

Blockchain Technology applied to food chains to Avoid Counterfeiting. The case of the Consortium Etna doc

Matarazzo Agata^{1*}, Sergio Arfo¹, Grzegorz Suwała²

¹Department Economics and Business, University of Catania
Corso Italia 135- 95129- Catania, Italy

² Department of Food Product Quality, Cracow University of Economics,
Rakowicka 27, 31-510 Krakow, Poland

***corresponding author : amatara@unict.it; 00393394256829**

Abstract

The main task of this paper is to show how blockchain technology is one of the main anti-counterfeiting methods and one of the main tools to guarantee and promote the originality of the all food sector chains. In order to achieve this objective, a case study has been carried out to; this is concerned the administration of a questionnaire to the companies of the consortium Etna DOC. The latter is considered one of the main technological innovations in agriculture 4.0 in the wine sector, as it ensures greater safety, promotion of the individual product, transparency and traceability of the entire production chain. Specifically the wine sector in Italy and in particular in Sicily, is one of the most expanding sectors and with one of the highest levels of business; an example of this, is the total wine production in Sicily and notably of DOC and IGT wines.

Key words: agriculture 4.0 ; wine sector; sustainability; blockchain; consortium; counterfeiting methods

Agata Matarazzo Is Associate Professor of Commodity Sciences at the Economic & Business Department - University of Catania (Sicily), where she teaches Technology of Sustainability Productions, and Quality Environmental and Safety Management Systems. She obtained the Ph.D. She specialized at Fondazione Eni Enrico Mattei (FEEM) and at Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA). She is member of the following scientific societies: IFORS (The International Federation of Operational Research Societies); SETAC (Society of Environmental Toxicology and Chemistry); IGWT (International Society of Commodity Science and Technology); ANAHEI (Association of North America Higher Education International). Research Focus: Quality and Environmental Management Systems, Life Cycle Assessment; Circular Economy; Eco Sustainability Instruments; Air Pollution Impacts; New Technologies in Energetic production plants and Corporate Social Responsibility .

