## The Impact of Artificial Intelligence on Food Industry

Authors: George Hanna Abdelmelek Henien

Abstract: Quality and safety issues are common in Ethiopia's food processing industry, which can negatively impact consumers' health and livelihoods. The country is known for its various agricultural products that are important to the economy. However, food quality and safety policies and management practices in the food processing industry have led to many health problems, foodborne illnesses and economic losses. This article aims to show the causes and consequences of food safety and quality problems in the food processing industry in Ethiopia and discuss possible solutions to solve them. One of the main reasons for food quality and safety in Ethiopia's food processing industry is the lack of adequate regulation and enforcement mechanisms. Inadequate food safety and quality policies have led to inefficiencies in food production. Additionally, the failure to monitor and enforce existing regulations has created a good opportunity for unscrupulous companies to engage in harmful practices that endanger the lives of citizens. The impact on food quality and safety is significant due to loss of life, high medical costs, and loss of consumer confidence in the food processing industry. Foodborne diseases such as diarrhoea, typhoid and cholera are common in Ethiopia, and food quality and safety play an important role in . Additionally, food recalls due to contamination or contamination often cause significant economic losses in the food processing industry. To solve these problems, the Ethiopian government began taking measures to improve food quality and safety in the food processing industry. One of the most prominent initiatives is the Ethiopian Food and Drug Administration (EFDA), which was established in 2010 to monitor and control the quality and safety of food and beverage products in the country. EFDA has implemented many measures to improve food safety, such as carrying out routine inspections, monitoring the import of food products and implementing labeling requirements. Another solution that can improve food quality and safety in the food processing industry in Ethiopia is the implementation of food safety management system (FSMS). FSMS is a set of procedures and policies designed to identify, assess and control food safety risks during food processing. Implementing a FSMS can help companies in the food processing industry identify and address potential risks before they harm consumers. Additionally, implementing an FSMS can help companies comply with current safety and security regulations. Consequently, improving food safety policy and management system in Ethiopia's food processing industry is important to protect people's health and improve the country's economy. . Addressing the root causes of food quality and safety and implementing practical solutions that can help improve the overall food safety and quality in the country, such as establishing regulatory bodies and implementing food management

**Keywords:** food quality, food safety, policy, management system, food processing industry food traceability, industry 4.0,

internet of things, block chain, best worst method, marcos

Conference Title: ICFSN 2024: International Conference on Food Science and Nutrition

**Conference Location :** New York, United States **Conference Dates :** November 07-08, 2024