The problem of quantifying public goods (PGs) is one of the most complex problems related to public choice theory. The term "public goods" is a generalisation. Economic theory distinguishes four types of goods: private, common, club, and public. The criteria of taxonomy include four traits: "rivalry", "non-rivalry", "excludability" and "non-excludability". In a narrow perspective, pure PGs are considered to meet two conditions: "non-rivalry" and "non-excludability" . In practice, however, such goods are scarce in the economy (examples include national services, national defence, order and security). In our considerations, we therefore extend the definition to include common goods (characterised by "rivalry" and "non-excludability") and the so-called merit goods, which may be private goods in terms of their physical traits, but, as a result of social doctrine and the social policy implemented by public authorities, are provided to citizens even without their acceptance. They include most goods financed by the public sector, particularly in the field of education, in healthcare and in environment protection. In accordance with the latest concepts, a majority of environmental public goods (EPGs) is located on rural areas and its provision is strongly related to the agricultural production.

European agriculture is not only responsible for supplying food and raw materials, but it also occupies 50% of the land. Its impact on the environment in rural areas and on possibilities of exploiting it is therefore immense. A specific feature of PGs related to agriculture and rural areas is the fact that they may be the external effect of "regular" agricultural production, a purpose-specific effect or a common resource in society's possession. At the highest stage of generalisation, these goods should include such elements as water, air, soil, biodiversity and landscape. In the academic literature, the PGs provided by agriculture are predominantly interpreted as equal to the external effects of agricultural activity, which, however, is too narrow, since some of them may be the product of purpose-specific activity directed towards their creation. They can also assume the specific form of abstinence from specific activity. Quantitative measures of environmental PGs should therefore include: proportion of land in highlands and other less-favoured areas, proportion of forest areas, forest production potential, use of pesticides, GHG emissions from agriculture, proportion of soils at risk of erosion, livestock farming concentration rate, proportion of wasteland, proportion of crops for biomass, share of organic farming, proportion of energy from RES, and level of fertilisation. The quality of the PGs provided by agriculture and rural areas should be evaluated using such variables as level of biodiversity, landscape value, quality of air, soil and water. **In the project, authors propose an innovative approach to quantifying public goods, taking into account the relationship of its quality to quantity. Ii is perhaps the first such broad-based attempt at taxonomic analyses of EPGs in Poland on a local scale and in the cross-section of the EU-28. There is a gap in the subject literature in terms of comprehensive research on the efficiency of funding EPGs in Poland (including its modelling and optimizing) on the background of other countries The project not only fills this gap, but also shows a complex funding mechanism of EPGs in Poland and its evolution. The proposal will also help to answer the question how to optimize public spending on EPGs.**