

The Influence of The Natural Gas Consumption, Occupational Level And Water Consumption on The Rural Households Wellbeing Status: A Synoptically Approach*

Iuliana NICOLAE

Bucharest University of Economic Studies, Doctoral School Economics II,
Mihail Moxa Street no. 5-7, Bucharest, Romania,

Andrei Marcel MANOLE

Valahia University, Doctoral School Economics, Targoviste, Romania,

Gheorghe Dan ISBĂȘOIU

Petroleum-Gas University of Ploiesti, Faculty of Economic Sciences, Ploiesti, Romania,

Dumitru NANCU

The Bucarest University of Economic Studies, Doctoral School Economics II,
Mihail Moxa Street no. 5-7, Bucharest, Romania,

Correspondence should be addressed to: Iuliana NICOLAE; istratoiu@yahoo.com

* Presented at the 39th IBIMA International Conference, 30-31 May 2022, Granada, Spain

Copyright © 2022. Iuliana NICOLAE, Andrei Marcel MANOLE, Gheorghe Dan ISBĂȘOIU and Dumitru NANCU

Abstract

Analysis of energy consumption is one of the core elements in studies on sustainable development. In addition to energy consumption, water consumption, waste management, cultural heritage management and biodiversity loss are other key concepts in these studies. So far, energy or water consumption has been studied independently and statistics have been developed on their values in different sectors or territories.

The purpose of this article is to find links between these consumptions, considering them as dependent variables, thus obtaining values of one type of consumption as a function of the variation of other consumptions. The analysis, carried out in a rural area of Romania, is based on the hypothesis of a correlation between energy and water consumption. In addition, it was also considered that the size of the employed or salaried population are determining factors in the variation of water consumption, which led to include these variables in the analysis. The methodology used is based on multi-factor statistical regression, in particular a statistical moderation model was applied, considering the population volume as a moderating element.

The results obtained led to the conclusion that the level of water consumption is dependent on the volume of energy consumed, with the study identifying a value of 3,3 litres of water consumption per person per day per 1 MJ of energy consumed per person per day. In addition, the analysis shows that there is no significant moderating effect, considering population volume as a moderating element.

Keywords: Energy consumption, Natural gas consumption, Water consumption

Cite this Article as: Iuliana NICOLAE, Andrei Marcel MANOLE, Gheorghe Dan ISBĂȘOIU and Dumitru NANCU “ The Influence Of The Natural Gas Consumption, Occupational Level And Water Consumption On The Rural Households Wellbeing Status: A Synoptically Approach” Communications of International Proceedings, Vol. 2022 (22), Article ID 3936822.