

Developing countries form one of the largest groups of countries around the world which is of key importance in terms of its development potential. The project will include a detailed analysis of a group of African, Caribbean and Pacific (ACP) countries which is part of the developing world and has been strictly collaborating with the European Union for more than 40 years. It includes as many as 79 heterogeneous economies. In this group of countries, particular attention needs to be paid to the agricultural sector, primarily including agriculture which makes a relatively high contribution to GDP (% of GDP), often fluctuating above 20%, and has a large share (40%, on average) of employees in the total employed population, reflecting its importance to the national economy. However, compared to highly developed countries, it is inefficient and unproductive. In order for the agricultural sector of developing countries to become more productive, the agricultural policy must provide for adequate support, which is beyond what many of these countries can afford. The usual response to the problems and needs of developing countries is assistance offered in various forms by developed countries. As shown by a preliminary analysis, developing countries mostly rely on Official Development Assistance (ODA) provided by the Development Assistance Committee (DAC), of which as much as 76% is allocated to agricultural support.

The main objective of this project is to quantify and assess the allocation of agricultural development assistance funds between ACP countries based on the optimization model. In this project, the linear optimization model is proposed as the key method for assessing the allocation of agricultural development assistance in ACP countries. Correlation analysis and multiple regression are also planned to be used in the project. The objective of the correlation routine will be to determine the relationship between the amount of aid and its outcomes (agricultural productivity indicators), split into different components of aid. In turn, the multiple regression model will be used in assessing the impact of economic characteristics on agricultural productivity indicators. It will allow to discover the determinants of the amounts and effective use of funds accessed under the Official Development Assistance scheme for the agricultural sector in ACP countries.

Most research projects on development assistance focus on general amounts. Conversely, this project places emphasis on the agricultural sector- which is of key importance to developing countries—and on the impacts of assistance on its productivity. Also, the project will consider the relationship between agricultural development assistance and conditions for development at country level.

The outcome of the project will be the assessment of allocation targets of agricultural development assistance in ACP countries. As an essential part, the study will determine the impact of agricultural development assistance on changes in agricultural productivity indicators in ACP countries, and will identify the characteristics of ACP economies which positively affect the efficiency of using development assistance (measured as an increase in agricultural productivity indicators).

The research will be both of a scientific and an utilitarian nature. An adequately designed optimization model can be of great utility as it allows not only to assess a previous allocation but also to analyze different allocation and reallocation options for aid funds. Also, this will provide guidance for the developing countries as to how to orientate their internal and international policies.