

## FUTURE CHALLENGES TO THE ECOLOGICAL APPROACH IN GREEN ARCHITECTURE OF CAP IN BULGARIA

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**Introduction:** Promoting effective ecosystems, sustainable food systems, and healthy lifestyles, using active tools and policies, are priorities outlined in Horizon Europe research. One of the key policies of the European Union, which is focused on the community's expectations of ensuring food safety and quality, environmental protection and ensuring a healthy lifestyle, is the CAP. The experience gained from the implementation of the CAP demonstrates its importance for the development of sustainable agricultural sector in Bulgaria. However, in order to make agriculture an attractive business and to stabilize and increase the incomes of its employees, the CAP needs to adapt of the dynamic environmental impact.

**Keywords:** CAP, ecosystem services, food security, sustainable agriculture

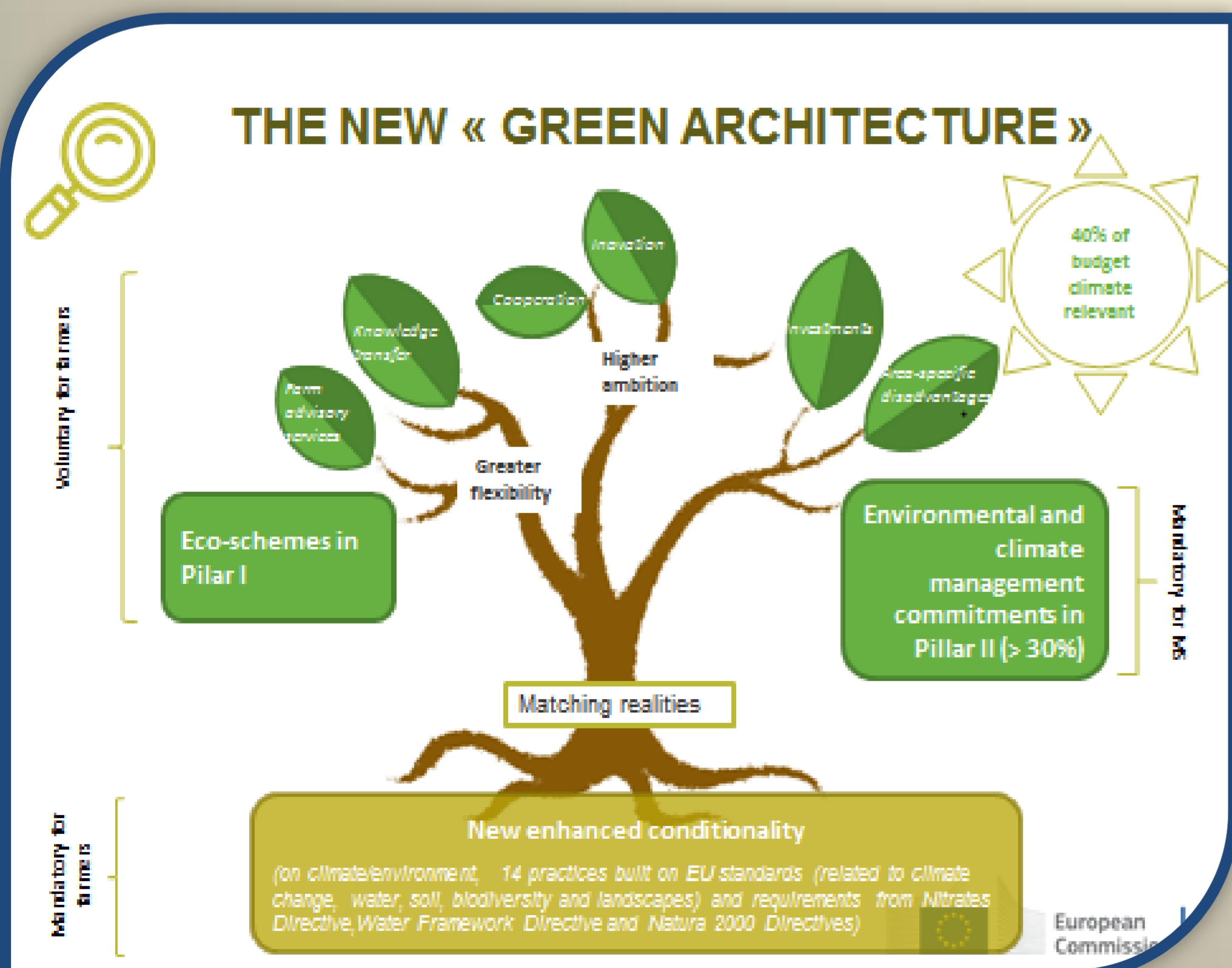
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A main challenge in the new GAP is high ambition on environmental and climate action. Farmers play a key role in tackling climate change, protecting the environment and preserving landscapes and biodiversity. Mandatory requirements include preserving carbon-rich soils through protection of wetlands and peatlands, obligatory nutrient management tool to improve water quality, reduce ammonia and nitrous oxide levels, crop rotation instead of crop diversification. Farmers will have the possibility to contribute further and be rewarded for going beyond mandatory requirements. EU countries will develop voluntary eco-schemes to support and incentivize farmers to observe agricultural practices beneficial for the climate and the environment (EC, 2019).

**Aims:** The main aim of this publication is to analyze the future challenges in the ecological approach in green architecture of CAP in Bulgaria. The focus is on the ecosystem approach to developing and implementing policies that contribute to outlining the importance of ecosystem sustainability in agricultural production. Its effects are poorly understood, which is the main motive for the team to present their views in this article.

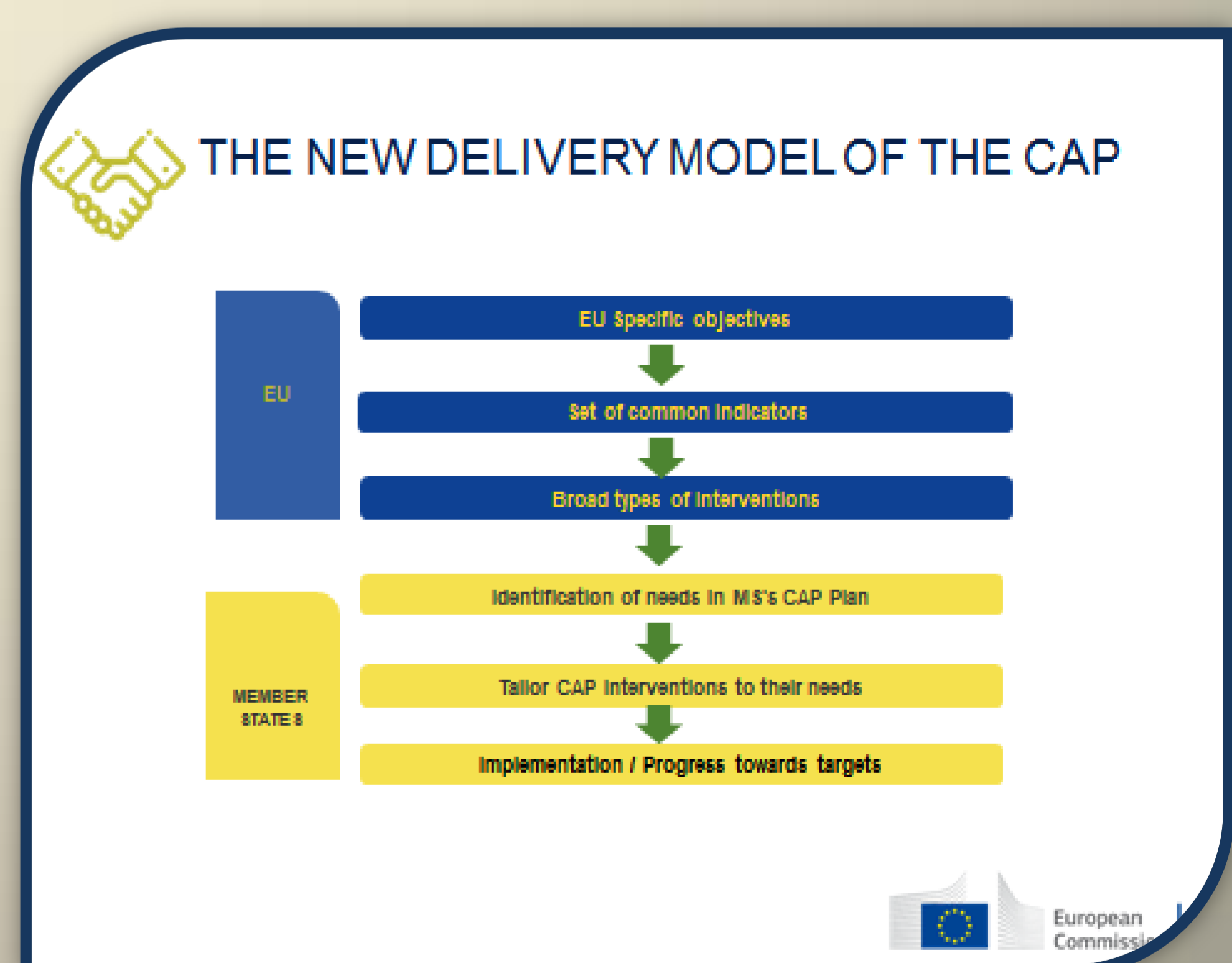
**Materials and Methods:** In order to achieve this aim, the Statistical Yearbooks of NSI, agrarian reports of the Ministry of Agriculture and Foods, newsletters of the Agro statistics Directorate at the MAF were used. Various sources of information - scientific journals, publications of Bulgarian and foreign authors, on-line (electronic) editions, as well as author's research were analyzed. The approach used is interdisciplinary in order to help clarify specific measures, initiatives and actions to help farmers to have sustainable production while maintaining soil fertility, protecting biodiversity and adapting their activities to climate change.

A successful and productive agricultural sector can only exist if a real change of generations takes place: our aging agricultural community needs fresh forces to make the sector more dynamic and open to the current technological transformations. However, young farmers and other new entrants in the industry face significant obstacles to starting up their business, including economic impediments, such as high land prices, but also social impediments, such as the perception of agriculture as an unattractive or old-fashioned occupation, sometimes characterized by inadequate social protection.



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Materials from workshops to discuss changes in the CAP were used in the preparation of the poster.



**Conclusion:** The synergy between the scientific potential utilizing green engineering and the CAP's proactive activities will help build a system of knowledge, practical skills and innovation for the agricultural sector in order to accelerate the implementation of innovative practices among all stakeholders. Specific actions can be summarized in several directions: Monitoring of biodiversity in agro-ecosystems. A roadmap of biodiversity is to create. A specific bio indicators (plants, birds, animals, etc.), which to determine the status and sustainability of agroecosystems are to determinate. To be develop indicators for measuring the characteristics of ecosystem services. Improve communication between all stakeholders. A large-scale awareness and education campaign on the benefits of green options in the new CAP. Permanent monitoring on green measures with active involvement of farmers to achieved. To use the regional approach in the implementation the green architecture of CAP. Building on the experience and knowledge of all stakeholders in the new CAP. Integrate best environmental practices into crop technology.