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INFLUENCE OF THE COMMON AGRICULTURAL POLICY ON THE RESILIENCE OF POLISH HORTICULTURE¹

Key words: Common Agricultural Policy, farming, robustness, adaptability, transformability

ABSTRACT. The goal of the research is to assess the impact of the Common Agricultural Policy on the three dimensions of resilience of farming sectors: robustness, adaptability and transformability. The chosen subject of the research was Polish horticulture and the examined period was the financial framework 2014-2020. The research was based on qualitative data analysis, including policy documents analysis and the focus group research. The results showed that the level of instruments and the CAP is more focused on robustness than on the level of goals, where there is more balance between robustness and adaptability. On both a goal and instruments level, transformability is the least supported from all three resilience capabilities. Taking the challenges of the horticulture sector into account, the CAP does not sufficiently answer the economic challenges of the sector. Overall, robustness, although supported by the CAP, could be supported much more effectively, if the implementation of instruments were more intensified in the sector. Better implementation requires the improvement of educational activities. Social education is not sufficiently implemented to meet the needs of the sector. In addition, the CAP, on a moderate level, in the case of both goals and instruments, supports other characteristics of adaptability. For the horticulture farming sector, which is one of the least benefiting from direct payments, the support of adaptability and transformability seems to be vital for its development.

INTRODUCTION

The scientific problem of the paper is to assess the influence of European Union policies on the resilience of Polish farming sectors. Resilience, in this article, is defined as the ability to maintain robustness, adaptability and/or transformability of agriculture in response to changes and shocks in their environmental, social, economic and institutional environment [Meuwissen et al. 2018]. EU agriculture was supported, for a long time, by a complex set of policies, especially the Common Agricultural Policy (CAP). Previously, agricultural policies aimed at isolating the sector from external shocks, such as price instability. However, in the 1990s, the process of liberalizing agricultural markets started, which exposed farming sectors to price fluctuations. These concerns are strengthened by climate and environmental stressors. These issues require addressing and the question on whether the current and planned designs of the CAP and other policies support or constrain

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the resilience of farm sectors requires answering. While some farming sectors receive relatively more support than others from CAP funds, little is known on how beneficial CAP is for less supported sectors, e.g. horticulture.

In Poland, one of the farming sectors benefitting least from the CAP policy is horticulture. It mainly consists of small and medium-sized farms. It is exposed to numerous risks. Vulnerability to economic risks in relation to declining prices is due to the Russian embargo, variations in prices and lack of labor for seasonal and labor intensive work. In 2014, the Russian Federation placed an embargo on the Polish agricultural sector. As a result, the import of, among others, Polish fruits and vegetables was suspended. This, in particular, affected the market for some products, e.g. apples, the export level of which was highly dependent on the Russian market [Nosecka 2014]. The embargo also resulted in lowering the volume of Polish exports of fruits and vegetables to countries of the Commonwealth of Independent States [Klepacka, Florkowski 2016]. Also other factors, such as the Single European Market or price changes on the world market, influence fruit and vegetable prices in Poland. The prices are also subject to seasonal supply fluctuations, mostly due to fruit sensitivity to agro-meteorological conditions, which contribute to crop failure, or the opposite – an abundant harvest [Bieniek-Majka 2017]. In the years 2008-2016, price volatility for fruit amounted to 22.3% and, in the case of vegetables, it was at a level of 13.1% [Czyżewski et al. 2018]. Vulnerability to environmental risks is related to increasing incidents of extreme weather phenomena, such as hail, frost, drought, and hydrological instability such as the infestation of trees by pests and fungal disease. For example, floods in 2010 and May frosts in 2011 caused a rapid price increase of fruit and vegetables [Czyżewski et al. 2018]. Vulnerability to social risk relates to changes in the preferences of consumers. Fruits represent a negligible part in the pattern of consumption, and with low income, spending on them can be limited. Another key factor, forming the volume of consumed fruit, is their prices, which influence periodical changes in demand for particular species. These changes are partly attributed to variations in domestic production highly dependent on atmospheric conditions [Stolarska 2014]. Another factor influencing the resilience of the sector is that, especially in the region of Mazovia and Podlasie, the lowest crop insurance uptake in the country takes place [Wąs, Kobus 2018].

RESEARCH MATERIAL AND METHODS

Research is based on qualitative data analysis, including policy documents analysis and the focus group research. After identifying main country- and sector-specific challenges, 22 policy documents were selected for analysis, including EU and Polish CAP documents, implementation plans and reports. The examined period was the 2014-2020 financial framework. Analysis of data was based on resilience-enhancing characteristics inspired by Katrien Termeer et al. [2018]. To refine analysis criteria, for each resilience dimension, four resilience-enhancing characteristics were used. In case of robustness, the chosen characteristics were: a short-term focus, protecting the status quo, buffer resources and other modes of risk management. In case of adaptability, middle-long term focus, flexibility, variety and tailor made responses as well as social learning were examined. In case of transformability, the chosen characteristics were long term, dismantling incentives

that support the status quo, in-depth learning, and enhancing and accelerating niche innovation. These characteristics provided structure to identifying relevant parts of analyzed documents describing characteristics of resilience and interpreting results in terms of three dimensions of resilience. Analysis took both the goals of the policy, as well as the instruments, which were analyzed into consideration separately. Subsequently, overall analysis of strengths and weaknesses of the CAP policy, in the context of resilience, was performed.

A focus group was organized to validate and enrich outcomes, and increase the trustworthiness of the qualitative data analysis. Stakeholders were selected on the basis of their merits related to the horticulture sector and/or the CAP. There were seven participants: two representatives of the Ministry of Agriculture and Rural Development, one representative of the fruit farmers' organization, three horticulture experts, and one CAP expert. The focus took place in the form of a presentation of results and a discussion.

RESULTS RELATED TO COMMON AGRICULTURAL POLICY DOCUMENTS – GOALS

The results obtained were related to CAP goals and instruments stated in policy documents, as well as the conclusions of the focus group research.

ROBUSTNESS. CAP goals usually relate to a time scope longer than one year, so they do not enable a short-term focus. The only short-term goal expressed in analyzed documents is the intention of mitigating risks related to the uncertainty of markets and environmental risks [EC 2017b]. Protection of the status quo is fairly enabled [EC 2013a]. The Ministry of Agriculture and Rural Development [MRiRW 2018] declares keeping the model of agriculture based on family farms by ensuring special support. The goals of CAP are very enabling for the development of buffer resources [EC 2013b]. Farmers are rewarded for their services by stable income support. In addition, other modes of managing risks are enabled by CAP goals. Mutual funds and insurance schemes allow farmers to respond better to market and price instabilities [EC 2017a].

ADAPTABILITY. CAP goals slightly enable a middle-long-term focus, although goals usually relate to a long-time scope. Few of them have middle-term focus, such as measures for encouraging potential new entrants to take up farming [EC 2017b]. CAP goals enable flexibility. Member States can design their own multi-annual programmes in response to needs of their rural areas based on the menu of measures available at an EU level [KMC 2015]. The new rules of the second pillar are more flexible than in previous programming periods [EC 2013a]. Variety and tailor-made responses are enabled by CAP goals [EC 2014]. Member States can design thematic sub-programmes, to give special attention to issues such as young farmers, small farms, mountain areas, women in rural areas, climate change, biodiversity or short supply chains. Social learning is enabled fairly. There are goals of creating knowledge-based agriculture and strengthening advisory services, but social learning is mostly an additional goal to other priorities [EC 2017a].

TRANSFORMABILITY. Focus on the long term is fairly enabled by CAP goals. Member States have the responsibility to set out future strategies for agricultural sectors, which will ensure their efficiency, competitiveness and sustainability in the long-term [EC 2017a]. However, most of those goals are non-specific. The dismantling of incentives that

support the status quo is only slightly enabled by CAP goals, because the key characteristics of the CAP remained untouched by the reform [EC 2013b]. In-depth learning is not enabled by policy goals. Goals related to learning do not concern changes in paradigms or radically new frames. The enhancement and acceleration of niche innovation is not enabled by CAP goals [EC 2013b].

RESULTS RELATED TO COMMON AGRICULTURAL POLICY DOCUMENTS – INSTRUMENTS

ROBUSTNESS. The short-term focus of CAP instruments is fairly enabled and related to direct payments, for which farmers can apply every year and which are limited by annual allocation [EC 2017b]. Instruments of the CAP enable the protection of the status quo. Market measures and income support are funded fully by the EU budget, although there is a lack of instruments targeted at the fruit and vegetables sector. Ten Member States (including Poland), used the option of redistributive payment. In Poland, a programme for supporting domestic plant varieties was launched [MRiRW 2018]. Policy instruments are very enabling for the development of buffer resources. Direct payments are the major source of support offered by the CAP (72% of the budget) [EC 2017b]. The policy instruments also enable other modes of managing risks. While grants and loans play a major role in helping farmers, financial guarantee schemes or insurance are also available [EC 2013a].

ADAPTABILITY. CAP instruments fairly enable a middle-long-term focus, mostly within pillar II [EC 2013a]. Rural development programmes extend over several years. The instruments enable flexibility fairly. Shares of funding allocated to different schemes vary between the countries, but within regulatory and budgetary limits (like max. 2% for young farmers) [EC 2017b]. CAP instruments enable variety and tailor-made responses. National programmes of development are designed to address specific needs and challenges of their rural areas [EC 2017a]. The II pillar provides a more diverse approach than in the previous programming period, by changing “axes” into six broad priorities and their focus areas. Within pillar II, different instruments aim to help the farm sector adapt to new trends and technologies and become more efficient, cost effective and adaptive to various challenges. However, the Ministry of Agriculture and Rural Development did not plan any special programmes supporting adaptation in the fruit and vegetables sector. CAP instruments enable social learning fairly. Instruments are more focused on trainings and information than social learning, which is considered supplementary [EC 2013b].

TRANSFORMABILITY. Focus on the long term is only slightly enabled by CAP instruments. Only national rural development programmes include action undertaken over a seven-year period [EC 2013b]. Instruments fairly enable the dismantling of incentives that support the status quo, although no special incentives supporting the status quo are dedicated to the fruit and vegetable sector. Expenditure for agricultural market management is dropping significantly, although the main drop took place in the previous programming periods, from over 90% in 1992 to 5% in 2013, which gives a significant difference of 85 percentage points within 11 years. There are no instruments indicated in examined documents, which would be related to the implementation of in-depth learning. No specific instruments of the CAP enable the enhancement and acceleration of niche innovation.

COMPARISON OF GOALS AND INSTRUMENTS

In general, transformability is the least supported aspect of resilience. Especially in-depth learning and niche innovation seem to be heavily neglected by the CAP [EC 2013b]. Robustness and adaptability are relatively balanced in the case of goals, but in the case of instruments, the dominance of robustness can be observed, as there is a shift towards a short-term focus and protecting the status quo in Polish agriculture. The short-term focus of CAP instruments is fairly enabled and related to direct payments, for which farmers can apply every year and which are limited by annual allocation [EC 2017b]. Buffer resources in the case of both goals and instruments seem to be relatively strongly supported. Farmers are rewarded for their services by stable income support and direct payments are the major source of support offered by the CAP (72% of the budget) [EC 2017b]. In addition, other modes of managing risks are enabled by CAP goals. Mutual funds and insurance schemes allow farmers to respond better to market and price instabilities [EC 2017a]. The Ministry of Agriculture and Rural Development [MRiRW 2018] aims at stabilizing main agricultural markets (though not the fruit and vegetable market), and increase the intake of farm facilities and yield insurance.

A noticeable feature of CAP goals and instruments is their relative similarity for three different dimensions of resilience: robustness, adaptability and transformability. However, there are some differences between them. Robustness is more supported by CAP instruments than by goals (see: Table 1), especially in the case of short-term focus and protecting the status quo. Adaptability is rated similarly however, in the case of instruments, middle term focus has a slightly greater importance, mostly within pillar II [EC 2013a], and flexibility, to a small extent, but loses its importance due to regulatory and budgetary limits (such as maximum 8% for coupled support or maximum 2% for young farmers) [EC 2017b]. The level of transformability does not change significantly. Dismantling the status quo slightly increases importance in terms of instruments, compared to goals. National programmes of development can be designed to address specific needs and challenges of their rural areas [EC 2017a]. The long-term focus loses CAP support to some extent. While it is fairly enabled by CAP goals, due to the fact that the Member States have the responsibility to set out future strategies for agricultural sectors [EC 2017a], the general character of guidelines leads to a situation, whereby Member States do not document an united, coherent strategy for the horticulture sector, on which they base choices regarding the implementation of the CAP [EC 2016].

Table 1. Comparison of the degree of support in terms of stability, adaptability and transformability under CAP objectives and instruments

	Stability	Adaptability	Transformability
Objectives	++	++	+
Instruments	+++	++	+

Source: own study based on an analysis of documents

RESULTS OF THE FOCUS GROUP RESEARCH

Stakeholders generally agreed to the results presented in the beginning of the meeting. They mostly shared their experience related to implementation aspects of the CAP. They pointed out that the horticulture sector in Poland and Europe is unique. It receives relatively little support in direct payments, comparing to other farming sectors, due to the small average size of farms. It forces the sector to adapt to the market and increase its innovativeness. In the CAP, one of the problems with supporting innovation is a lack of a precise definition, which can be considered an innovation. It causes serious problems in supporting innovation through the Rural Development Programme. Stakeholders, not only in the case of innovation, brought the problem of quality of EU regulations up several times. In the case of horticulture, according to stakeholders, what is also important is support for organizations, which is available in Pillar I. It can be a source of increasing adaptability and innovation, mostly in the middle- and short-term (not big enough to support transformability, but rather adaptability). However, the cooperation and creation of cooperatives and producer groups is very ineffective in Poland. According to EUROSTAT data from 2010, on average, in EU countries, 43.9% of total fruit and vegetable production was production within groups and recognized producer organizations, while in Poland this figure constituted 11% [see: Pilichowski 2018].

It was also elaborated that there are differences between the situation of the Polish fruit sector and the vegetable sector. The fruit sector is particularly very poorly organized, which makes it even more difficult to use the available CAP funds by the sector. It is hard to provide the necessary information flow, so that small farmers know how they can use funds other than direct payments, which consist, on average, of only around 4% of the general income of horticulture farms. Lack of information and education is often a reason for the small uptake in different instruments. Increasing complexity of CAP requires more educational activity, to avoid difficulties in implementation. Otherwise, regulations, which might seem supportive, might, in reality, have very little impact. For example, in the case of Poland, insurance is not a tool utilized enough for risk mitigation offered by the CAP, especially due to implementation inefficiency. However, the CAP is not effective in supporting education in Polish agriculture.

Stakeholders agreed that buffer resources, protecting the status quo and other forms of risk management are the most supported areas. Opinions were divided regarding the influence of those characteristics of robustness on the farming sector. Some stakeholders suggested that adaptability is not supported enough, others claimed that risk management is the reason for CAP existence, and therefore strongly supported, especially in relation to climate-related risks. An interesting idea was that the less buffer resources are included in agricultural policy (as for example in the US), the more other forms of risk management are needed, such as an efficient insurance system.

Stakeholders agreed with most of the challenges listed for the sector. The importance of the Russian embargo is mostly important for the fruit sector, which stems from the fact that 80% of the Polish fruit sector consists of apple cultivation, and Polish apples were predominantly exported to the East (other fruit mostly to Western countries). Among vegetables, only cabbage is, to a large extent, exported to the East, and therefore was affected by the embargo (40% of production on Eastern markets export).

Stakeholders expressed that it is not surprising that transformability is not supported due to the fact that it is seen as risky. The main goal of the CAP is the preservation of a social and production structure. However, the support of social structure might play a dominant role, and a stabilization of income does not necessarily mean a stabilization of production, because it teaches farmers to adapt not to the market and increase competitiveness, but to CAP regulations and support.

Another important issue brought up by stakeholders is the continuous growth in energy prices, which is affecting and will continue to affect the horticulture sector even more strongly in upcoming years. Another interesting remark was that the Ukraine is starting to introduce the cultivation of traditionally Polish varieties of apples, which might, in the nearest future, increase competition for this sector.

An important issue pointed out during the discussion, not included in the initial identification of specific main farming sector challenges, is the problem of supply instability. It is an important economic thread, especially for fruit farming, due to a lack of stabilizing tools. The issue was added to the description. Even a relatively small decrease in production results in a large price increase, and vice versa, an increase in production leads to a rapid decrease in prices. In the year 2019, the problem was so significant that 50-60% of chokeberry and around 20% of currants were not even picked from fields, as the prices were so low, that they could not cover the cost of the labor force picking those fruits. The vegetable market is more stable due to its higher level of organization and the implementation of a minimum and a maximum. However, the market of fresh vegetables is less stable than the processed one, but still not as vulnerable to supply instability as the fruit sector. Most countries have fixed limits of production, but are not applied in Poland in the case of fruit, due to a lack of the requirement of signing agreements between producers and processors, protecting both producers from low prices, as well as processors from very high ones, which could endanger their business activity. It is a significant difficulty for this sector. Farmers use the diversification of production as a risk management method.

Stakeholders also pointed out that, in Poland, ROPs (Regional Operational Programmes) and the CAP are not related. It is necessary to create a mix of policies to achieve better outcomes. The additional benefit of that would be a mentality change. It would enforce the national policy for agriculture. Lack of supplementing the CAP from other policies is a big mistake. For example, education should be conducted on all stages of the value chain. Currently, there are no instruments connecting farmers and consumers.

CONCLUSIONS

The main conclusion from the analysis is that, on the level of instruments, the CAP is more focused on robustness than on the level of goals, where there is more balance between robustness and adaptability. On both a goals and instruments level, transformability is the least supported from all three resilience capabilities.

Taking the challenges of the horticulture sector into account, the CAP does not sufficiently answer the economic challenges of the sector. It does not offer solutions for price volatility due to production changes, and the offered buffer resources do not always cover the financial burden related to that problem. The CAP enables other forms of risk

management, such as insurance, however, as stated in the focus group research, their implementation in Poland was relatively slow and the intake insufficient, due to a lack of awareness among farmers of the importance and availability of such insurance. Productivity in farming is heavily related to environmental factors, so the instruments related to the mitigation of climate risk should also be more efficiently implemented. Overall, robustness, although supported by the CAP, could be supported much more effectively, if the implementation of instruments were more intensified in the sector.

Better implementation requires an improvement of educational activities. Social education is only fairly enabled by the CAP, and as the stakeholder check suggests, it is not sufficiently implemented to meet the needs of the sector. In addition, the CAP, on a moderate level, in the case of both goals and instruments, supports other characteristics of adaptability.

For the horticulture sector, the needs for in-depth learning and supporting niche innovation are heavily neglected by the CAP, both in the case of goals and instruments. The sector is relatively innovative, although the CAP does not support this process, and does not support spreading niche innovation and good practices among farmers. Also, CAP instruments do not sufficiently support the long-term focus. For horticulture, which is one of the least benefitting from direct payments, the support of adaptability and transformability seems to be vital for its development.

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ODDZIAŁYWANIE WSPÓLNEJ POLITYKI ROLNEJ NA ODPORNOŚĆ SEKTORA OWOCOWO-WARZYWNEGO W POLSCE

Słowa kluczowe: Wspólna Polityka Rolna, rolnictwo, stabilność, adaptacyjność, zdolność do transformacji

ABSTRAKT

Celem artykułu jest ocena oddziaływania Wspólnej Polityki Rolnej na trzy wymiary odporności sektora rolniczego: stabilność, adaptacyjność i zdolność do transformacji. Zjawisko zbadano metodą studium przypadku, do którego wybrano sektor owocowo-warzywny w Polsce, a badanym okresem były ramy finansowe 2014-2020. W badaniu wykorzystano metody jakościowe: analizę dokumentów programowych i raportów oraz badanie fokusowe. Wyniki pokazały, że WPR w większym stopniu wspiera stabilność na poziomie instrumentów niż na poziomie celów, gdzie istnieje większa równowaga między stabilnością a adaptacyjnością. Zarówno w odniesieniu do celów, jak i instrumentów zdolność do transformacji jest najmniej wspierana ze wszystkich trzech wymiarów odporności. Biorąc pod uwagę wyzwania sektora owocowo-warzywnego w Polsce, WPR w niewystarczającym stopniu na nie odpowiada. Stabilność, choć wspierana przez WPR, mogłaby być wspierana znacznie skuteczniej, gdyby wdrażanie instrumentów było bardziej dostosowane do potrzeb sektora. Skuteczniejsze wdrażanie WPR wymagałoby poprawy w zakresie działań edukacyjnych. Edukacja społeczna nie jest wdrażana w stopniu wystarczającym, aby zaspokoić potrzeby sektora. Ponadto WPR w umiarkowanym stopniu, zarówno w przypadku celów, jak i instrumentów, wspiera inne wymiary adaptacyjności. W przypadku sektora owocowo-warzywnego, który jest jednym z najmniej korzystających z płatności bezpośrednich, wsparcie adaptacyjności i zdolności do transformacji wydaje się mieć zasadnicze znaczenie dla jego rozwoju.

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