

# Short Communication March 2019

### **Executive Summary**

At the EU-wide level, there is a constant decrease in the number of farms, an increase in average farm size and a decrease of overall work force in agriculture. Farms tend to become more specialized, and family farms dominate the EU agricultural landscape. Besides that, the share of older farmers is increasing while the share of young farmers is decreasing. However, a study across a diversity of European farming systems shows that these general trends and their future direction depend on regional specificities related to agro-ecological zoning, socio-economic characteristics, environmental challenges, institutional and cultural embedding and embedding in the value chain. The obtained similarities/contrasts in sector and regional specificities from the cross case-study comparison should allow to learn from differences and inspire local government to tailor their policies to specific situations.

FARM DEMOGRAPHICS, STRUCTURAL CHANGE AND RESILIENCE ARE STRONGLY CONNECTED

#### Intro

In SURE-Farm, we explored major trends in farm demographic and structural change in 11 case-studies. A case-study is a particular farming system in a certain region, and the selected case-studies reflect a variety of settings and a diversity of farm types. A combination of quantitative and qualitative data sources was used to understand trends on dynamics of the farmers' population in the case-study regions. Eurostat datasets from 1990-2016 (Eurostat, 2009) were combined to describe the evolution of both farm structural characteristics and farm demographics in the regions. The quantitative data collection is supported by in-depth interviews with regional experts in which regional characteristics influencing these trends were identified. We reflect on our main findings in this short communication.

## Farm demographics and resilience: how are they related?

Farming systems are resilient if they have the capacity to adapt to changing circumstances and challenges while maintaining their core functions, including the delivery of vital goods and services. Multiple internal and external processes influence the ability of farming systems to cope with changing environments. One of these processes influencing the resilience of farming systems comprise farm demographic dynamics.



First, particular challenges are reflected in farm demographic trends. Lack of succession and new entrants will be reflected in a changing age structure of the farmers' population. Second, demographic characteristics of the farmers' population, such as age, education and availability of labour, have a major impact on structural change of farming systems. Such structural characteristics, like farm size, specialisation and intensity, for their part, strongly influence adaptive capacity of farming systems. Therefore, unravelling the underlying processes that shape farm demographics should increase our understanding of farming systems' resilience.



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STRUCTURAL CHANGE: A COMBINATION OF GENERAL TRENDS AND REGIONAL CHARACTERISTICS



### Towards less but larger and more specialized farms

Regarding structural change EU-wide, the agricultural sector went through significant structural changes over the last decades. The most evident structural developments are reflected in a constant decrease in the number of farms, an increase in average farm size and a decrease of overall work force in agriculture. Farms tend to become more specialized, focusing on either crop or animal production, away from mixed farming. These structural changes are mainly driven by technological progress, market developments and policy intervention. Institutional context additionally supports this long standing tendency as scale enlargement and intensification have been promoted as the way forward by sector organizations, research institutes and governance.

However, these general trends and their future direction depend on regional specificities of the case studies. These specificities relate to agro-ecological zoning, socio-economic characteristics, environmental challenges, institutional and cultural embedding and embedding in the value chain. In several case studies, large intensive farming systems are dealing with increasing resistance of society, negatively influencing investment plans in the region. At the same time, other case-studies revealed that the delivery of ecosystem services by extensive farming systems is becoming more important to local population, and this way, demands of society might retain these extensive farming systems in some areas across Europe.

Structural changes of farming systems across Europe also depend on government. For example, in the French case study, numerous agroenvironmental schemes (AES) have been implemented and contributed to consolidate extensive beef farms. In the Netherlands, after the abolishment of the dairy quota, the average herd size of Dutch dairy farmers increased and nitrate and phosphate levels came more under pressure. The EU threatened to withdraw the Dutch derogation, which allows them to have higher levels of nitrogen fertilization. To meet the phosphate and nitrate regulations, farmers had to reduce herd size.



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FAMILY FARMS, FAMILY LABOUR AND RESILIENCE OF FUTURE FARMING SYSTEMS



### Labour organisation on growing farms

Family farms are by far the dominating organizational farm type in EU agriculture, both in terms of their numbers as in terms of their contribution to employment in agriculture. Family farms in our study are defined as those where farm profit covers unpaid labour and own capital of the holder and the holder's family. On family farms, farm labour is largely supplied by the holder and the holder's family.

Several reasons have been described to explain the high proportion of family labour in total agricultural employment. Family labour allows flexibility, which might contribute to robustness of the farms. Many tasks are done most effectively and for the least cost by family members. Family members are more motivated, they have life-long learning experience and have best insights into farm specific characteristics. In most cases, family members have an emotional connection with the farm and are therefore willing to work harder when necessary.

However, as farm size is increasing, the lack of sufficient family labour to have recourse to, is perceived as an upcoming problem in several case studies. In some case studies, hired labour is not easily available or comes at a very high cost for the farmers' family. Even more, family members more often decide to (partially) work off-farm to provide sufficient income for the farmers' household. Sometimes, farmers compensate this work overload by investing in increased automation and mechanization of practices. In Germany, corporate dairy farms compensate the lack of skilled workers by more automation of practices (milking and feeding), contributing to high labour efficiency and productivity. Consequently, the financial resources required for farm transfer might hamper succession.

Besides labour pressure, in some case studies there rather was a problem with skilled labour. At the farming system level, technological progress not only reduces total labour input, but also results in an increasing capital to labour ratio, which in turn requires more efficient use of labour, specialised operator skills and improved farm management capacities. The lack of educated workers threatens the future of these farms because technological skills and managerial capacity of farmers is crucial to the ability to adapt and transform. In Sweden, the low attractiveness of the sector due to low profitability results in limited availability of skilled and well-educated work force, which is reflected in low interest for attaining agricultural education.



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DECREASING SHARE OF YOUNG FARMERS: THE RESULT OF OVERALL AGEING OF THE EUROPEAN POPULATION OR GENERATIONAL RENEWAL PROBLEM?



## Generational renewal of European farming systems

Another tendency at European level, is the changing age structure of the farmers' population. The average age of the farmers' population is increasing. The share of older farmers is increasing while the share of young farmers is decreasing, which is known as the generational renewal problem. The EU recognizes that there's a notable shortage of young farmers and has stated that the "generational renewal" of agriculture is critical for the long term viability of the sector. Therefore, multiple agricultural policies on early retirement or new entrant schemes, and regulations on taxation rules for the capital transfer involved in intergenerational hand-over, are specifically designed to support young farmers. Also numerous scientific efforts have focused on the importance of attracting the next generation of farmers and facilitating succession processes.

In almost all our case studies, experts have mentioned this generational renewal problem as a future challenge for the resilience of farming systems in the region. However, other studies emphasize that it is still not clear whether or not Europe is dealing with an acute succession crisis or not. It has been questioned whether this tendency results from general social trends, among which the overall ageing of the European population. As farms are more capital intensive, young farmers often decide to take over the farm in multiple stages. Besides that, older farmers are not pressed to leave the sector because they often have lower debts combined with subsidy entitlements.

This cross case-study analysis shows that the observed general European farm demographic trends are influenced by multiple factors and dynamic processes, depending on sector and regional specificities. This might inspire local government to tailor their policies to specific situations. Besides external challenges, we should not ignore the importance of farm and human related factors in decision making processes. External factors that are perceived as a major challenge for one farmer, might be perceived as an opportunity for another one. Further research in SURE-Farm will provide more insight in these farm and human related factors and might reveal additional strategies for improving the resilience of farmers, farms and farming systems.

### **SURE-Farm publications**

Bijttebier et al., 2018. Report on current farm demographics and trends. Deliverable 3.1, SURE-Farm.



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