Principles for a resilience-enabling environment

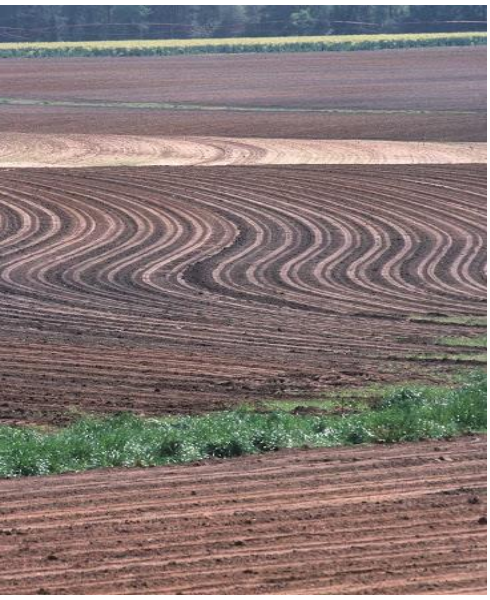
Policy Brief

February 2021

Executive Summary

An institutional and socio-economic environment that fosters resilience is crucial for the future of EU farming systems. SURE-Farm has integrated much of its previous work into a set of 6 key principles for a resilience enabling environment. These are (1) to use resources to help the FS to deal with a shock only to buy time while working on structural solutions; (2) to devote enough resources to building anticipating and responsive capacities when shocks happen; (3) to detect long term trends and their potential impact on the FS; (4) to foster a diversity of potential options; (5) to develop a sufficient degree of ambidexterity; and (6) to do in-depth analysis of root causes of challenges and the FS's vulnerability to them. Implementing these principles into concrete actions and strategies requires social learning and concerted efforts by all actors involved.

Safeguarding the functions of FS requires more than traditional risk management.



Why a resilience enabling environment is crucial for Europe's farming systems

Challenges that threaten the performance of farming systems such as droughts and price drops, originating from stress and shocks such climate change, geo-political uncertainty, trade conflict, changing consumer preferences and growing opposition against certain modes of farming and the very recent COVID-19 crisis have put resilience higher on the agenda of policy makers in the European Union. Ensuring a resilient farming sector was among the prominent goals of the European Commission's proposal for the Common Agricultural Policy (CAP) post-2020. The Green Deal, the Farm-to-Fork Strategy, the Biodiversity Strategy and the EU Recovery and Resilience Plan reinforced the call for a resilience-enabling policy framework.

Farming systems (FS) operate in biophysical, political, social, economic and cultural environments which are often far from stable. Frequently or unfavourably changing conditions can affect FS performance, i.e., the delivery of FS functions (such as food production or ecosystem services). The extent and direction of the changes are often uncertain and there are many unknown unknowns, i.e., events that cannot be imagined currently, let alone that their likelihood is known. Hence, safeguarding the functions of FS requires more than traditional risk management, which often assumes that the possible states of the future environment are known and that probabilities can be attached to each state, i.e., that it is known which shocks might occur and with which probability. This means that it is not always clear how – in which direction – farming systems have to evolve to continue to perform well in the future, since we do not know how that future will look like. Hence, the institutional and socio-economic environment in which farming systems are embedded should at the same time provide some direction, but also help farmers keeping their options open and facilitating flexible and smooth responses, i.e., the enabling environment should foster resilience.

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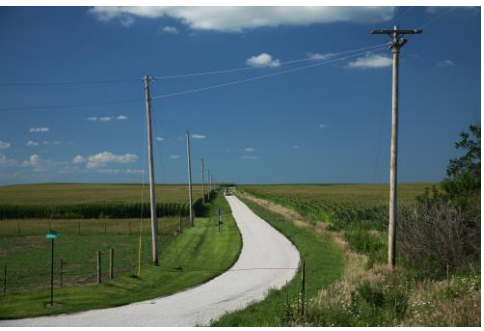
Resilience was defined as consisting of coping capacities, anticipating capacities and responsive capacities

SURE-Farm

The SURE-Farm project has investigated the resilience of EU farming systems from various points of view and with a diversity of methods. The different points of view included the links between risk management and resilience, an analysis of demographic and structural changes of farming systems, an assessment of how policies enable or restrain resilience and an investigation of system performance under various challenges. Methods varied from system dynamics, agent-based modelling, over survey techniques and econometric analysis to qualitative methods such as in-depth interviews and focus groups. Towards the end of the project, SURE-Farm aimed at deriving principles for a resilience-enabling environment, based on all previously collected data and obtained results. The 'enabling environment' is composed of all actors around the farming system, i.e. governments, retailers, suppliers of inputs and financial services, processors, researchers, educators, civil society organisations, etc. Exactly who are the relevant actors differs between countries, regions and sectors. The farming system itself is composed of mainly the farmers and sometimes other actors (e.g., cooperatives, contractors, …) if there is mutual influence between them and the farmers.

Resilient FS are those in which actors have invested resources (in the broad sense, so including human and social capital) into supporting the resilience capacities in such a way that they are able to cope with challenges, i.e., they are robust against external pressure, in order to maintain fulfilling private and public FS functions. To guide the work to derive principles for a resilience enabling environment, SURE-Farm has defined resilience as consisting of **coping capacities** (the capacity to withstand challenges and continue to function without major changes to the farming system, i.e., robustness); **anticipating capacities** (the capacity to detect trends and to imagine possible future states and their impact on the functioning of the farming system); and **responsive capacities** (the capacity to adapt or transform the farming system when it is no longer robust against external challenges, i.e., adaptability and transformability).



Robust FS are able to continue functioning without having to constantly change, i.e., without having to constantly tap into their responsive capacities in order to trigger a response (adaptation or transformation). Nonetheless, besides coping capacities, responsive capacities have to be present. Indeed, at certain points in time, stresses may build up, other types of challenges emerge and/or unanticipated shocks are so severe that farming systems are no longer robust, i.e., they are not able to continue to perform well enough in business-as-usual mode. At that moment, in order to continue to function, farming systems have to use their responsive capacities in order to implement changes that better enable the system to function in this changed environment. Such changes might be modest, whereby the main characteristics of the farming system remain intact (adaptations), or they can be more radical (transformations). The ease with which they can do this reflects their responsive capacities (adaptability and transformability). Anticipating capacities influence both the coping capacities and the responsive capacities on the one hand, and the perceived need to use them on the other. Farming systems with high anticipating capacities are more resilient. Together, anticipating capacities, coping capacities (robustness) and responsive capacities (adaptability and transformability) determine a farming system's resilience.

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Principle 1. When a FS cannot sufficiently cope with a challenge, the enabling environment should provide temporary resources to cope with the adverse consequences of the shock, but only to buy time while working on the real remedy.

The COVID-19 crisis has triggered large responses from the enabling environment, mainly governments, including temporary change of regulations (i.e., to allow farm workers to travel across borders) and financial support. Such crises are often too systemic and severe for actors in the farming system (mainly the farmers) to cope with, and in these situations, interventions from the enabling environment to help the farming system cope with the shock are justified. Indeed, before a system can adapt or transform, it first needs to cope with the challenges at hand to survive. Similar reaction can be observed in reaction to – mainly – sudden shocks such as price drops, trade restrictions, epidemic animal diseases and adverse weather events.

However, such interventions can only be used to buy time while working on more fundamental remedies. The danger is that such interventions reduce the incentive for the necessary structural solutions ('Shifting the burden' archetype) or the focus on short term solutions might create side effects for the future that increase the need for even more short term fixes ('Fixes that fail' archetype). Both failures might result in an 'Addiction' archetype whereby the farming system becomes addicted to such short term fixes. Defining a generic rule when to stop is not easy but relate to the uniqueness and singularity of the challenge, and the underlying reasons for the farming system's vulnerability to the challenge. For challenges that can be expected to repeat themselves in similar nature and severity, the focus on short term relief should be quickly turned into a focus on structural solutions. Further, when it is structural characteristics which make the farming system inherently vulnerable to the challenge, rather than investing in symptom-based solutions, there should be a focus on adaptations or transformations. An example is adverse weather events (e.g., droughts) which are expected to occur more frequently, against which more structural change to the farming system may be discouraged by continued use of short term solutions. The realization of principle 3 (building anticipating capacity) and principle 6 (detecting root causes for the farming system's vulnerability) will contribute to this.

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Principle 2. When shocks have occurred, resources should be shifted towards building anticipating capacity as well as responsive capacity, to prevent addiction to external solutions and to increase future coping capacity of the FS.

This principle is a logical continuation of principle 1, which stresses the importance to limit the focus and reliance on short term symptom fixes to increase the incentive and (perceived) need for structural changes. Principle 2 stresses what should be done instead after a shock has happened. Rather than continuing to rely on short term symptom fixes, when challenges occur, actors in the farming system and the enabling environment should build anticipatory capacities and responsive capacities.

Anticipatory capacities allow the detection of trends and to imagine future challenges. Often, shocks are regarded as unique events and it is underestimated to what extent shocks are actually part of a trend, because of a lack of anticipatory capacity. This increases the incentive to rely on short term fixes only, rather than working on more fundamental changes that increase farming systems' resilience.

Simultaneously, responsive capacities need to be built in order to facilitate these more fundamental changes, including adaptations and transformation that increase the farming system's resilience to future shocks and growing trends. Building responsive capacities involves embracing variety within and between systems, supporting social and in-depth learning and accommodating flexibility.

Principle 3. The enabling environment should assist the FS to detect, assess and address long-term trends that challenge the FS, in a way that increases future robustness, including through adaptation or transformation to that trend in the long run.

Trends should not only be detected, but their potential impact on the farming system should be projected in order to raise awareness and create a sense of urgency to invest resources in adaptation rather than in the status quo. As FS actors have insufficient resources to invest in such anticipatory capacity, public-private investment is needed. However, also private actors should be convinced of the importance of foresight activities. Communication should be improved not only regarding the challenge but also regarding the potential of possible solutions.

The analysis points to a lack of such longer term foresight activities and capacities, which leads to an underestimation of the importance of long term trends, and a focus on short term solutions for often less severe challenges that can be characterized as noise. Moreover, the activities of the actors are often focused on trying to slow down or even revert the trend, which can on the one hand buy time, but on the other hand reduces the incentive to implement more fundamental solutions and may aggravate the challenge itself. Typical examples can be found in the efforts to counter changing societal preferences and growing societal opposition that challenge farming systems.

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Principle 4. The enabling environment should foster a potential diversity of responses, rather than focusing too much on a limited set of actions strengthening resilience.

When building responsive capacities, it is important to keep options open and set up learning experiments related to a wide and varied set of structural solutions. First, resilience thrives with diversity. Second, focusing on one particular strategy may backfire if the strategy turns out to have unintended consequences. Often, a 'success to the successful' pattern is observed, whereby the majority of resources is devoted to one particular (type of) solution, which reduces both the incentive to invest in alternative solutions and the relative competitiveness of these alternative solutions, even though they could be inherently better, and as such they are crowded out by the support for on particular (type of) solution. Over time, this could also create path dependencies, reducing the responsive capacity to future challenges.

Whereas a diversity a responses is in general positive for the resilience of the system as a whole, keeping options open does not always imply that actual responses should go into all direction, as sometimes coordinated action is preferred. Nonetheless, it remains important to keep options open and to avoid to burn bridges down.

Principle 5. The ensemble of the FS and its enabling environment should develop a sufficient degree of ambidexterity, that is, find a balance in putting resources in immediate versus future challenges.

Since structural solutions require time, there is a danger of underinvestment in such solutions. Therefore, a good balance should be achieved between investing resources in strategies enhancing coping capacity of FS on the one hand and in strategies enhancing responsive (and thus future coping) capacities on the other. Unhealthy patterns are situations in which only resources in coping strategies are invested or when decisions are made without having sufficiently invested in adaptation strategies, because this situation can lead to the 'shifting the burden' problem, whereby the problem return, possibly even more severe.

A healthier pattern occurs when the enabling environment provides the right incentives for adaptation, while spending enough resources to overcome temporary income losses following for instance stronger regulation.

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Principle 6. There needs to be more systemic in-depth analysis of the root causes of challenges on the one hand, and of the drivers of vulnerability to these challenges on the other hand, to avoid a redefinition of the problem and the implementation of solutions that do not fix the real problem.

Actors in the farming system and the enabling environment should engage in more in-depth analysis, including through participatory and social learning processes, for identifying the root causes of challenges and why farming system are vulnerable to these challenges. Such deeper understanding is a necessary prerequisite to avoid unhealthy patterns such as 'shifting the burden', 'fixes that fail' or 'success to the successful' archetypes. What is often observed is a too superficial framing and scoping of the problem, or even a deliberate redefinition of the problem in order to protect vested interests enabling by the status quo. This reduce both the anticipatory and responsive capacities of farming systems, and hence their resilience to these challenges, and can lead to fixes that only address the symptoms but not the root causes of the challenge and the vulnerability of the farming systems.

Implementing the principles for a resilience-enabling environment and translating these into concrete actions and strategies requires concerted efforts from all actors in the farming system and the enabling environment.

The principles for a resilience-enabling environment were identified based on an analysis across 11 case-studies in very different farming systems with different challenges. Hence, they have been defined at a general level, as their implementation and the translation into concrete action and strategies requires a tailored approach. It is recommended that actors within the farming system and the enabling environment engage in participatory social learning activities to discuss what these principles could mean for a farming system in a specific region, and how they can be translated into concrete action and strategies, considering the different roles of all actors. Such social learning activities can be both backward-looking to learn from past experiences and forward-looking to define longer term roadmaps. The actual implementation will require concreted efforts of all actors involved and should be subject to regular monitoring and reflection, and is thus a continuous process rather than a once-only endeavour.

Implementing the principles for a resilience-enabling environment and translating these into concrete actions and strategies requires social learning and concerted efforts.

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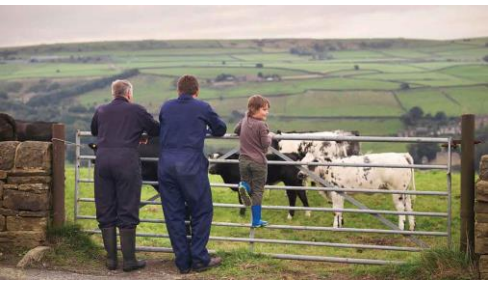

Further reading

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