ABSTRACT BOOK

9th International Soil Science Congress on “The Soul of Soil and Civilization”

Soil Science Society of Turkey Cooperation with Federation of Eurasian Soil Science Societies

14 - 16 October 2014, Side, Antalya / Turkey

Editors:

Dr. Ridvan KIZILKAYA
Ondokuz Mayis University, Turkey

Dr. Coşkun GÜLSER
Ondokuz Mayis University, Turkey
The financial feasibility of hazelnut husk and sewage sludge based vermicompost production

Vedat Ceyhan 1,*, Ridvan Kızılkaya 2, Anna Veselova 3, Ksenia Novikova 3

1 Ondokuz Mayıs University, Faculty of Agriculture, Department of Agricultural Economics, Samsun, Turkey
2 Ondokuz Mayıs University, Faculty of Agriculture, Department of Soil Science and Plant Nutrition, Samsun, Turkey
3 Perm State University, Faculty of Economics, Department of Marketing, Perm, Turkey

Abstract

Recycling the waste such as hazelnut husk, sewage sludge etc. has been one of the issues into the agenda of many countries. Therefore the purpose of the study is examining the feasibility of the vermicompost production. Technical data about composting hazelnut husk and sewage sludge gathered from past research. The time series data such as production, export, import and price of vermicompost collected from TURKSTAT, FAO and related institutions. Autoregressive integrating moving average model (ARIMA) and smoothing methods such as double exponential model and winter model were used in forecasting process. We followed net present value and internal rate of return were used to evaluate the financial feasibility for the facility having one ton vermicompost production capacity per day. Research results showed that the profitability of vermicompost production facility was high, while the likelihood of loss was less. Vermicompost production facility with approximately 130 thousands of US dollars initial investment provided net present value of 1.28 million of US dollars during the economic life. The internal rate of vermicompost production facility was 23%. Research results also revealed that production cost of vermicompost was $0.2 per kilogram. Since vermicompost production facility investment with high profitability and low level of risk was good investment alternatives with low level of competitive, the study suggested to investors who has good backgrounding about sector paid attention to marketing system and market observation about organic input market.

Key words: Vermicompost production, financial feasibility, waste recycling.

*Corresponding author: Vedat Ceyhan
Ondokuz Mayıs University, Faculty of Agriculture, Department of Agricultural Economics, 55139 Samsun, Turkey
Tel: +903623121919 E-mail: vceyhan@omu.edu.tr