

RETHINK - Rethinking the links between farm modernisation, rural development and resilience in a world of increasing demands and finite resources

Policy Brief



Background

The last decades have seen a concentration of agricultural production and a polarisation of agricultural structures in Europe. Rural areas have been facing simultaneous and significant changes in their economic structures, demography and in their various societal functions.

The RETHINK project set out to explore the future development of European agriculture at a time when it needs to respond to increasing scarcity and distributional issues (e.g. those related to natural resources and public finances), while facing deep uncertainty over future developments, especially those related to climate change and global markets.

Research approach

The objectives of RETHINK were to explore differing trajectories of development and modernisation, to highlight opportunities for innovation, and to identify potential synergies between farm modernisation and sustainable rural development.

RETHINK aimed to contribute to renewing our understanding of agricultural 'modernisation', by focusing on the relationships between resilient farming, the resilience and prosperity of rural communities and knowledge and innovation. It looked at the conflicting societal goals, and potential synergies, while explicitly recognizing the complexity of the challenges, the diversity in situations and the many and multidimensional nature of the strategies and ways forward. The project adopted a sys-

tems perspective to explore these inter-relationships and to understand inter-related dynamics of change.

The project interpreted resilience as the capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganising in ways that maintain the essential function(s), identity, and structure of rural areas and agriculture. The description can be applied to both rural and agricultural systems and the two are, depending on the agricultural systems and rural context, either strongly or weakly interconnected. This is why RETHINK focussed on inter-relations. Other key notions, of adaptive resource management and adaptive governance, allow RETHINK to connect this concept with policy and implementation.

Fourteen substantial case studies, one in each country have explored the connections between farm modernisation, rural development and the resilience of both, agricultural and rural systems. They illustrate how practitioners are trying to shape inter-relations in positive ways. Each case study is an expression of innovative development trajectories, highlighting potential synergies between farm modernisation and sustainable rural development.

Four cross-cutting themes framed the comparative analysis of the fourteen case studies: resilience, prosperity, governance, and knowledge and learning. A set of seven peer-reviewed scientific publications present the results of the comparative analyses.

This Policy Brief aims to inform decision-makers in the private and public sectors. It builds on the comparative analysis and relates the project's findings to the relevant European policy frameworks, in particular the 'Europe 2020' strategy¹, the Rural Development Regulation (RDR)², and the European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI).³

Each section of the Policy Brief concludes with a number of evidence-based policy recommendations.

Key findings and policy recommendations

Pathways to resilient systems in European agriculture

European strategies

The 'Europe 2020' strategy seeks to 'promote a more resource efficient, greener and more competitive economy'. The Common Agricultural Policy (CAP) speaks of maintaining 'a competitive and dynamic agricultural sector which attracts young farmers in order to preserve the vitality and potential of rural Europe'. The related strategic analyses show that agriculture is a main driver of the economy in the majority of European countries.⁴ One of the practical challenges faced by rural development policy-makers for 2014-2020 is to translate these high-level goals, which include new terms such as resilience, into concrete measures. For example, Article 3 of the 2014-2020 RDR refers to the 'development of an EU agricultural sector that is more territorially and environmentally balanced,

climate-friendly, resilient, competitive and innovative'. In Priority 5, it refers to a 'shift towards a low carbon and climate resilient economy'. In light of these objectives, European agriculture needs to maintain and increase agricultural production, while also reducing negative environmental impacts, increasing resource-use efficiency and making positive contributions towards climate stability, biodiversity, landscapes and resilience to weather extremes. Priority 6 of the RDR adds an important dimension, as it refers 'to promoting social inclusion, poverty reduction in and the economic development of rural areas' (Art. 5 (6), Art. 20).

Findings

The fourteen case studies show a variety of trajectories in agricultural development that reflect divergent goals and which are often much more differentiated than the classical 'scale enlargement – specialisation – rationalisation' model. The diverse goals driving these strategies range from the increased provision of public goods and ecosystem services, competitiveness in global markets. The active shaping of and positioning in the newly evolving bio-economy to an increased engagement in higher value product chains and organic markets. All these strategies are being adopted in parallel but at different paces and with a range of economic, environmental and social outcomes in different regions.

Some of the pathways have led to environmental improvements and increased economic viability, while others have reinforced 'old-style' modernisation focussing on specialisation and expansion, leading to ever more investments in machinery and increased automation.

¹ Communication from the Commission - Europe 2020 – A strategy for smart, sustainable and inclusive growth. COM 2010 (2020)

² Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 and Council Regulation (EC) No 1698/2005

³ European Innovation Partnership 'Agricultural Productivity and Sustainability'. COM(2012) 79 final

⁴ 'The CAP towards 2020: Meeting the food, natural resources and territorial challenges of the future' COM(2010) 672 final

These different trajectories, and goals, reflect differences in resource endowments, structures and societal demands. Generally, farmers are increasingly responding to new societal demands. Typically, this does not lead to radical changes, but it often implies a change in farmers' thinking.

Farm-level adaptation and resilience are determined by many factors. These include the character and capacity of each individual farm manager, and his or her interaction with, and access to, multiple sources of agricultural knowledge and innovation support. Other determinants are access to resources such as land, labour and capital, and the farmer's ability to reconfigure these through creative thinking and problem solving, interactive innovation and the adoption of best practices.

Our study highlights the importance of the diversity of specialized and mixed farms, but also the huge diversity within small farms. This is related to their level of integration in agricultural and non-agricultural markets, the integration of different sources of farm household income, the degree of specialization or the marketing strategies used.

The increasing inequalities and differences in access to resources, including support mechanisms, that can be observed, tends to be overlooked by decision-makers. The predominant focus on standard product qualities and marketing channels, which leads to farms being increasingly exposed to large processors and retailers, also generates inequalities of access. The aim to be competitive through ever-lower production costs exerts a continuous pressure on standards and work conditions. In consideration of these shortcomings in conventional trajectories and thinking, it is hard to understand why conventional agricultural knowledge and innovation systems tend to undervalue and largely ignore alternative, multifunctional approaches and those adopted by small farmers. This observation applies to all fourteen case studies.

Policy recommendations

- **Agricultural and rural development strategies must be based on a clear vision that encompasses sustainability and adaptation to global changes,** such as the changing climate regimes, rapidly ongoing social transformation, the globalization of markets and related economic and cultural shifts.

The diversity in farm structures, specialised and diversified, small and large, contributes in different ways to coping with changes and therefore to the resilience of agriculture and rural communities.

European and national policy frameworks have to acknowledge the benefits of this diversity and of the coexistence of different structures, development pathways and farming styles.

- **The further development of policy frameworks therefore has to ensure that support mechanisms recognise the particular and diverging needs of different farm types and scales.**

EU support frameworks need to be sufficiently flexible in order to allow national and regional authorities to target support to specific needs while also reducing the complexity of regulations. Diversified farms and artisanal processors, in particular, are increasingly overwhelmed with the task of keeping abreast of complex and frequently changing regulations.

Farmers need to be encouraged to develop and implement strategies that correspond best to future demands as well as their particular strengths.

- **There needs to be a focus on serving people (particularly in marginalised regions and communities), on improving their quality of life, and on promoting resource-use efficiency in farming and rural businesses.**

There is a whole range of strategies that can contribute to rural and farm-level prosperity including product innovation, diversification, nature management and the provision of community services. All such strategies need to be accompanied by the continuous enhancement of the sustainability and resource-efficiency of production systems.

- **A key feature of future support frameworks must be that they better coordinate financial and advisory support for farmers with wider rural policy and societal goals.**

Agricultural trajectories should be guided far more by consumer demands. This requires improved strategic orientation and increased efforts in support of value-chain development, while at the same time aiming to enhance the resilience of food systems. At diverse scales (European, national, regional, local), agricultural policies should be better linked to food policies in order that they are more consistent and to enable them to contribute to the resilience of food systems.

- **Consumers need to be empowered through much better information on the different dimensions of food quality and the real costs of different forms of production.** One way towards achieving this is by strengthening interactions and relations between producers and consumers and between rural and urban areas.
- **New approaches for assessing farms are required that extend beyond the current focus on productive assets, production functions and costs and economic performance.**

Such approaches need to integrate social components such as the quality of work conditions, use of farmers' knowledge and experience, ties with the local economy and community and environmental criteria. This, in turn, will help lead to a more gradual and more differentiated development of the very large number of small farms in Europe, reducing their exposure to external risks and allowing them to develop along more resilient trajectories.

- **There is a particular need for research into how to develop more effective support mechanisms that encourage alternative modernization trajectories and pathways that enhance resilience.**

Considering the limited nature of natural resources and the buffer capacities they provide, such research is particularly needed in countries with capital-intensive and resource-intensive agri-

culture and in regions where production is extremely concentrated and/or specialised. In order to develop such new approaches the policy, research and farming communities need to work together more effectively.

Knowledge and innovation are essential for the further development of agricultural and rural systems

European strategies

The 'Europe 2020' strategy identifies knowledge and innovation as drivers of future growth and development. Key measures include improving the quality of education, strengthening research performance and promoting innovation and knowledge transfer. The strategy claims that these investments will also benefit traditional sectors and rural areas. The European Commission's 'CAP towards 2020' strategy reflects this priority: emphasising that innovation is 'indispensable to preparing EU agriculture for the future'. In the current funding cycle, CAP supports agricultural innovation through several different mechanisms. Art. 5 (1) of the RDR refers to: '(a) fostering innovation, cooperation, and the development of the knowledge base in rural areas; (b) strengthening the links between agriculture, food production and forestry and research and innovation, including for the purpose of improved environmental management and performance; and (c) fostering lifelong learning and vocational training.' Art. 14 refers to a range of knowledge transfer and information actions, and Art. 15 to advisory services, farm management and farm relief services. The reference to 'farm modernisation, competitiveness building, sectoral integration, innovation and market orientation, as well as the promotion of entrepreneurship' say much about current priorities. RDR Art. 53 established the EIP-AGRI as a new instrument. This is based on the understanding that 'increased and sustainable agricultural output will be achievable only with major research and innovation efforts at all levels'. One key aim of EIP-AGRI is to

close the gap between the provision of research results and actual application in farming practice.⁵

Findings

The RETHINK case studies confirm that innovation, which can take many forms, is essential for renewal at the level of the farm and of rural economies as a whole. Innovation not only has an impact on economic development, but also plays a vital role in fostering welfare and resilience. The case studies showed that mutual trust, transparency and good communication between different actors play an important role in the adoption, and scaling up, of innovations.

All the case studies showed that access to appropriate knowledge for innovation plays an important role. They also showed that farmers mostly build on their own knowledge and place a high value on local and other farmers' knowledge. Local and informal knowledge is often more attuned to the values, needs and resources of farmers and rural communities. Multi-actor platforms for exchange of different forms of knowledge enable joint learning through reflection, encourage the questioning of traditions that narrow options, and promote innovative new ideas. Multi-actor platforms seem to have particular potential as they are embedded in tangible social, economic and environmental contexts, which have specific dynamics, diversity, opportunities, uncertainties and risks. Informal knowledge, interaction, exchanges and learning form a foundation for developing practices that respect and make best use of local natural and social resources and possibilities, in order to enhance livelihoods in the long-term.

New pathways such as energy farming require technical and organizational knowledge as well as social innovation. We found that technical knowledge is relatively easily exchanged, but farmers struggle more with social innovation and with establishing and managing supply chains that

increase net added value. Farmers recognise that, in order to benefit more from the manifold opportunities that a bio-based economy offers. There is a need for new forms of collaboration to promote innovation, knowledge exchange and new ideas.

Policy recommendations

The EIP-AGRI, which supports the combination of different types of knowledge and co-learning, is a major step forward, since it helps to foster adaptive management.

- **Official agricultural knowledge and innovation systems need to recognise the importance and potential of informal knowledge.**

Researchers, developers and planners should recognise that farmers are co-creators of knowledge and make better use of their practice-based experiential knowledge. Such a recognition, and use of farmers' knowledge, would also support the goal of an inclusive knowledge-based society, which respects that there is a diversity of knowledge, encourages broad access to knowledge and boosts participation of people with different types of knowledge.

The inter-linkages between knowledge, innovation and rural development strongly suggest that policies and support frameworks need to adopt a longer-term framework.

- **There is in particular a need to not only start up facilitation and network management but also, depending on the particular resource situation, to ensure its continuity.** Depending on the particular area, there might be a need to go beyond an initial funding period to ensure the continuity of newly established governance processes and structures.

Significant changes in strategic orientations are required to realize the much-needed transition(s) and to benefit from the manifold new opportunities.

⁵ European Innovation Partnership 'Agricultural Productivity and Sustainability', COM (2012) 79 final.

- **Public authorities should therefore allocate more resources to training farmers in new business skills and to developing new industries and value chains that can co-evolve with local agriculture.**
- **Member States and regional authorities need to pay more attention to making innovation a priority, fostering systemic change and addressing unconventional modernisation opportunities. This could be done if the European Agricultural Fund for Rural Development (EAFRD) could require a minimum allocation to the implementation of the EIP-AGRI (as the LEADER programme does).**

Regions need more targeted support aimed at re-defining their own economic centres and this support should be available for social as well as technical innovation. However, it is often difficult to justify support for social innovation the outcome is not predefined, but emerges through a process of trial and error through which ideas are modified and refined. It is a disadvantage that social innovation is mostly restricted to the LEADER programme.

- **Pilot schemes and model regions that facilitate experimentation and support the elaboration of new future-oriented strategies should be funded.** Funding criteria should require that the proposals for pilot schemes cross social, economic and environmental boundaries, that they are carried by multi-actor partnerships and that they are based on a convincing long-term vision and management strategy.

Initiatives such as EIP-AGRI can make a significant contribution to disseminating the lessons learnt from pilot programmes and to fostering their wider application. Exploring the similarities between EIP-AGRI and the LEADER approach in more detail could foster the building of connections between the two as well as the exchange of lessons learned. The key issues are the principle of multi-actor involvement, which means diverse actors are engaged in strategy development and implementation, the focus on projects, the importance of networks, and the promotion of knowledge, learning and practitioner-led innovation.

Generally, policy needs to aim at generating an environment of creativity and innovation where change results from an open-ended learning process. Smart policy frameworks foster mutual respect among farmers following different modernisation pathways, and rural entrepreneurs, and enhance synergies and collaboration.

Improving multi-level governance in order to foster synergies between agriculture and rural development

European strategies

Concepts such as subsidiarity, multi-level governance, and participation are referred to in the 2014-2020 Rural Development Regulation and their inclusion in the policy debate dates back as far as the 1996 Cork declaration. The 'Europe 2020' strategy interprets these concepts in its third priority: Inclusive growth – fostering a high-employment economy delivering economic, social and territorial cohesion, adding that 'inclusive growth means empowering people'. The Commission's communication 'The CAP towards 2020' explicitly states that 'measures to help unlock the potential of rural areas' should pay particular attention to innovative ideas for business and local governance. The RDR speaks of the 'networking of national networks, organisations and administrations involved in the various stages of programme implementation' and how this has proven able to 'play a very important role in improving the quality of rural development programmes by increasing the involvement of stakeholders' (RDR, par. 40).

Findings

Our case studies illustrate that governance systems that foster multi-stakeholder cooperation help foster a departure from purely economic and purely sectoral approaches. This is because the multi-stakeholder discussions capture the diverse interests around regional development, allowing participants to identify common long-term goals and resolve conflicts. As such, multi-stakeholder

cooperation can be a very effective way of strengthening the resilience of rural areas.

Many governments (national and regional) are increasingly assuming the role of an 'enabling state' and better integrating different funding programmes. This helps to harmonise agricultural and broader rural development goals and rural actors see this as a very positive move.

However, more attention needs to be paid to long-term perspectives. The establishment and management of networks, in particular, is a vital component of Rural Development Programmes. However, this requires more than initial or temporary funding. This suggests incorporating rural development in the concept of 'services of public interest' as an additional 'soft' factor.

There should be more emphasis on financing pilot schemes that encourage experimentation with completely new approaches and test systemic changes. Examples could be new forms of partnership in value chains or profoundly novel cross-sectoral rural development visions and strategies. Other areas that would benefit from fundamentally new thinking include new approaches for collective environmental and climate action and/or for connecting urban and rural areas. The RDR describes pilot projects as 'important tools for testing the commercial applicability of technologies, techniques and practices in different contexts, and adapting them where necessary' (RDR, para 29). However, this description might well be too narrow and is not adequately translated into the more concrete measures presented later in the regulation.

RETHINK also found that new approaches to coordinate and connect strategic land planning with rural development instruments and socio-economic mechanisms have the potential to better reconcile landscape with leisure and production functions in rural areas.

Culture and tradition also make significant contributions to the attractiveness of a region and often

also to network building and participatory decision-making. This in turn can contribute to innovative entrepreneurial activities amongst those are committed to staying in their home region, thus helping alter the tendency towards an aging demographic profile.

In many rural regions, farm families still contribute significantly to the many functions and activities that contribute to quality of life and to maintaining local traditions and knowledge. In other regions, farmers are much less involved in civil society and cooperative initiatives and projects. Processes of change must include community engagement, not only in the sense of participation in designing development strategies, but also as the actual facilitators of change. As such, transparent communication and open governance structures with meaningful stakeholder involvement are very important.

Policy recommendations

- **In order to be meaningful and effective in the long term, national, regional and local level decision-makers have to be encouraged to make fuller use of the many opportunities provided by European policy frameworks.**

New governance models require new skills and competences, both within public institutions and among citizens and civil society organisations. This might explain why there is considerable reluctance to try out new approaches.

The fostering of cross-sectoral integration requires a considerable amount of facilitation, which needs to be provided for in RD programmes through relevant measures and adequate resourcing.

- **Capacity building among local government and stakeholders is a precondition for the development and implementation of more integrated, cross-sectoral strategies and projects.**
- **Facilitators play a major role as catalysts in these processes. However, there is often inadequate funding available for them to fulfill their potential.**

Strategies with a territorial focus help to better orchestrate the governance of agriculture and rural development. However, there is still a need to better integrate policy frameworks across levels and sectors.

- **Participatory spatial planning and development can effectively support the integration of agricultural needs and opportunities with wider goals. The study shows that** additional research is required into the drivers and barriers for collaborative planning and action within a rural and agricultural context.

EU policy frameworks must ensure transparency at national, regional and local levels. At the same time, there is a need to eliminate contradictory legislation and excessive formality.

- **Policy frameworks ought to balance, and connect, the development of new (multi-actor) networks with the devolution of responsibilities and strengthening of local ownership.**
- **Government agencies should give their personnel the time and freedom needed to participate in formal and informal networks.** It is however important that attention is paid to avoiding conflicts of interest.

In contexts where there is already an abundance of networks, organisations and initiatives, governments should be careful not to establish new organisations or institutions on top of the existing ones. Often it can be more effective to connect existing structures or to strengthen coordination between them.

More in-depth research is required on the interplay between bottom-up initiatives and top-down policy. In particular, the creation of a widespread network of good examples and pilot projects that experiment with, and demonstrate, more far-reaching systemic change would enable new learning.

- **There is a need to strengthen regional capacities for transdisciplinary research, which has the potential to assist and improve public and private sector decision-making.**

Further information

Dr Karlheinz Knickel, Simone Sterly

Institute for Rural Development Research (IfLS),
Frankfurt/M., Germany

E-mail: knickel@ifls.de & sterly@ifls.de

Project website: www.rethink-net.eu

RETHINK is a trans-disciplinary research project supported by the European Commission and funding bodies in 14 countries under FP7 and the RURAGRI ERA-NET (CA 235175).

