# EVALUATION OF THE FACTORS AFFECTING GREENHOUSE GAS EMISSIONS IN TURKEY

**Özge NİYAZ**

*Çanakkale Onsekiz Mart University, Faculty of Agriculture, Department of Agricultural Economics, Çanakkale-Turkey, E-mail: ozgecanniyaz@comu.edu.tr*

**Abstract**: Greenhouse gas is the gas in the atmosphere that absorb and emit radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in the Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide and ozone. There are major activities which cause of the greenhouse gas emiossions. The aim of this study to find out most explosive variables to define greenhouse gas emissions in Turkey. In this study, a basic statistical model is constituted to estimate the main reasons of greenhouse gas emissions. Variables (greenhouse gas emissions, cattle breeding, consumption of coal, consumption of oil, consumption of natural gas), which thought might be important to explain the model, are analysed for the time series (1990-2011) by Vector Autoregressive Model (VAR).

According to the results of analiysis, determinated variables are quite expositive 81% of the model. Henceforth, variables that consumption of natural gas (98%), consumption of coal (94%), cattle breeding (81%), consumption of oil (74%) are significant to descriptive the whole model. Therefore, consumptions of oil, coal and natural gas in Turkey might be reduced. If it is not possible to reduce the consumptions, there must be done more investments for air filtration. Also, methane gas emmisions because of large scale cattle breeding must be prevented.

**Keywords:** Greenhouse gas emissions, Vector Autoregressive Model, Turkey