture (CA) is an option that has great potential. This farming technology makes more efficient use of natural resources through integrated management. Through the application of the three main principles of reducing soil disturbance, maintaining a permanent soil cover and practising crop rotations, CA improves the soil’s physical and chemical properties and reduces run-off and soil erosion while increasing water infiltration. As such the practice has major advantages in dealing with water stress in cropping systems. CA has been shown to improve drought tolerance for crops, increasing yields and encouraging diversified cropping systems that are accompanied by significant environmental benefits.

## WHAT IS THE POTENTIAL ACTION THAT COULD BE TAKEN?

Encourage the adoption of conservation agriculture to improve resilience among farmers and promote an efficient use of natural resources.

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

Policymakers, civil (NGO etc.), farmers, farmers organization / cooperatives, indigenous groups

## WHERE ARE MAIN AREAS IN WHICH THIS SOLUTION WOULD MAKE CHANGES

- Food supply chains - Inputs
- Food supply chains - Production
- Food environments - availability
- Food environments - Product properties (including safety)

## WITHIN WHICH CATEGORY DOES THIS INTERVENTION MOST EASILY FALL?

- Regenerative agriculture
- Cross-cutting

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

The best practice was first implemented in Zimbabwe 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/2019/12/The-Climakers-Stories-from-the-Field-Volume-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: "Conservation agriculture is one of the most common climate-smart practices across all regions especially in maize crop according to Sova et al. (2018). Climate smartness of this practice is high considering its contribution to all pillars (adaptation, mitigation and productivity). Conservation agriculture is a practice that can be implemented more easily by the farmers themselves, which tend to be perceived as having a lower number of institutional, economic, information, social and environmental barriers. Opportunities to strengthen synergies across CSA pillar include the combination with other practices such as agroforestry systems, crop rotation and fertilizer management, in order to increase smartness in the system. According to Thierfelder et al. (2017), conservation agriculture systems maintain higher infiltration rates and conserve soil moisture, which helps to overcome seasonal dry spells. For more information about CSA, in the study of World Bank, CCAFS and CIAT (2018), it is possible to identify several practices for Zimbabwe evaluated around 8 key criteria: Water, Carbon, Nitrogen, Energy, Knowledge / Info risk, Yield, Income and Soil."