

# The Role of Common Agricultural Policy in Climate Actions

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*Abstract: In the current post-pandemic economic environment, both climate action and sustainable development remain essential objectives for the European Union, while the Common Agricultural Policy (CAP), with the largest funding from the European budget may emerge as a key factor for achieving them both. CAP financing framework for 2021-2027 has three broad objectives: viable food production, sustainable management of natural resources and balanced territorial development. Given that those objectives of the post-pandemic CAP are particularly wide and ambitious, this paper focuses only on a comparative quantitative analysis of climate and environmental expenditures undertaken by Member States, highlighting Romania's position in the European hierarchy. Our research aims to present the achievements and challenges of Member States' environmental and climate spending under the CAP, in order to underline which development directions could contribute to a more resilient and sustainable rural development across EU.*

*Key-Words: Common Agricultural Policy, post-pandemic development, climate and environmental actions, EU Member States*

*JEL Classification: Q01, Q15, Q2, Q28*

## 1 Introduction – a “greener” CAP for a more resilient EU agricultural sector

For years, the dichotomy between sustainable and competitive development under CAP “umbrella” has remain a most disputed subject in the literature review (Belinska et al., 2021; Barreiro et al., 2021; Streimikis, 2020). While many analysis (Mets et al., 2021; Constatin et al., 2021) have praised the CAP progress to a more sustainable and ecological European agriculture there are some critics (Brown et al., 2021) who underlines the challenges of this process especially in terms of resilience in the complicated post-pandemic economic environment.

Recently, a complex analysis has highlighted that after their accession to EU Poland and the Baltic States can be considered as leaders in the agricultural domain (including in sustainable agriculture), while Romania, Bulgaria and Slovenia used their potential poorly (Csaki et al, 2016).

Some studies (Blake, 2020; Liegmann, 2021) consider that the new CAP may be a key element of the European Green Deal through the Farm-to-Fork Strategy, and this reality is best reflected in the fact that achieving more sustainable food and agricultural systems is intrinsically linked to the role of 'green' and digital economic development, which aims to integrate the new technologies (e.g. digitalization as a way to promote and sell organic agricultural products, thus bringing new opportunities in global chains for both producers and for consumers), but also to experiment with new production methods that will preserve resources for future generations, ensuring a more equitable access to quality food for all consumers. In our view, the opportunities opened up by the adoption of the Farm-to-Fork Strategy (European Commission, a, 2020) in terms of increasing the resilience of rural areas in the EU and boosting sustainable rural development are paving the way for new funding directions fit to ensure not only greater food security but also greener development across EU.

The climate objectives of the current CAP are particularly ambitious as they aim to enable Member States' food systems to withstand the shock of future crises (similar to that generated by the COVID-19 pandemic) but

also to create significant changes in both the supply chain and the European consumption model, in order to reduce the share of carbon emissions in agriculture, to limit the consumption of natural resources, while increasing the biodiversity of rural areas in terms of nutrition and health.

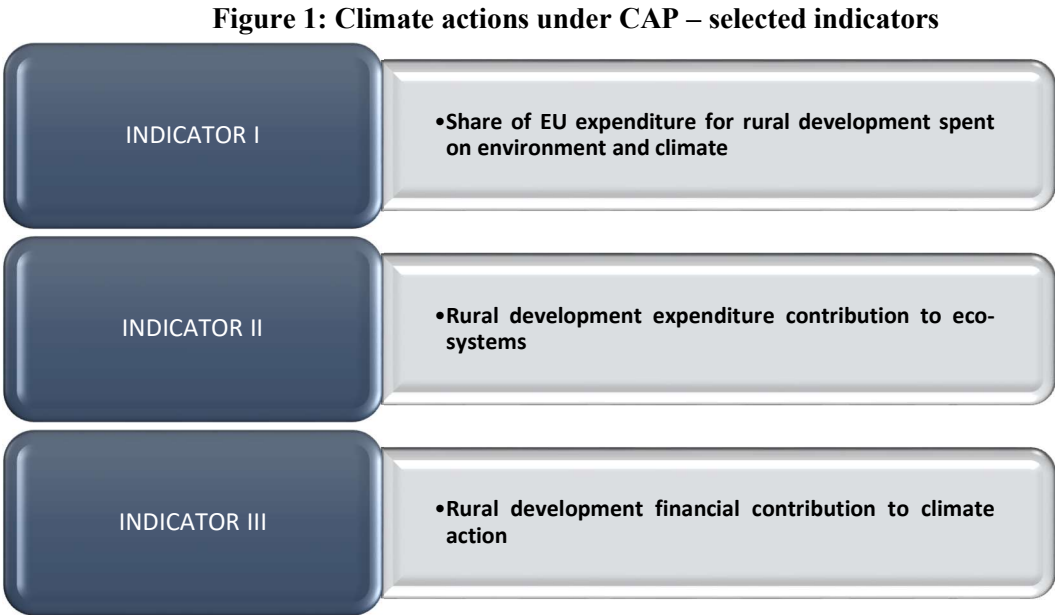
**2 CAP and climate actions – selected indicators for a comparative approach across the Member states**

As stated by some studies (Drăgoi, 2021), CAP has slowly migrated from a policy with market orientation that openly supported European farmers and European production to a policy that sets its core around the “green” development necessary for achieving a sustainable rural space for future generation.

While having undisputed benefits this goal of CAP also poses many challenges for Member States that must adapt their rural development funding accordingly. One of the most important challenges is linked to the fact that agriculture is a sector with a lower degree of standardisation in terms of financing objectives as the latest DG Agricultural and Rural Development data are showing.

Moreover, there are significant imbalances in the economic space of the EU in general and in the development of the agricultural sector in particular, a gap that is very clear especially regarding climate actions related to CAP. After the Green Deal adoption, CAP has become more focused on climate actions, while Member States must comply with more ambitious targets in the field.

Hence, our research has selected three indicators (see Figure 1) related to climate actions undertaken through CAP financing in order to analyse the achievements and the challenges that remains for European countries in order to cope with the new “green” CAP agenda.



Source: Authors representation.

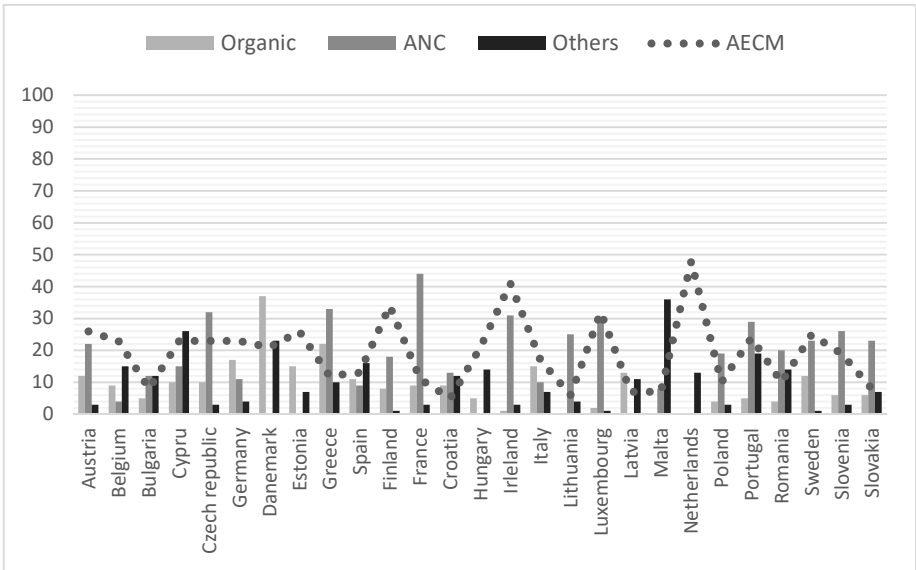
We selected those indicators because we believe that they are particularly relevant for drawing a significant picture on how have Member States managed to fulfil the climate related targets through CAP funding. For each indicator we will present the situation at EU level and across Member States using the latest available data (for the year 2020) (European Commission, b, 2020).

**2.1 Share of expenditure for rural development spent on environment and climate**

A key indicator for financing rural development in the EU is related to the share of Member States' environmental and climate spending in total rural development spending. Its importance is underlined by some analyzes (Bisciari et al., 2021) which show that, especially after the adoption of the new regulations of the post-2020 CAP this indicator is the core of rural "green" development, but also an important tool for rapid recovery after the difficulties caused by the COVID-19 pandemic. According to the latest European statistics available, at the level of 2020, there is an unequal performance among the Member States in terms of this indicator, with

Denmark, Greece, Cyprus, Ireland and Portugal occupying the first places, while Romania is ranking low in the European hierarchy (see Graph 1).

**Graph 1: Member States' performance on the share of climate and environmental expenditure in total rural development expenditure in 2020 (%)**



Source: Authors based on data published by the European Commission (2021).

Within this generic indicator on climate and environmental spending there are four sub-indicators: agri-environmental spending, abbreviated AECM (Agri-Environmental Climate Measures used for general objectives such as reversing the decline of biodiversity, conservation of landscapes in rural areas, water and soil protection, genetic resources and combating climate change); expenses for organic farming; expenditures for areas with natural constraints, abbreviated ANC (Areas with Natural Constraints) and other environmental expenditures.

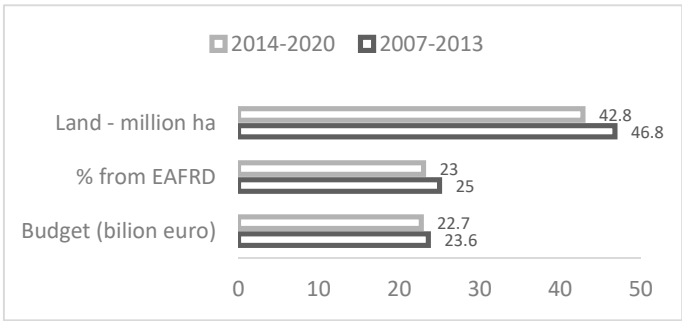
If we look at the performance of Member States in relation to each of these sub-indicators we observe a reversal of hierarchies, with some countries performing poorly on total climate and environmental measures while achieving notable performance on some of these sub-indicators (for instance Sweden, which is at the forefront of organic farming, but has a poor performance on other sub-indicators).

As we may observe in Graph 1 there is an extremely diverse distribution of climate and environmental spending across the four sub-indicators.

Thus, while most states have allocated a significant percentage for AECM expenditures, there are also countries that have allocated zero funds for some of the sub-indicators (Lithuania, Malta and the Netherlands for organic farming and Germany, Denmark, Hungary and the Netherlands for ANC).

Currently, AECM spending is considered the most important vector for achieving sustainable rural development objectives under the CAP, hence benefiting from important funds over the most recent multi-annual budgetary framework (Graph 2) because these type of expenditures are considered essential for driving the restoration, conservation and growth of ecosystem diversity in rural areas of the Member States, while also contributing to the transition to a green and low-carbon economy.

**Graph 2: AECM funding under CAP multi-annual budgetary framework**

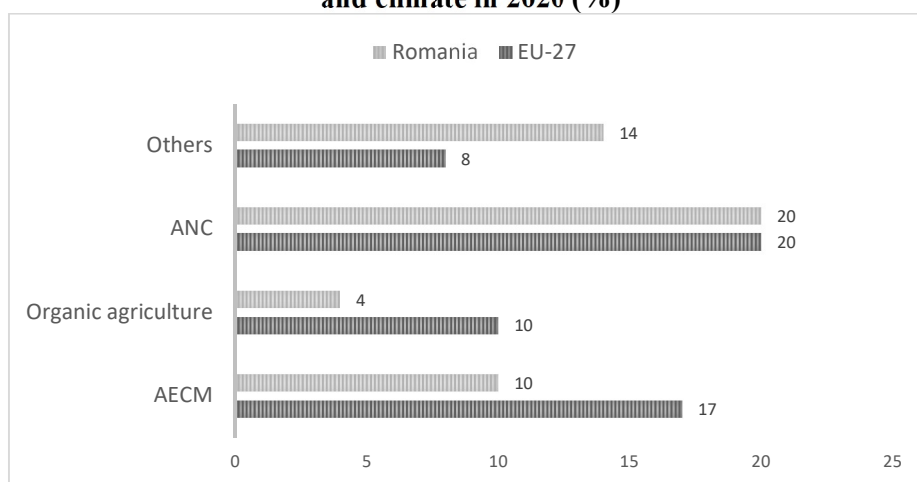


Source: Authors based on data published by the European Commission (2021).

As we may see in Graph 2, when comparing this type of measure across the EU-27 over the most recent multi-annual budgetary framework (2007-2013 and 2014-2020, respectively) one may see a decrease in funding for this indicator, both as a percentage of the European Fund for Agriculture and Rural Development (EAFRD) and in terms of the area on which has been implemented.

The data on the evolution of this indicator reveal that compared to the EU-27 average, Romania has allocated lower funds for both AECM and organic farming, matching the European average only to the ANC sub-indicator (see Graph 3).

**Graph 3: Romania's performance on share of expenditure for rural development spent on environment and climate in 2020 (%)**



Source: Authors based on data published by the European Commission (2021).

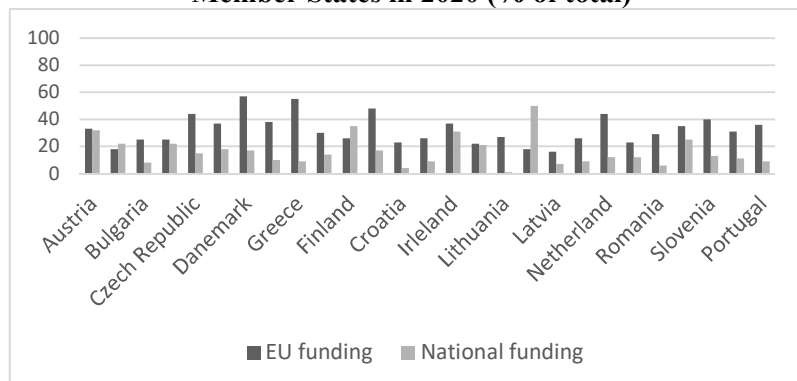
Romania's lower performance compared to the EU-27 average is explained in some analyses (Drăgoi & Dragomir, 2021) by the fact that most funding in the previous National Rural Development Plan focused on some specific development issues (infrastructure, increasing the quality of human resources involved in agriculture, reducing development gaps between rural and urban areas, diminishing poverty in rural areas, modernizing farms). In fact, some research (Rudnicki et al., 2021) indicates the association in cooperatives and large farms as a key factor in the successful implementation of AECM funding and in this regard Romania is deficient with an extremely fragmented structure of agricultural holdings and a predominance of small and subsistence farms.

## 2.2 The contribution of rural development expenditures to the protection of ecosystems

The protection of rural ecosystems is a key objective of sustainable development in rural areas, hence the share of expenditure allocated to this indicator is a highly relevant for the green commitments made by Member States in their Strategic Rural Development Plans.

Expenditure on rural development for the protection of ecosystems can be allocated through both European and national funding, but an analysis of this indicator evolution in 2020 shows that the vast majority of Member States have preferred funding from European budget (see Graph 4).

**Graph 4: Share of expenditure on ecosystem protection in total rural development expenditure in Member States in 2020 (% of total)**



Source: Authors based on data published by the European Commission (2021).

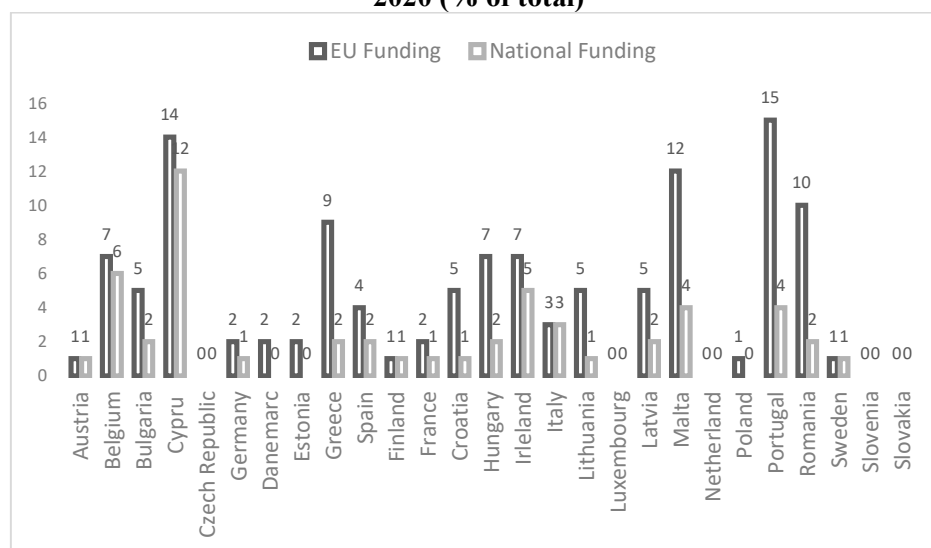
Graph 4 also shows the existence of "champions" in the field, such as Denmark and Greece, but also some countries that they have chosen to massively direct national funds towards this "green" goal (Luxembourg, which has allocated 50% of national funds).

In terms of Romania's performance, they were quite weak, with 29% of EU funds and only 6% of national funds being allocated to this indicator in total rural development expenditures for 2020.

### 2.3 Share of climate change expenditure in total rural development expenditure

Combating climate change and the devastating effects on agriculture remains an essential goal of sustainable rural development, all the more so as the extent and frequency of natural disasters (drought, floods, landslides, forest fires) has increased significantly in recent years throughout the EU-27 area (Gobin et al., 2013). The analysis of the share of Member States' spending on combating climate change (see Graph 5) shows an insufficient allocation of funding for this goal (both from European and national sources), with the EU average also much lower than other indicators (only 5.4%).

**Graph 5: Share of climate change spending in total rural development spending in Member States in 2020 (% of total)**



Source: Authors based on data published by the European Commission (2021).

Graph 5 shows that in 2020, there are four Member States that have not allocated any funds to this indicator at all (Czech Republic, Luxembourg, Slovenia and Slovakia) while the state that has allocated the highest share of funding for this indicator is Cyprus (with a total of 26% 12% of national funds and 14% of European funds, respectively).

If we analyse Romania's performance on this indicator in 2020, we notice that is better compared to both other Member States and the European average, which Romania significantly exceeded, allocating a total of 12% of rural development expenditures to combat climate change (10% from European funds and 2% of national funds).

## 3 Future measures under CAP for increasing climate action in rural development funding across EU

The analysis of the three selected indicators indicates that, although Member States have allocated significant funds for sustainable rural development objectives in 2020, the fight against climate change was underfunded both in the EU average and in most Member States. The best performance was registered for ecosystem protection, but progress is still needed on areas under environmental requirements (especially permanent grasslands and pastures).

The adoption of Farm-to-Fork Strategy is considered to be a key pillar in combating climate change through EU rural development programs since it will increase funding to combat climate change by focusing more on environmental goals.

The new CAP will thus accelerate the transition to a sustainable food system that will significantly contribute to climate change mitigation, but some critical analyzes show that ambitious environmental goals could

jeopardize the sustainable development by neglecting social disparities and other development gaps that many rural areas from EU are still facing today (Moschitz et al, 2021).

The analysis of the strategic objectives of the new CAP indicates that, although some of its targets, such as reducing antimicrobial sales, are not directly linked to climate action, its new directions of action are primarily aimed at reducing CO<sub>2</sub> emissions at all stages of the value chain (in growing, storing, processing, packing, transporting, consuming and disposing of food and agricultural products).

Thus, measures of the new CAP - such as rewarding farmers for removing CO<sub>2</sub> from the atmosphere, rules for imports associated with deforestation - are primarily aimed at reducing CO<sub>2</sub> emissions thus making a significant contribution to combating climate change. The climate-related objectives of the new CAP aim to reduce chemical fertilizers in agriculture by 20% (thus contributing to the growth of organic farming), an indicator in which, as we pointed out earlier in our analysis, some Member States continue to perform poorly). Under the new CAP, between 2021 and 2027, Member States must increase the share of agricultural land under stricter environmental requirements, as well as organic farms (at least 25% of the total).

Both financial directions are related to climate and the environment measures that can facilitate the sustainable production of quality food by contributing not only to the well-being of European consumers but also to combating the negative effects of agriculture on accelerating climate change.

In order to increase climate and environmental ambitions, National Rural Strategic Plans (that are a key tool under new CAP) need to increase funding for ecosystem protection. The new CAP also requires that 20% of the funding allocated under Pillar I (regarding market oriented measures and agriculture at EU level) must be allocated by Member States to eco-schemes (usually through Direct Payments through the Basic Payment per hectare). These eco-schemes will reward those European farmers who choose to undertake additional activities to protect the climate and the environment, as well as animal welfare, thus supporting the objectives of the Green Deal. The provision of eco-schemes is mandatory at Member State level in the financial framework 2021-2027 of CAP, but participation in them is voluntary for European farmers.

It should be noted that these climate related ambitious of CAP will also involve higher costs for European farmers who will have to comply with stricter requirements for animal welfare standards (which may lead to a decrease in livestock numbers), larger areas allocated to organic farming (in order to increase the carbon stored in the soil), as well as practices related to reducing food waste.

The major challenge for the whole “greening” process of CAP in terms of the EU food system lies in the many compromises that will need to be made between measures aimed at protecting the environment, farm animals, consumers and the climate, but which are unlikely to successfully meet all those goals simultaneously.

## 4 Conclusion

Some critics of the new CAP (Beckman et al., 2021) have pointed out that a lower use of chemical fertilizers and an increase in organic land cultivation will reduce EU food production, jeopardizing food security in the internal market.

These risks mean that the implementation of the new rules and mechanisms needs to be carefully analyzed as the priorities of the new CAP will guide rural development in the EU for at least the next decade while the imbalances between ensuring the EU's food security could jeopardize the supply of food and agricultural products in the Member States, as well as the resilience of European farmers in the post-pandemic world.

This is all the more evident as two Member States, Italy and Slovakia, have recently asked permission from the European Commission for a greater flexibility in their National Rural Strategic Plans allowing them to increase production at the expense of “green” targets, expressing concerns about shortages of food supply that could occur in the context of the prolongation of the military conflict initiated by the Russian Federation in Ukraine (Fortuna et al., 2022).

The European Commission has responded to these requests with apparent inflexibility, reaffirming the importance of the CAP's “green” targets in the post-2020 period, considering that the goals of sustainable development must remain at the very core of this European policy. However, the two Member States seem determined to adjust their National Rural Strategic Plans to meet the challenges of the present. One must underline that the National Rural Strategic Plans (the principal novelty brought by the new CAP) are allowing to the Member States to be more creative in adjusting funding at national level, provided that they meet certain minimum environmental and climate requirements. This creativity could, for example, allow Member States to use additional interventions and compensatory subsidies for agricultural producers and processors affected by the

consequences of the conflict in Ukraine, thus supporting domestic agricultural production and responding to possible food security challenges.

Our comparative analysis of Member States' performance on the selected indicators shows that while many countries are performing well on the AECM, there are also states that have allocated zero funding for some sustainable rural development goals (Lithuania, Malta and the Netherlands). According to the analyzed data, Romania is on a similar position to the EU-27 average in terms of ecosystem protection, but performs well below expectations in the field of organic agriculture. The analysis of total climate and environmental spending in rural development financing at EU level revealed a slight decrease in the period 2014-2020 compared to the period 2007-2013. Taking into consideration all these challenges the new CAP can stimulate a higher growth of share of "green" targets across EU-27 in particular through the use of mandatory eco-schemes and minimum requirements for organic farms. However, it should be noted that, in our opinion, the achievement of all the climate related objectives of the new CAP must be done in a balanced way, without jeopardizing the volume of agricultural production and food security on EU-27 internal market.

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### References:

- [1] Barreiro Hurlé, J., Bogonos, M., Himics, M., Hristov, J., Perez Dominguez, I., Sahoo, A., & Elleby, C. (2021). *Modelling environmental and climate ambition in the agricultural sector with the CAPRI model* (No. JRC121368). Joint Research Centre (Seville site).
- [2] Beckman, J., Ivanic, M., & Jelliffe, J. (2021). Market impacts of Farm to Fork: Reducing agricultural input usage. *Applied Economic Perspectives and Policy*.
- [3] Belinska, Y., Matvejciuk, L., Shmygol, N., Pulina, T., & Antoniuk, D. (2021). EU agricultural policy and its role in smoothing the sustainable development of the EU's agricultural areas. In *IOP Conference Series: Earth and Environmental Science* (Vol. 628, No. 1, p. 012030). IOP Publishing.
- [4] Bisciari, P., Butzen, P., Gelade, W., Melyn, W., & Van Parys, S. (2021). The EU budget and the Next Generation EU Recovery Plan: a game changer?. *NBB Economic Review*, (39).
- [5] Blake, R. (2020). Will the European Green Deal make agriculture more sustainable?. *Outlooks on Pest Management*, 31(5), 198-200
- [6] Brown, C., Kovacs, E., Herzon, I., Villamayor-Tomas, S., Albizua, A., Galanaki, A., & Zinngrebe, Y. (2021). Simplistic understandings of farmer motivations could undermine the environmental potential of the common agricultural policy. *Land Use Policy*, 101, 105136.
- [7] Constantin, M., Rădulescu, I. D., Andrei, J. V., Chivu, L., Erokhin, V., & Gao, T. (2021). A perspective on agricultural labor productivity and greenhouse gas emissions in context of the Common Agricultural Policy exigencies. *Економіка польовпривреде*, 68(1), 53-67.
- [8] Csaki, C., & Jambor, A. (2016). 10 years of EU membership in agriculture: lessons from the new member states. *International Agricultural Journal*, 6, 4-8. <https://doi.org/10.24411/0235-7801-2016-0001>.
- [9] Drăgoi, A. E. (2021). The Role of Direct Payments For The Achievement Of „Green Deal” Objectives. *Euroinfo*, 5(1), 57-66.
- [10] European Commission, a, (2020). *Farm to Fork Strategy*. [https://ec.europa.eu/food/horizontal-topics/farm-fork-strategy\\_ro](https://ec.europa.eu/food/horizontal-topics/farm-fork-strategy_ro)
- [11] European Commission, b, (2020). Environment and Climate Action (Summary) - (EU27) - European Union 27 (excluding UK). <https://agridata.ec.europa.eu/extensions/DashboardIndicators/Environment.html>
- [12] Fortuna, G., Koreň, M., Foote, N. (2022). *Italy, Slovakia call to rethink CAP in light of Ukraine war*. Euractiv. <https://www.euractiv.com/section/agriculture-food/news/italy-slovakia-call-for-rethinking-cap-in-light-of-ukraine-war/>
- [13] Gobin, A., Tarquis, A. M., & Dalezios, N. R. (2013). "Weather-related hazards and risks in agriculture". *Natural Hazards & Earth System Sciences*, 13(10).
- [14] Metz, F., Lieberherr, E., Schmucki, A., & Huber, R. (2021). Policy change through negotiated agreements: the case of greening Swiss agricultural policy. *Policy studies journal*, 49(3), 731-756.
- [15] Moschitz, H., Muller, A., Kretzschmar, U., Haller, L., de Porras, M., Pfeifer, C., Oehen, B., Willer, H. & Stolz, H. (2021). How can the EU Farm to Fork strategy deliver on its organic promises? Some critical reflections. *EuroChoices*, 20(1), 30-36.
- [16] Rudnicki, R., Wiśniewski, Ł., & Biczkowski, M. (2021). A Spatial Typography of Environmentally Friendly Common Agricultural Policy Support Relevant to European Green Deal Objectives. *Land*, 10(10), 1092. Streimikis, J., &

Baležentis, T. (2020). Agricultural sustainability assessment framework integrating sustainable development goals and interlinked priorities of environmental, climate and agriculture policies. *Sustainable Development*, 28(6), 1702-1712.