WHAT EXTERNAL AND INTERNAL FACTORS AFFECT ORGANIC FOOD SECTOR?

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Abstract: The aim of this study is to analyse the external and internal factors affecting organic food industry in Turkey. Organic food industry used to be a niche market segment where one can only find it at particular food section or retailers. But in the late 1980s, organic food demand has grown tremendously. This study used the framework suggested for the purpose of analysing the organic food industry in the Turkey. Based on the macro environment framework, the model used the PESTLE analysis and besides; SWOT analysis tends to be more product specific as an individual or an entity conducts this analysis based on that products. SWOT analysis helps to interpret the findings of the PESTLE analysis to determine the business’s strengths and weaknesses, and opportunities and threats. It is important, as a part of the internal focus, to conduct the SWOT analysis prior to completing organic food industry plan.

In this study, firstly, at the macro-environment level for organic food industry, we have discussed about the PESTEL mode, which is useful for management to run an analysis on the environment the company is sitting in. Lastly, at the organic food sector level, we investigate the SWOT analysis model. The model is powerful as it matches both the internal as well as external factors in the analysis. By considering the situation inside the organization, the model suggests how a company can exploit opportunity in the external environment.

Keywords: organic, food, Turkey, market.
INTRODUCTION

Every company in a business has certain frameworks that they follow in order to understand the market they are catering to. They usually keep on checking the nerve of the market where they want to focus their products upon. Certain companies carry out field work in form of market research through which they conduct surveys or employ other techniques by which to gauge the market needs and trends.

It is known that then there are other analysis methods that allow for a more holistic approach towards determining trends and then setting strategies. From a strategic management’s perspective, there are certain tools that permit the knowledge of the market and the surrounding environment in depth, but the most famous ones are PESTLE and SWOT analysis.

In analysing the macro-environment, it is important to identify the factors that might in turn affect a number of vital variables that are likely to influence the organization’s supply and demand levels and its costs (Kotter and Schlesinger, 1991; Johnson and Scholes, 1993). The “radical and ongoing changes occurring in society create an uncertain environment and have an impact on the function of the whole organization” (Tsiakkiros, 2002). A number of checklists have been developed as ways of cataloguing the vast number of possible issues that might affect an industry. The analysis examines the impact of each of these factors and their interplay with each other on the business. The results can then be used to take advantage of opportunities and to make contingency plans for threats when preparing business and strategic plans (Byars, 1991; Cooper, 2000).

When planning an entrepreneur, it is important to learn about the internal and external factors that can affect the project. There are some excellent strategic planning methods that it can be used analyse all these factors. SWOT analysis and PESTLE analysis are two of the most frequently used planning methods. The aim of this study, at the macro-environment level for organic food industry, it has been discussed about the PESTLE mode, which is useful for entrepreneurs to run an analysis on the environment the industry is sitting in. Lastly, at the organic food sector level, it is investigated by the SWOT analysis model. The model is powerful as it matches both the internal as well as external factors in the analysis. By considering the situation inside the organization, the model suggests how a company can exploit opportunity in the external environment. Both these measures give an in-depth view to the company regarding the environment they’re in or are about to enter and also about the products or the services with which they plan to enter the marketplace.

Organic foods are made according to certain production standards. For the vast majority of human history, agriculture can be described as organic; only during the 20th century was a large supply of new synthetic chemicals introduced to the food supply. This more recent style of production is referred to as "conventional". Under organic production, the use of conventional non-organic pesticides, insecticides and herbicides is greatly restricted and saved as a last resort, pesticides. If livestock are involved, they must be reared without the routine use of antibiotics and without the use of growth hormones, and generally fed a healthy diet, growth hormones.

Organic production systems are designed to produce optimum quantities of food of high nutritional quality by using management practices, which aim to avoid the use of agrochemical inputs and which minimise damage to the environment and wildlife (UKROFS, 2004).

The objective of organic farming can be related to the perception towards meeting eco-friendly environment by avoiding synthetic fertilizers, herbicides and pesticides. The farming activity of organic food very much dependent on nutrient inputs from maneuvers and mulches, biological nitrogen fixation, crushed minerals and microbial preparations (Stacey, 2004). Stacey (2004) also highlighted that the organic farming relies on nutrient inputs from
manures and mulches, biological nitrogen fixation, crushed minerals and microbial preparations.

Organic farming is a popular trend both among consumers and producers. It can be taken a closer look at this movement adopted by most of us as part of a healthier diet. Organic farming is an eco-friendly means of production based on sustainable productivity that doesn’t use artificial components such as chemical fertilizers or pesticides. Each step of this licensed system which is based on soil fertility and food safety is monitored and registered by a variety of means.

The first requirement for organic farming is that the land should be away from traditional fields, busy main roads, heavy industry facilities, mines, urban waste dumping areas, rivers that contain harmful waste, and ground waters. The most prominent cost of organic farming is time and effort considering that it is done manually and it aims to cultivate adequate amounts of produce without harming the soil - rather than aiming at maximum productivity at any cost.

Consumers place high priority on being certain that what they buy is “organic” and locally produced with these standards. Organic farming in Turkey is constantly inspected by Turkey’s Directorate of Provincial Food, Agriculture and Livestock within the framework of the authorization scheme granted to the certification organization. The authorities also conduct analyses of the soil, leaf, water and products throughout the entire process.

Interestingly, Turkey is actually a major regional producer of organic produce, mostly fruits and vegetables, with exports totalling close to $100 million annually. However, imports are beginning to creep into the market mix. In terms of sales, there are a few distinct product categories holding big chunks of Turkey’s overall organic food and beverage sector makeup. The top three sectors with the largest market share are (Anonymous, 2018):

- Dairy (including cheese) - 21,8%;
- Baby food - 14,8%;
- Sweet and savoury snacks - 13,6%.

METHOD

The aim of this study is to analyze the organic food sector. By focusing on the components for the organic food sector, the study is trying to relate the implication of macro environment towards the industry growth pattern. The study is looking forward to analyze the impact of the changes in PESTEL aspects drives the changes on organic food sector. SWOT analysis was used in this study together with PESTLE analysis. PESTLE and SWOT are closely related approaches to business analysis. PESTLE is an acronym that stands for political, economic, social and technological influences on a business. SWOT is a situational analysis tool for company leaders that involves assessing strengths, weaknesses, opportunities and threats. PESTLE has correlates strongly with the threats component of SWOT, but also has relevance to the opportunities assessment.

MACRO ENVIRONMENT ANALYSIS – PESTLE

The analysis of each variation of PESTLE has three main elements. These elements include:

a. External factors,
b. Implications of external factors and
c. Relative importance of implication of external factors.

The analysis will involve answering few questions such as those influences in the present time and also in the next few years. The study will also include the analysis on the key drivers of change in the external environment that will affect organic food sector in Turkey.
To analyse the macro environment, there are few considerations that need to be taken carefully. Firstly, entrepreneurs need to understand the external environment and the interconnections of various factors to be able to understand and translate to the business planning and decision-making process.

The use of analyses framework such as the Macro Environment, which uses the PESTLE analyses as a tool, is seen as a source for improvisation in businesses. Each element in the analysis enables entrepreneurs to look into possible aspects and issues that may act as a barrier towards development and profit. As the elements are studied and observed, entrepreneurs will be able to gain insight into what is to be expected and what is to be avoided in order to achieve their targets and missions.

The PESTLE analyses are useful when a company decides to enter its business operations into new markets and new countries. The use of PESTLE, in this case, helps to break free of unconscious assumptions, and helps to effectively adapt to the realities of the new environment especially for the organic food entrepreneurs.

This study looks into how a systematic method can be used to analyse the external environment that can influence the organic food industry in the Turkey (Oraman, 2014). The systematic approach to analyse the PESTLE analysis in the Turkey is based on the model established by Renewal Associates (2003) called “PESTLE Analysis – A model Framework”.

The questions to ask are:
- What are the key political factors likely to affect the organic food industry?
- What are the important economic factors?
- What cultural aspects are most important?
- What technological innovations are likely to occur?
- What current and impending legislation may affect the industry?
- What are the environmental considerations?

1. Political

The political aspect in the analysis would include elements such as global and national political levels. Apart from that, political changes at regional, local and community trends would likely to pose an impact on the organic food industry as well.
This dimension of the PESTLE analysis model reflects governmental influence on business and industry. In Organic Foods Market’s case, the following are the most significant political external factors in the macro-environment:

1. Regulations on organic food (opportunity)
2. Free trade agreements (opportunity)
3. Low labour standards in developing countries (opportunity)

Organic foods market has the opportunity to further improve its standards to ensure proper labelling of organic products. The firm also has the opportunity to expand its business based on advantages of free trade agreements, such as through new locations overseas.

In analysing the political aspect, there are few elements that can affect the industry. There are some questions that can be forwarded to determine the significance of a political influence:

a. What type of policies adopted by the government with regards to the organic food industry?
b. What type of tax policy is being practice in the tax policy?
c. What techniques would the Turkey government use for economic management?
d. What policies of redistribution income the Turkey government is practicing?
e. Is the Turkey government likely to spend any extra or the same level of government expenditure?

The impact from government policies in the organic food industry in Turkey is evident. Turkish lifestyles are changing. Young Turks are busier, more active and, seemingly, more health conscious than ever before. A shake-up in consumption habits is sweeping the nation – not least in the organic food sector. At present, awareness of organic produce and consumption is a little low. Many Turkish consumers feel greener, health-orientated products are something of a luxury item. Those who do eat and drink organic offerings tend be higher educated, live in urban areas and enjoy higher income levels.

While this purchaser profile could prove off-putting for exporters, it actually reflects Turkish societal trends. Turkey’s middle class has risen to be around 41% of the population since the mid-90s (Anonymous, 2018). With a GDP per capita of over $11 000, Turkey is a whisker away from achieving OECD High Income status. Additionally, Turks are increasingly turning towards healthy foods. While there is some way to go before Turkey’s entire population is clued up on the benefits of organic food and drink, sales are starting to grow – mainly in the pre-packaged sector. Sales of health foods grew 24% from 2013 to 2014. As of 2015, the market for packaged organic food and drink in Turkey is valued at $90 million. By 2020, it is expected to reach over $170 million (a compound annual growth rate of 12.9%). With growth remaining both healthy and steady, Turkey’s potential for organic foods is becoming clearer each year.

The implication of government agencies highlighting the need for healthy food dieting and as well as suggesting that organic food is one of the healthy eating solution poised tremendous positive effect to the organic food industry (Soil Association, 2005).

During the conversion period of trying to promote the organic food industry, the government played a major role by having a policy to support the growth. Implication of the changes of government’s intention to stimulate the industry led to a positive growth. In fact, the policy then managed to get the private sector to be involved in terms of marketing and retailing.

Intrinsically, the impact on organically produced food seems to be positive with several policies in place. Since there is a significant relationship between politics and the industry, it is important that businesses keep abreast with the changes that might happen. This would help give indication to businesses in organic food industry towards strengthening its position in the Turkey market.
2. Economical

In this dimension of the PESTLE analysis model, the impacts of economic conditions are determined. Organic food market must address the following economic external factors in macro-environment:

- Economic stability (opportunity)
- Higher employment rate in the Turkey (opportunity)
- Rising labour costs in developing countries (threat)

The national and local trends should be among the elements analysed in the economical environment variance. Factors such as the trend of consumptions, disposal income level, gross domestic per capita need to be analysed. According to Braun J. (1994), the economic models suggest that the adoption by consumers and entrepreneurs on supply and demand for a product could lead to a widespread adoption.

Discussion about economic growth in a country is crucial for any economic activities such as the organic food industry. In the Turkey, to help the economy grow, a chancellor is needed to maintain the level of demand in the economy. A chancellor is responsible for the country’s financial policy. They have two options either to improve or maintain the levels of the economy’s growth. The two options are either through fiscal policy or monetary policy. The change in the policy would either encourage spending, cut taxes or cut interest rates. These activities would then affect the industry especially in the areas that are being focused. Growth in the economic sectors will improve the level of income and thus improve the living standards for the people. As such there are four elements that possibly impact the growth or demand of organic food or farming. High level of economic growth (growth in GDP), low level of unemployment, low level of inflation and external balance between exports and imports are important elements that entrepreneurs need to focus upon.

The changes in the economic factors show that it can cause long-term impact especially when there is a discussion about the future implication. Nevertheless, depending on the economic policy, the use of the framework should consider the scale of impact by time and dynamics.

3. Social

This dimension of the PESTLE analysis model identifies the social conditions that influence consumers, employees and investors. In Organic Foods Market’s case, the following are the social/sociocultural external factors in the macro-environment:

- Increasing emphasis on healthy lifestyles (opportunity),
- Increasing cultural diversity (opportunity),
- Increasing wealth gap (threat),

Organic Foods Market has the opportunity to grow based on high quality organic products that satisfy the healthy lifestyles trend.

The analysis on the social aspect should involve elements such as demographic, consumer behaviour, lifestyle, perception etc that can affect the food industry. The driving forces at the collective and the individual levels would often determine the environmental setting for a consumer’s behaviour. The collective level refers to technical, economic, demographic, institutional and cultural developments. The individual level refers to the consumers, who have different needs, which may be more or less satisfied, are confronted with opportunities for consumption, and have various abilities to consume these opportunities. Furthermore, consumers may be more or less uncertain, depending on the difference between expected and actual outcomes of their behaviour.

The elements of social attitudes such as social class and socio-economic groupings have impact on the industry of organic food. The implication of the two elements is evident in
the demand trend for the organic food. The habit of healthy eating diet and the perceived value that organically produced food is closely connected to healthy food and nutrition, influences the demand for organic food (Wilcock, et. al, 2004). Apart from social class, elements such as income distribution at national, regional and occupational level too plays a role in changing the demand or activity to organic food industry (Powell, et. al, 2002).

Studies on consumer behaviour like theories about human needs, motivational processes and social learning theory explain parts of the processes that determine consumer behaviour (Jager, 2000). On top of that, changing lifestyles will impact the eating habits and consequence on the organic food market.

The demands for organic food are towards the incremental trend (Soil Association, 2005). It is driven by consumer’s perception of the quality and safety of these foods. The concern about food safety has provoked people to consume more organic food though it is more expensive. This increases the market value for organic food industry.

4. Technological

In the 21st century, one cannot avoid highlighting about the changes that are taking place in technological aspects. The analysis of these aspects can be scanned in two scenarios as we apply it into the organic food industry in the Turkey. The first scenario is on the management of organic farming techniques and machineries. The second scenario would be on the content and nutrition of the type of organic food produced. Apart from that, the progress in the area of telecommunications, transportation, marketing and business technology also has great influence on the food industry market.

Technology plays a crucial role in the development of a business. There are a number of claimed social and environmental factors that have a positive impact on especially the organic farming and growing. These include causing less pollution, benefiting biodiversity, producing less waste and being beneficial to animal welfare. On the produce front, organic foods and drinks are claimed to contain more vitamins and minerals, less nitrates and pesticide residues, and not to contain antibiotics and most food additives. No organic foods contain genetically modified (GM) ingredients. These are the result gained from the existence of technological developments and researches.

Though food production is a global industry, there is much debate about modern production methods and acknowledgment of modern techniques in agriculture. It is claimed to exhaust the land though it produces resources with are cheap and in large quantity. The role of technology is inevitably important in organic food sector. The scenario of farming technique is enhanced with the production method. The organic industry has been invested with intense capital support while other method such as screw driver plants and outsourcing has been crucially vital in changing the way organically produced food is produced.

Turkey’s organic food industry is small compared to some countries in the EU but is growing very fast. The fact that the Turkish farming industry is staggering from one crisis to another, farmers are opting to find solutions to improve their profitability. Many more farmers are turning from intensive agriculture to niche market requirement by producing high quality specialty food that is organic. Apart from new productivity techniques and new type of food, the development in technology has also improved the way organic food is distributed or marketed. The Internet revolution has enabled the farmers to bypass the retailers and communicate directly to the end users. The impact of technology change has brought more changes to the organic industry thus has helped introduce to the world.

The development in technology has also contributed a great deal especially in the area of organically produced food. For example; the addition of probiotic and prebiotic ingredients to yogurts and other dairy products is one of the contributions. Apart from this, some of the organic food range has also been recognized as comprising cholesterol-lowering ingredients.
that contain sterol esters, which are not absorbed by the body. This supports the demand from the market that is high on low fat and reduced-sugar foods.

Organic produce is usually found to contain no pesticide residues. If residues exist, they are significantly very low in organic compared to non-organic produce (https://www.soilassociation.org). Alternatively, the impact of technological change is also evident in the pest control activity in organic farming. Farmers are beginning to take right decisions at right time such as growing crops that are disease and pest resistant. The technological improvement also enables farmers to choose sowing seasons that prevent pest and disease outbreaks. Technological advancement also provided the farmers with better farming management system to increase the population of natural predator that have natural capability to control insects, diseases and weeds (Hannigan, 2005).

In organic food industry there is a range of technological issues that should be taken into consideration: starting from production and packaging to effectiveness of product delivery - logistics. The storage period of organic products is short (in average 36 hours, max 72 hours). It means that demand for these products is always higher than organic (eco) farm’s capacity (The World of Organic Agriculture Statistics and Emerging Trends, 2017).

5. Legal

Organic food products sold on the Turkish market have to be certified according to Turkish law (Laws no. 5262 of 03/12/2004, published in the Official Gazette no, 25659, and no. 27676 of 18/08/2010, and amendments). The inspection and certification body should be authorised by the Ministry of Food, Agriculture and Livestock, based upon certain criteria. Product should carry a label containing the information specified in the regulation. In order to be sold as organic in the Turkish domestic market, certification according to Turkish regulations is compulsory, and this must be carried out by certification bodies authorised by the Ministry of Food, Agriculture and Livestock. However, any food products can be certified for export according to other official or private standards. The use, size and colour etc. of the organic logo is specified in Turkish legislation. The use of the organic logo is compulsory. For imported organic products and products in conversion the logo cannot be used.

Legal aspects related to food industry will continue with the changes in the government policy now and in the future. The impacts from the changes in legal factors are eminent and every change made by the government, normally would worry the farmers. In the organic food industry, government policies, regulations and international food standard requirement are some of the important elements that needs to be considered. Government policy to encourage the farming of organically produced food, consumer’s consciousness about the safety and reality of organic food benefits and also the international exposure both in locally and regulation on maintaining the quality of organic food needs to be observed constantly.

The element of legislation that are often seen as great potential impact comprises the consumer legislation, consumer protection, sale of goods and trade description. It affects in the area of supply of goods and services, weight and measures, food safety, food labelling and consumer safety.

Besides, producers making production under Organic Farming are provided with the following support payments by the Ministry of Food, Agriculture and Livestock;

In addition to supports paid for animal husbandry, 50% support payments for organic farming to the farmers making organic animal production in livestock sector, sheep and goat sector, beekeeping and aquaculture sector.

6. Environmental

Organic foods are often perceived as one of the environmentally friendly method of crop production. This is reflected in research done by Oraman (2014) when few of the survey questions were related to the perception of consumers with regards to the organic food and its environmental relationship. Hence, it is often expressed that organic farming does not give farmers very much control over nutrient inputs versus outputs. As a consequent, organic farmers very much rely on nutrients inputs abstracted from farmyard manures, crushed minerals like elemental sulphur and phosphates, and nitrogen fixation. Since this is one of the methods used by farmers, the nutrition content is often quite unpredictable in the crops produced.

Activities on crop production have to meet the quality requirement set by the regulations as well as customer’s environment expectations. Production of organically produced food has to balance with the necessity of providing its customers with high quality product. The use of plastic trays, plastic film for covering the organic foods, cardboard for the sleeves and for the boxes prior to the distribution also contribute towards the environmental conditions. Though the impact is that the farmers need to look for better efficiency supplier and maximise on recycling technique, it contributes towards farmer’s production cost. Environmental policy from the government by implementing climate change levy charged on farmers for each unit of electricity or gas used in their production process also leaves a deep impact on the production cost.
As a whole, the environmental analysis should be directed towards the direct and indirect implication of organically produced food activity. The scanning on environmental impact on the industry can help farmers and organisations to prioritise the need to be environmentally friendly. The weight of scale can really give a good indication in the framework to analyse the impact of environment changes on the crops, production process, regulation and as well as consumer’s expectation.

**SWOT ANALYSIS**

As previously stated, SWOT analysis helps to interpret the findings of the PESTLE analysis to determine the business’s strengths and weaknesses, and opportunities and threats. It is important, as a part of the internal focus, to conduct the SWOT analysis prior to completing organic food industry plan. It is a critical part of the risk management process.

It helps to understand SWOT analysis by classifying the strengths and weaknesses as an internal assessment of a business, so looking within a business at controllable factors. The opportunities and threats are therefore classified as an external assessment of the business, so looking at outside forces and influences that are beyond the businesses control.

It is seen that in the components of the SWOT analysis are:

- **Internal Analysis - Strengths and Weaknesses**
- **External Analysis - Opportunities and Threats.**

The External Analysis takes a look at the opportunities and threats existing in your organization’s environment. Both opportunities and threats are independent from the organization. An evaluation needs to be completed drawing conclusions about how the opportunities and threats may affect the sector.

**External resources:**
- Macro - Demographic/Economic, Technological, Social/Cultural, Political/Legal
- Micro - Customers, Competitors, Channels, Suppliers, Publics

**Internal Resources:** The Firms

![SWOT Matrix for Organic Food Industry](image-url)
The SWOT Matrix helps visualize the analysis. Also, when executing this analysis, it is important to understand how these elements work together. When an organization matches internal strengths to external opportunities, it creates core competencies in meeting the needs of its customers. In addition, organic food firms should act to convert internal weaknesses into strengths and external threats into opportunities. Finally, they should act to focus on themselves strengths, to shore up weaknesses, to capitalize on opportunities, to recognize threats.

**CONCLUSION**

The Organic food industry is an industry, which is developing, based on consumers demands and valued perception over its contribution towards healthy eating habits. Organic farming practices are safe and continue to preserve our natural resources are reason enough to support the organic farmers in the Turkey. Hence, this framework is developed with an intention to help and guide the organic farmers by looking at some of the important elements that would play a crucial role in its sustenance and development.

Although the organic food market shows a big annual growth even in the Turkey, it still battles with weaknesses. A lifestyle preferring organic foods has not sufficiently spread in the Turkey yet, the purchase of organic food is often casual. Nevertheless, the supply falls behind demand. For instance, meat and milk, eggs, fruits and vegetables, soya products (meat, yoghurts) and spreads continue to be insufficient. The price of organic food is still high; some commodities in organic quality are by up to 600% more expensive than the conventional ones. Last but not least, a systematic support on the part of the state and government is considerably missing. Selling organic foods through chain stores has its positives and negatives compared with selling in specialized shops. One of the main advantages of selling in chain stores is the possibility to sell organic foods for a lower price than in the specialized shops of “healthy nutrition”. The surveys show, however, that it is not always like that – we can find cases, where organic food is more expensive in the chain stores than in a specialized shop.

This study highlights the important of pursuing and understanding the implication of macro environment for the organic food industry in the Turkey. The potential changes and effect on the industry can be foreseen for any changes that may take place in the environment. It also intends to make entrepreneurs in the organic food industry in the Turkey to be proactive in their effort to sustain their business by gaining understanding of the macro environment analysis.

**REFERENCES**


