

Review Article

FOOD ECONOMICS

Matthew N.O. Sadiku¹, Tolulope J. Ashaolu² and Sarhan M. Musa¹

¹Roy G. Perry College of Engineering, Prairie View A&M University

²College of Food Science

Southwest University, Tiansheng Road Beibei District,

Chongqing, 400715, P.R. China

E-mail: sadiku@ieee.org; ashaolut@gmail.com; smmusa@pvamu.edu

Abstract: Humans cannot exist without food. Today food can only be thought of in its global and international market. Food producers in developed and developing countries will need modern science-based technologies to ensure a sustainable supply of safe food to satisfy a rapidly growing global food demand. Food economics is an applied field that is concerned with applying economic principles in optimizing the production and distribution of food. This paper provides a brief introduction on food economics.

Keywords: food economics, food systems.

INTRODUCTION

Today there are about one billion hungry people around the globe. Using modern production technologies will help produce more high-value protein from less land and also have a net positive impact on the environment [1]. The food system is designed to assist local food leaders and educators with understanding the current landscape of food system from farm to plate. Food systems differ dramatically among regions, and change rapidly with time. As shown in Figure 1, a sustainable food system encompasses the goals of social equity and human health, economic vitality, and environmental health [2]. Economic principles can be used to explain, predict, and evaluate changing food systems around the world [3].

Traditionally, economics is the study of resource allocation under scarcity. Mainstream economics is too bound up with concerns profit, economic growth, and the perspective of the owners of production. Food economics (FE) is a marriage between food science and traditional economics. Food economics aims to apply the principles of economics to the production and allocation of food in order to optimize its production and distribution. It includes a variety of applied areas, having considerable overlap with conventional economics.

CONCEPT OF FOOD ECONOMICS

Since we cannot possibly have everything we desire, scarcity forces us to choose. Economics is the study of making choices. Public funding and support of agricultural research are required to promote growth in food supplies. Governments in high income nations often subsidize farmers to help and encourage them. Although government programs and policies are well intended, they often cause unintended problems. Taxes are often imposed to generate revenue to the government. The government also uses taxes to decrease the consumption of items such as alcohol or tobacco [4]. All US food laws and policies are administered by key federal agencies that oversee farming, food production and distribution, food safety, and land conservation. US Federal Agencies impacting food production include:

- The United States Department of Agriculture (USDA)
- The United States Food and Drug Administration (FDA)
- The Environmental Protection Agency (EPA)

Food economics deals with food supply, demand, and prices, market elasticities and derived demand, food processing, wholesaling, retailing and food service, and the international food market. The economic analysis of the food problem deals with the dynamics of production, income, growth, demand, and trade.

BENEFITS AND CHALLENGES

Food economists have greatly contributed to understanding how households make choices, how food prices are determined, how consumers respond to price changes in a consistent way, how agriculture contributed to economic development, and tools for understanding consumer preferences.

The current food economy is characterized by many challenges and contradictions. Surplus “food mountains” exist with bountiful supermarkets. Rising levels of obesity stand in stark contrast to widespread hunger and malnutrition. The under- and overweight individuals coexist within the same household. Promoting the economic benefits of eating at home, while the fast food restaurants are springing up everywhere. Transnational companies dominate the market in food, while farmers in developing countries remain impoverished. Mounting food toxicity and the “ecological hoofprint” of livestock mean that the global food economy rests on increasingly shaky environmental foundations [5]. The consequences of failing to use available science-based technologies and innovations to mitigate these problems will be disastrous.

CONCLUSION

Food has become something bigger than itself. It has become very complicated.

It is also a good barometer of globalization. Food economics affects food policy, agricultural policy, and environmental policy. It is applying economic principles to optimizing the decisions made by food producers [6]. More information on food economics can be found in books [3,7-15] and four journals devoted to it:

- *Agricultural and Food Economics*
- *American Journal of Agricultural Economics*
- *European Review of Agricultural Economics*
- *International Journal of Food and Agricultural Economics*

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Figure 1: A healthy food system encompasses social equity, human health, economic vitality, and environmental health [2]