

FOOD SECURITY VS. ENERGY SECURITY IN THE CONTEXT OF BIOFUEL PRODUCTION

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ABSTRACT

The study attempts to approximate a complex research problem concerning the use energy resources of agricultural origin to ensure energy security and their impact on food security. The study was based on a literature review. Public statistics data (including EUROSTAT and FAOSTAT) were used. The time range of the analysis covered the years 2005–2016. In the last decade, there has been a systematic increase in the production and use of the 1st biofuels generation. The basic raw materials for their production in the world are mainly cereal grains, root crops, sugar cane and vegetable oils. These agricultural

products previously intended mainly for food and fodder. First biofuels generation based on food raw materials are becoming more and more competitive for food production. In 2016, 58.2% of maize grain, 12.8% of wheat grain, 3.2% of grain of other feed grains and 13.7% of vegetable oil were used for the production of biofuels. In the future, the scale of competition will depend on the level of biofuels production and the share of second biofuels generation (produced from non-food raw materials) in total fuel consumption. Alternative energy carriers, such as biofuels, are gaining importance, among others due to the implementation of climate and energy policy and increase oil prices.