

Supply Chain Inefficiencies in Greek Organic Food Industry: the Role of Information Flows

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Problem statement:

In last decade organic farming has been growing rapidly in developed countries. Nevertheless, growth in the Greek organic sector was one of the lowest in Europe and in 2005 was half that of 2004. This research investigates the demand and supply constraints between supply chain intermediaries that restrict the growth of market share.

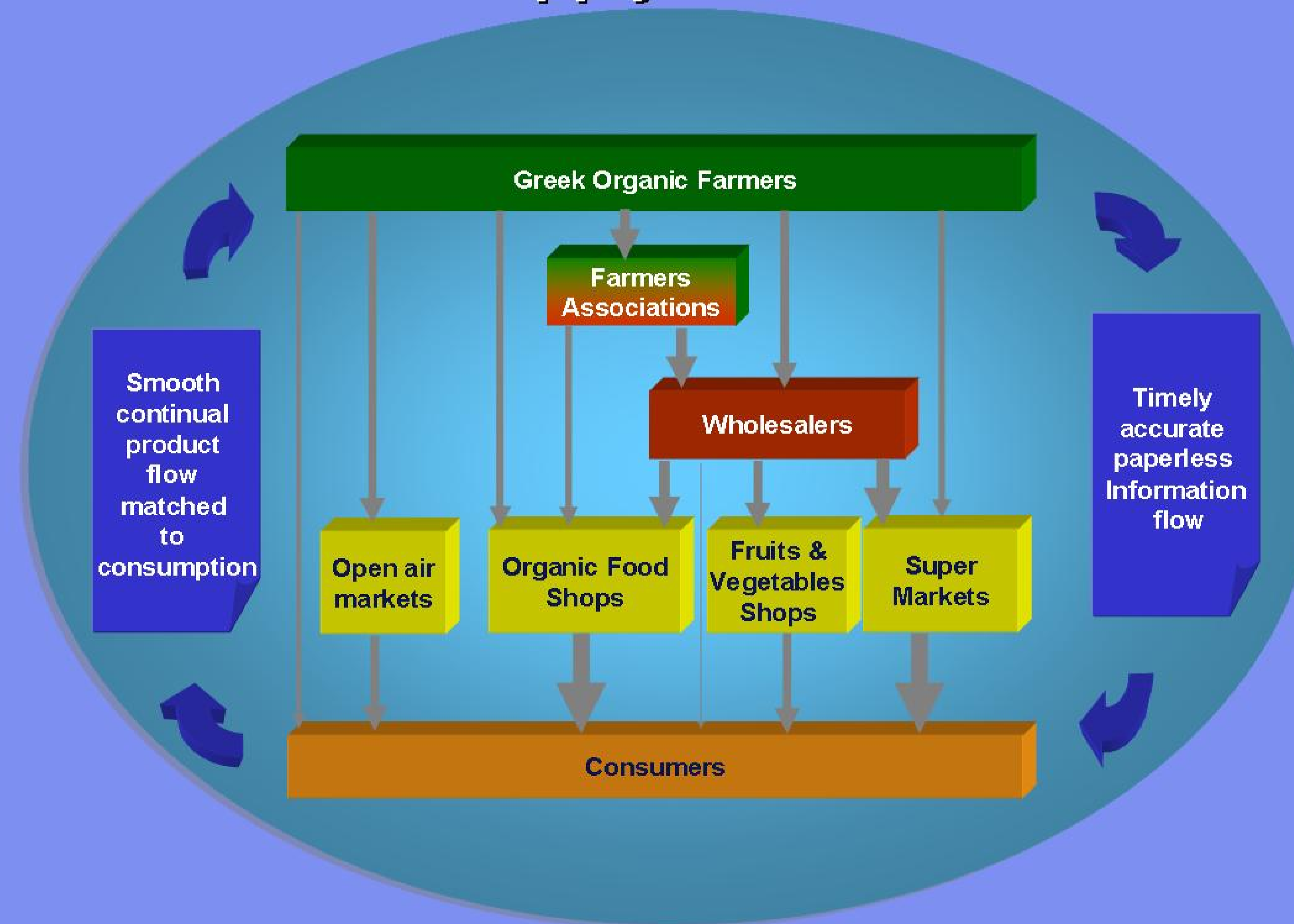
Research on the Greek organic food industry:

- Demand: on the one hand there is from the consumers' perspective a willingness to pay & buy organics

- Supply: on the other hand, players in the Supply Chain (SC), especially at the production level, are unaware of this demand, resulting in:

- low availability of products to meet consumer wants

Greek Organic Food Supply Chains



The hypothesis (H_p)

"The information links between demand and production in the Greek Organic Food Industry are not efficient"

"There is a significant demand for organic food products in the Greek Market" H₁

CONSUMER

"There is no intention from the retailers, at non-specialized shops, to satisfy the consumer demand for organic food products" H₂

RETAILER

"There is an obstruction for organics accentuated by the wholesalers" H₃

WHOLESALER

"Due to lack of organization & support, farmers are manipulated by intermediaries when selling their products, and misguided about what to produce" H₄

PRODUCER

Implications for commercial strategies:

- retailers have the power to influence consumer demands through managing the functions of market channels with their organic suppliers

- it is more beneficial for intermediaries to manage organics as just another category which needs to compete with other food categories than to promote organics as a full range of food within a specific consumption lifestyle

- a whole supply chain approach is essential to understand the information linkages and flows

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Abstract

“Supply Chain Inefficiencies in Greek Organic Food Industry: the Role of Information Flows”

Research problem

In last decade organic farming has been growing rapidly in developed countries. Nevertheless, growth in the Greek organic sector was one of the lowest in Europe and in 2005 was half that of 2004. This research investigates the demand and supply constraints between supply chain intermediaries that restrict the growth of market share

Research objective

The basic concept of this research is a holistic examination of the supply chain (SC) from the consumer to the producer focusing on the information flow. According to the existing literature, there are several indications that a paradox applies to the Greek market. More specifically, on the one hand there is an indication that consumers want to buy organic food products, but on the other hand the key participants in the SC, especially at the production level, do not seem to be aware of this demand. Hence, the general assumption is that SC stakeholders sustain the limited availability of the organic products (existing by definition from the initial stages of the organics introduction at the market) because limited availability creates high prices.

Several hypotheses lie behind this research question with respect to all the supply chain functions, stakeholders and the links between them. A general project-hypothesis (H_p) could be stated at this point based on a theoretical approach:

H_p : “The links between demand and production in the Greek Organic Food Industry are not efficient”.

The acceptance or rejection of H_p will be derived from the sub-hypotheses test (H_1 , H_2 , ect), the formulation of which and the conceptual model that support this syllogism will be illustrated below.

Methods

The conceptual model is based upon a step by step approach of the key elements of information flow in the SC beginning with the consumer and concluding at the producer. A specific product is going to be used for feasibility issues, so tomato was selected due to the fact that it is a commonly used product which is widely available in the market in both organic and conventional forms. The target is to test the different sub-hypotheses (H_1 , H_2 , etc), and by analyzing these results ultimately a conclusion can be drawn for the project-hypothesis (H_p). Detailed clarification follows:

- **Step 1, consumer level**

The hypothesis (H_1) at this level is that a motivation from the consumers to buy organics exists and it is translated to demand. However, limited availability in terms of quantity and variety discourages them.

H_1 : “There is a significant demand for organic food products at the Greek Market”.

In order to test H_1 , qualitative research will take place by means of deep interviews (laddering & MEC) so that, the motivations in terms of the consumption of organic food and the willingness to pay for it will be clarified. Subsequently, a case study will attempt to capture the “real” demand at the market. Questionnaires (exploratory statistics) assessing

awareness of organics, frequency & places of shopping, market observations and analysis of official statistical facts and figures (by government, NGO's, certification bodies & EU) related to production and consumption of organics will contribute towards this direction.

▪ **Step 2, retailer level**

At this stage the question is: what is the retailers' point of view for organics? Independently of rejection or acceptance of (H_1), the hypothesis (H_2) is that supermarkets and groceries (not at specialized shops) are not willing to provide more organic products to the consumers.

H_2 : "There is no intention from the retailers, at non specialized shops, to satisfy the consumer demand for Organic food products in the Greek market".

The reason for this is either because they can not understand the consumers demand or because it is not beneficial for them to do so. The market structure will be defined simultaneously with the capture of the "real" demand of the market - from the previous step - by using the same qualitative and quantitative means. Afterward, interviews with store managers from supermarkets and big chains will be conducted in order to understand their perceptions and intentions for organics.

▪ **Step 3, wholesaler level**

This is the most complicated phase of the research due to the structure of the SC. Specifically, several intermediaries are involved, such as the individuals occupied in a wholesale outlet, managers of farmers' associations and supply managers of big supermarket chains. The bottom line however, is that all these intermediaries (named as "wholesalers") are not willing to promote organics:.

H_3 : "There is an obstruction for the promotion of organics arising from the dominant strategies of wholesalers"

Qualitative research methods will be used for testing this hypothesis (H_3). Open-ended deep interviews and questionnaire-based personal interviews will be conducted with several key stakeholders into the SC wholesale level, targeting the exploration of their strategies for organics and their expectations for the organics sector.

▪ **Step 4, producer level**

Last but not least, farmers will be interviewed for the completion of the SC's holistic approach. The issue here is under which circumstances farmers decide what to produce and how the distribution of their products is established. The hypothesis (H_4) at this point is that they are not well informed with respect to the market demand, plus there is no effective support from the policy environment through their associations and the government.

H_4 : "Farmers are manipulated by intermediaries, due to lack of organization and support, when selling their products and as indirect consequence when they are deciding what to produce"

Quantitative methods using questionnaires and open interviews will be used to collect data for descriptive and analytical statistical methods including the frequency procedure, cross tabulation and factor analysis, for achieving this goal.