Environmental Engineering and Management Journal xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
http://omicron.ch.tuiasi.ro/EEMJ/

"Gheorghe Asachi" Technical University of Iasi, Romania

AN OVERVIEW OF THE DEVELOPMENT AND PROGRESS OF WATER SUPPLY AND WASTEWATER TREATMENT IN ROMANIA

Stefan-Adrian Strungaru[1], Mircea Nicoara[1*], Oana Jitar[2], Ioan Moglan[1], Gabriel Plavan[1]

[1] *"Alexandru Ioan Cuza" University of Iași, Department of Biology, Faculty of Biology, B-dul Carol I, 700505, Iasi, Romania*
[2] *"Gheorghe Asachi" Technical University of Iasi, Department of Environmental Engineering and Management, 73 "Prof. Dr. D. Mangeron" Street, 700050, Iasi, Romania*

Abstract

The water supply system is very important for the development of the country. Furthermore, a wastewater treatment with more than two levels of treatment decreases the risk of environmental pollution with heavy metals and better cleans the water that will be reused. According to Eurostat, in 2011 more than 40% of the Romanian population was not connected to the public water supply and even more to the wastewater system. In the present study raw data were analyzed and plotted to show the evolution of the drinking water supply and wastewater treatment, sludge production and disposal, precipitation and evaporation, freshwater abstraction, water consumption for different activities, and renewable freshwater resources during the period 2001 to 2011, before and after joining the European Union, integrated in the context of the future challenges. Since the Romania joined to the EU the projects co-financed by the EU for water supply development and rehabilitation were executed very fast. New modern water treatment plants were constructed and many villages were connected to the safe water supply system and wastewater treatment plants. As a result a large number of Romanian inhabitants have access to a safe water resource monitorised permanently.

Key words: renewable freshwater resource, sludge production, wastewater treatment, water supply

Received: August, 2014; Revised final: July, 2015; Accepted: August, 2015

* Author to whom all correspondence should be addressed: e-mail: mirmag@uaic.ro