We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

6,900

186,000

200M

Downloads

154

TOP 1%

Our authors are among the

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE

Selection of our books indexed in the Book Citation Index in Web of Science™ Core Collection (BKCI)

Interested in publishing with us? Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.

For more information visit www.intechopen.com



Factors Influencing Consumers' Willingness to Pay for Agricultural Organic Products (AOP)

Mahtab Pouratashi

Department of Agricultural Extension and Education, Faculty of Agricultural Economics and Development, University of Tehran, Karaj, Iran

Email: m_pouratashi@yahoo.com

Abstract

The main purpose of this study was to investigate factors influencing consumers' willingness to pay for agricultural organic products (AOP). This article has done with reviewing and analyzing various researches in different countries. The findings revealed that the premiums that consumers were willing to pay vary from country to country. Consumers' knowledge and awareness about AOP differs. Some had more knowledge about AOP and some were un-knowledgeable about AOP. Some factors influencing consumers' willingness to purchase AOP were consumers' socio-economic characteristics and AOP characteristics. Due to the importance of consumers' knowledge about AOP for purchase decisions, it is recommended to publish materials about AOP and deliver them to families.

Keywords: Agricultural organic product, willingness, purchase, knowledge

1. Introduction

With population growth, agriculture will need to produce enough supply of food to feed an expected more than eight milliard people by 2030 (1). Farmers depend mainly on chemical technologies to manage pests and to produce adequate food (2). However, despite their many benefits, it is now clear that pesticides may also have unfortunate consequences to human health and the environment (3). Hence, an interest in organic products is increasing throughout the world due to response to concerns about conventional agricultural practices, human health, and environmental safety. The role of organic agriculture in providing food is now gaining wider recognition (4).

Stobbelaar et al. (5) stated that "an organic product is food produced without artificial fertilizer or chemical pesticides, nor containing artificial coloring, flavoring or aromatic substances, preservatives, or genetically modified ingredients". Organic foods are perceived as healthier than conventional alternatives (6). At the same time, these products are perceived as rather expensive (7). Hence, it is essential to investigate if consumers are willing to pay for AOP. According to the studies done in the field of organic products in different countries, this study attempts to investigate how much consumers are willing to pay for organic products. Also, which factors influence they willingness to pay for these products.



1.1. Purpose and Objectives

The main purpose of the study was to investigate Factors influencing consumers' willingness to pay for agricultural organic products (AOP). The special objectives of the study were:

Consumers' willingness to purchase AOP;

Effective factors on consumers' willingness to purchase AOP.

2. Consumers' willingness to purchase AOP

Different studies have been done in regard to consumers' willingness to purchase AOP. For example, Skuras and Vakrou (8) found that 60 to 70 percent of respondents willing to pay a premium for quality food products. Meier-Ploeger and Woodward (9) in German reported that 52 percent of the respondents were willing to pay more for organic fruits and vegetables and 39 percent for grain products. Davis et al. (10) found that men would pay more at a percentage of 41 percent compared to 44 percent of women.

Gil et al. (11) showed that in Spain only likely and actual organic consumers were willing to pay a premium of 15-25 percent for organic food. Fotopoulos and Krystallis (12) stated that in Greece, organic consumers expected to pay from 19 to 63 percent for food products.

Corsi and Novelli (13) in Italy found that only organic consumers who could remember the price of conventional minute steak beef and roast beef were willing to pay 52 and 58 percent respectively above regular prices for the organic type of these products. Millock (14) found that 35% of the respondents in Denmark were willing to pay more for any type of organic products. In contrast, 18% of consumers were not willing to pay for all kind of products.

Canavari et al. (15) found that the proposed premium price for organic peaches and apples was accepted by 65.8 percent of the Italian respondents of their survey. Angulo et al. (16) found that although the Spanish consumers were concerned with the issue of food safety, 72.5 percent of them were not willing to pay a premium for a labeled food with a traceability certificate.

Aryal et al. (17) revealed that all respondents were willing to pay price premium, but the level of acceptability varied considerably. A total of 58% of the consumers were willing to pay 6-20% price premium, whereas 13% were willing to pay up to 50% premium. The average premium was estimated about 30%. Asadi et al. (18) found that in Iran, the majority of respondents were not willing to pay a price premium higher than 20%.

According to the findings, it is revealed that the premiums that consumers are willing to pay vary. This difference can be explained by the consumers' knowledge and awareness about agricultural organic products.

3. Effective factors on consumers' willingness to purchase AOP

Attention to studies in the field of organic agriculture has found different factors influencing purchase of AOP. Krissoff (19) found that consumers' perception about food safety of organic products - these products are safer, healthier and more environmentally friendly than conventionally products- affected consumers to pay for AOP. Govindasamy and Italia (20) showed that

gender, age, income and education, are among the most important factors influencing willingness to purchase AOP.

Makatouni (6) reported that product characteristics such as nutritive value, freshness, taste, and food safety influence consumer' willingness to purchase AOP. Bonti-Ankomah and Yiridoe (2006) also reported that respondents were willing to pay more for organics products because of food safety, taste and nutritive value.

Angulo et al. (16) stated that among the factors that affect willingness to pay for organic foods were consumers' use of food labels, experience with the product, and the prices consumers actually pay. Krystallis and Chryssohoidis (22) found that Consumers purchased organic products because they perceived these products as higher quality, safer foods that they could trust more than their conventional counterparts.

Aryal et al. (17) found that lack of information available to consumers, higher prices over those of conventional foods, and the limited and erratic domestic supply were factors influenced consumers' willingness to purchase AOP. Rajabi et al. (23) found that the consumers' knowledge of organic products was at medium level. Also, consumers' attitude toward using organic products was at neutral and favorable levels. The researchers found that four most highly ranked factors influencing the adoption of organic products were educational, access, improving product characteristics and supportive services

According to the findings, effective factors on consumers' willingness to purchase AOP can be shown by Fig. 1.

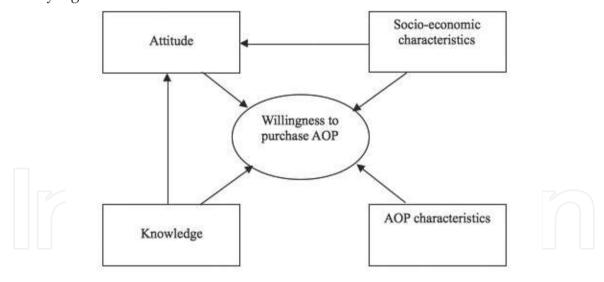


Fig. 1- Factors influencing consumers' willingness to purchase AOP

4. Summary and conclusion

According to the importance of AOP, this study investigated factors influencing consumers' willingness to purchase AOP. Attitude, knowledge, age, income, characteristics of agricultural products such as tests, color, nutritive value were among the factors affected consumers' decision making about purchase.

If consumers are not knowledgeable about organic products, they are unwilling to pay anything more than standard prices. Knowledge and awareness are perceived prerequisites in the adoption process (24). Bhatta et al. (25) found that a majority of the respondents knew about organic agriculture. Aryal et al. (17) found that nearly all of the respondents had heard about the organic products. But, they were not sure which products were organic and which were not. Rajabi et al. (23) found that the consumers' knowledge of organic products was at medium level. Therefore, consumers must be knowledgeable about organic products and their benefits including human health. Rajabi et al. (23) found that uses TV the most. After that, there were books, Newspapers and Journals. It is recommended to increase consumers' knowledge about AOP via different delivery methods such as radio and TV programs, CD and DVD. Zhou and Chen (26) found that 56 percent of the consumers had heard about organic products from TV, 47 percent learned from magazines, 23 percent through internet, 16 percent obtain the information from supermarket, 10 percent from friends and 5 percent had obtained the organic food information from other channels.

High prices and deficiencies in distribution channels are obstacles to the purchase of AOP (11). Hence, it is recommended that policy makers indicate distinct places for selling of these products.

5. Acknowledgement

The author gratefully acknowledges the National Elite Foundation for their support.

6. References

- [1] GHolifar, E., Ali Asadi, A., Akbari, M. and Pouratashi, M. 2010. Effective factors in apple waste in Islamic republic of Iran:a comparative study. Journal of Human Ecology, 32(1): 47-53.
- [2] Mauceri, M. 2004. Adoption of integrated pest management technologies: A case study of potato farmers in Carchi, Ecuador. Master of Science in Agricultural and Applied Economics, Virginia Polytechnic Institute and State University, Blacksburg, Virginia.
- [3] Pimentel, D. 2005. Environmental and economic costs of the application of pesticides primarily in the United States. Environment and Development, 7, 229–252
- [4] Van Elzakker, B., Parrott, N. Chola Chonya, M. and Adimdao, S. 2007. Organic Farming in Africa in H. Willer and M. Yusseffi (Eds.). The World of Organic Agriculture: Statistics and Emerging Trends. Bonn, IFOAM, pp.96-106.
- [5] Stobbelaar, D.J., Casimir, G., Borghuis, J., Marks, I., Meijer, L., and Zebeda, S. 2006. Adolescents' attitudes towards organic food: a survey of 15 to 16 year old school children. International Journal of Consumer Studies. Blackwell Publishing Ltd.
- [6] Makatouni, A., 2002. What motivates consumers to buy organic food in UK? Results from a qualitative study. British Food Journal. 104(3/4/5): 345-352.
- [7] Radman, M. 2005. Consumer consumption and perception of organic products in Croatia. British Food Journal, 107(4), 263-273.
- [8] Skuras, D. and Vakrou, A. 1999. Willingness to pay for origin-labeled products: a case study of Greek wine consumers. 67th EAAE Seminar Proceedings, Le Mans, 28-30 October.

- [9] Meier-Ploeger, A. and Woodward, L. 1999. Trends between countries. Ecology and Farming, 20, January-April, 15.
- [10] Davis, A., Titterington, A.J. and Cochrane, C. 1995. Who buys organic food? A profile of the purchasers of organic food in N. Ireland. British Food Journal, 97(10), 17-23.
- [11] Gil, J.M., Gracia, A. and Sanchez, M. 2000. Market segmentation and willingness to pay for organic products in Spain. International Food and Agribusiness Management Review, 3, 207-26.
- [12] Fotopoulos, C. and Krystallis, A. 2001. Defining the organic consumer and his willingness to pay for selected food products in Greece. paper presented at the 51st International Atlantic Economic Society Conference, Athens, March 13-20.
- [13] Corsi, A. and Novelli, S. 2002. Consumers' willingness to pay a price for organic beef meat. Paper presented at the Xth EAAE Congress, Zaragoza, 28-31 August
- [14] Millock, K., Hansen, L.G. Wier, M. and Anderson, L.M. 2002. Willingness to Pay for Organic products: A Comparison between Survey Data and Panel Data from Denmark, AKF Denmark.
- [15] Canavari, M., Nocella, G. and Scarpa, R. 2003. Stated willingness to pay for environment-friendly production of apples and peaches: web-based versus in-person surveys. Paper presented at the 83rd EAAE Seminar, Chania, 4-6 September.
- [16] Angulo, A.M., Gil, J.M. and Tamburo, L. 2003. Food safety and consumers' willingness to pay for labeled beef in Spain. paper presented at the 83rd EAAE Seminar, Chania, 4-6 September.
- [17] Aryal, K.P., Chaudhary, P., Pandit, S. & Sharma, G. 2009. Consumers' willingness to pay for organic products: a case from kathmandu valley. The Journal of Agriculture and Environment, 10, Jun.2009, 12-22.
- [18] Asadi, A., Akbari, M. Sharifazadeh, A. and Hashemi, S.M. 2009. Analysis of Factors Affecting Agricultural Organic Products Diffusion among Consumers: Perception of Extension Workers. World Applied Science Journal. 6 (3): 331-338.
- [19] Krissoff, B. 1998. Emergence of U.S. organic agriculture can we compete? American Journal of Agricultural Economics. 80(5): 1130-1133.
- [20] Govindasamy, R. and Italia, J. 1999. Predicting willingness to pay a premium for organically grown fresh produce. Journal of Food Distribution Research, 30(2), 44-53.
- [21] Bonti-Ankomah S. and Yiridoe, E.K. 2006. Organic and conventional food: A literature review of the economics of consumers' perceptions and preference. Final Report. Organic Agriculture Centre of Canada. Nova Scotia Agricultural College, truro, Nova Scotia, Canada.
- [22] Krystallis, A. and Chryssohoidis, G. 2005. Consumers' willingness to pay for organic food. British Food Journal, 107(5),320-343.
- [23] Rajabi, A., Pouratashi, M. and ShabanAli Fami, H. 2011. An Analysis of consumers' knowledge and willingness to pay for organic products. First National Congress on New Technologies in Agriculture, 10-12 Sep., Zanjan University, Iran.
- [24] Rogers E. 1995. Diffusion of innovations. 4th ed. New York: Free Press.
- [25] Bhatta, G.D., Doppler, W. KC, K.B. and Ranabhat, A. 2008. Potentials of Organic Agriculture in Nepal. In P. Chaudhary; K. Aryal and D. Tharu (ed.), Proceedings of International Workshop

- on Opportunities and Challenges of Organic Production and Marketing in South Asia, NPG, Kathmandu, Nepal, pp.34-46.
- [26] Zhou, L. and Chen, T. 2007. Consumer Perception of Organic Food in Urumqi. Contributed Paper prepared for presentation at the 5th Seminar 'International Marketing and International Trade of Quality Food Products' Bologna, Italy, March 8-10.



