

THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

The Drivers of Consumers' Purchase Intentions for Organic Food Products: A Review of the Literature

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Abstract:

Using synthetic chemicals in agriculture has adversely affected the environment and health, such as soil nutrient depletion, ecosystem damage, eutrophication, the accumulation of hazardous substances in the human body, and respiratory illnesses. Efforts to meet food needs have triggered agricultural intensification by applying excessive chemical fertilizers and pesticides and planting plant varieties that are greedy for nutrients. If allowed to continue, it will lead to a significant decline in the quality of agricultural land. One of the things that can reduce farmers' dependence on external inputs is organic farming. This method can increase soil fertility by increasing the number of organisms in the soil. This research aims to analyze the existing implementation of organic agriculture, considering environmental, social, and economic factors.

Keywords: *Organic food products, organic farming, plant-based, purchase intentions, sustainable lifestyle*

1. Introduction

Many nations worldwide are currently dealing with the world food problem (Sen, 1982; Hendrickson & Heffernan, 2002; Leathers & Foster, 2022). Food shortages, access and availability issues, and subpar food quality are just a few of the issues that contribute to this issue (Singh, 2009; Fróna et al., 2019). World food problems can also result from economic, political, and environmental issues (Gebremedhin, 2000; Savary et al., 2020).

To solve the world's food problems, many countries have attempted to create various initiatives and programs (Canfield et al., 2021; Sun et al., 2022). Some of the initiatives implemented by many countries include increasing food production and increasing the availability and accessibility of food in less affluent areas (Capone et al., 2014; Grote et al., 2021). The need for food supplies is directly proportional to the increasing world population. This immediately impacts the food needs of each individual. Every country must try to meet demand and maintain food availability to protect its citizens from the threat of starvation. The food crisis is currently a polemic throughout the world. FAO estimates that around 1.02 billion people suffer from hunger and food shortages. These are the highest cases of hunger and food shortages since the 1970s.

By 2050, according to estimates from the UN Population Fund (2000), countries in Africa and South Asia will face hunger and food shortages. More than 2.32 billion people worldwide need food to meet their needs. However, this is not an easy matter because climate change makes the earth's condition unstable. The demand for food is increasing while the agricultural land needed to produce it is increasingly limited because many agricultural lands have become the infrastructure for industry or change. Producing quality food, of course, depends on the soil quality. Several research results on land show that Indonesia has experienced a decline in food productivity due to land degradation. Efforts to meet food needs have triggered agricultural intensification by using excessive chemical fertilizers and pesticides and planting plant varieties that are greedy for nutrients. If allowed to continue, it will lead to a significant decline in the quality of agricultural land. Chemical fertilization, in the long term, can cause a decrease in the organic matter content of the soil so that the activity of organisms in it decreases. As a result, the ground becomes diseased and cannot produce optimal agriculture (UN Population Fund, 2000)

Based on data from the United Nations World Food Agency (FAO), since 2002, the use of NPK fertilizers in Indonesia has continued to increase. If inorganic fertilizers are used without control, various big problems will arise, including declining soil quality, environmental pollution, and threatening human health. Intervention using synthetic chemicals harms the environment and health. Several studies have described the effects of these synthetic chemicals on disorders of the reproductive system, kidneys, liver, and nervous system (Tomer et al., 2015), as well as respiratory system disorders (Douglas et al., 2018). Chemical pesticides can bioaccumulate in the food chain, which can be dangerous if left unchecked long-term (Agarwal et al., 2015). The use of synthetic chemicals in agriculture has the potential to pollute the soil and eventually cause eutrophication. In addition, dirt can also contaminate and damage soil fertility (Chandini et al., 2019).

One of the things that can reduce farmers' dependence on external inputs is organic farming. This method can increase soil fertility by growing organisms in the soil (Markuszevska & Kubacka, 2017). Das et al. (2017) stated that

organic farming methods can also maintain the sustainability of agricultural product productivity. Squalli & Adamkiewicz (2018) said that other benefits of organic farming include increasing carbon absorption and reducing greenhouse gas emissions. In addition, according to Mie et al. (2017), consumer preferences for the desire to consume organic products and human health conditions associated with organic food production methods are critical aspects of a sustainable life. Based on the problem of high environmental impact due to chemical pesticides, there are many opportunities to increase organic food production and consumption.

2. Methods

This article is developed using a qualitative method through a systemic literature review. The first step is gathering all the relevant literature and data on the environmental sustainability of agriculture practices from journals and international reports. The second step is to review the collected literature and data.

3. Results

Organic agriculture has the characteristic of a holistic production management system to improve and develop soil biological activity, biological cycles, and agro-ecosystem health, including biodiversity (Permentan No. 64, 2013). Meanwhile, IFOAM (2008) defines *organic farming* as a production system that maintains soil, ecosystems, and human health by relying on ecological processes, biodiversity, and cycles adapted to local conditions. In other words, an organic farming system is a production system that maintains a balance and relationship between human and environmental needs. Organic farming can be a means to produce healthier food and be part of efforts to mitigate climate change (Chiriaco et al., 2017). Organic farming is an excellent agricultural system, especially regarding approaches to achieving sustainable food systems, but its feasibility is often doubted (Muller et al., 2017). In particular, organic farming is more economically profitable than conventional farming (Uematsu & Mishra, 2012). However, from environmental aspects and the impact of climate change, organic farming is considered more sustainable because organic farming produces less pollution than conventional farming (Meemken & Qaim, 2018). For this reason, specific efforts are needed to stimulate the adoption of this agricultural system so that environmental sustainability can produce good economic viability.

IFOAM (2008) formulates the principles of the organic farming system, among them are:

- The principle of health: The implementation of organic farming must maintain or increase the level of fertility of soil, plants, animals and humans as an inseparable part,
- The principle of ecology: The implementation of organic farming must be based on ecological systems and cycles that work together to follow and maintain their naturalness,
- The principle of justice: The implementation of organic farming must be built on a relationship that emphasizes justice for the environment and life, and
- The principle of care: The implementation of organic farming must be processed with a complete sense of responsibility to protect human health and well-being, both for the current and future generations.

4. The Drivers of Consumers' Purchase Intentions for Organic Food Products

4.1. Price Point

Perceptions regarding the cost of organically grown vegetables are essential while determining the selling price to know how much consumers are willing to pay, or willingness to pay (WTP), to procure organic vegetable products, as such high costs are a barrier for manufacturers. Production costs and distribution margins of organic food products in Spain are high, resulting in a high selling price (Gil, Gracia, & Sanchez, 2000). Therefore, information regarding the maximum price consumers are prepared to pay is required. This information can assist manufacturers in implementing an appropriate pricing strategy for organic food products. The future of organic agriculture depends on consumers' willingness and capacity to pay a premium for organic food products. Thus, this consumer-centric approach has been applied to understand the product market. Organic food is essential to improve the management of organic agriculture and organic food products (Sriwaranun, Gan, Minoo, and Cohen, 2015).

4.2. Attitude

Considered to have three components, attitude is comprised of:

- Cognitive or knowledge,
- Affective or emotion, feeling, and
- Conative or action

Attitude is the expression of how a consumer feels about a product, whether they like it or dislike it. Attitudes can also denote a consumer's confidence in the object's numerous attributes and advantages (Sumarwan, 2011). The level of importance of the attributes that a product should possess and the degree to which these attributes are evaluated can be used to gauge consumer attitudes towards a product. This measurement is possible for individuals who have ever consumed organic products. However, if a person has never ingested organic products, internal factors (beliefs and emotions) and external influences can be used to determine his attitudes and tendencies. Culture, social class, personal and familial influences, and circumstance can influence consumer behavior in making purchases and willingness to pay a higher price if there are differences in characteristics. However, it is assumed that a product's characteristics are objective and the same for all consumers. Each consumer has a purchasing behavior associated with the product (Hamzoui & Zahaf, 2012).

4.3. Concern for the Environment

Mohamad Salleh et al. (2010) found that the motivations of New Zealand consumers were influenced by health and the environment, whereas in Denmark, they were influenced by environmental motivation. As a result of his concern for the environment and health, he encourages them to consume organic food, which does not contain any harmful chemicals and is therefore considered harmless to the environment. Per Maslow's Theory or Hierarchy of Needs, humans attempt to satisfy their fundamental needs before their more complex needs. Physiological needs are fundamental human needs for survival, followed by the need for security and then the need for physical protection. Humans also require affection, taste, ownership, and social acceptance. The fourth need is ego or esteem, which is the need to attain a higher level than others. The human ego is powerful in its desire to achieve more. Need or desire for an individual to become the most significant based on his potential and abilities. Self-actualization needs also encompass a person's desire to learn, comprehend, and form a value system, thereby influencing others. The need for self-actualization is the urge to communicate one's beliefs and value system effectively.

5. Conclusions

External and internal factors contribute to the favourable attitude of consumers towards organic products. Internal factors are environmental motivation and concern, while external factors are subjective norms. A broad distribution can also bring consumers closer and influence them. Consumers' income, level of education, and product quality all impact their willingness to pay. The propensity to pay increases as education, income, and consumer evaluations of the quality of organic vegetable products rise. Society-wide dissemination of information regarding the health and environmental benefits of organic food products is required to expand the dissemination of organic vegetable products. Thus, consumer concern for their health and the environment is expected to increase, and the market for organic food products will expand.

6. References

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