

Responsible sourcing practices in hazelnut industry

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Abstract

Companies may play an important role to guarantee the supply of their basic raw materials and hereby to support sustainability. The aim of this study is to investigate the companies' responsible sourcing practices in hazelnut industry in Turkey. Turkey is the world's leading producer and exporter of hazelnuts, accounting for around 75% of the world's supply. Survey, interview and analysis of secondary data method were used together. Responsible sourcing practices of companies were analysed into two parts as assessment and collaboration. Besides, under-age workers on hazelnut production are one of the major problems that companies have to struggle to prevent it in the context of responsible sourcing.

Keywords: Responsible sourcing, hazelnut, Turkey.

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1. Introduction

The world is running out of resources and businesses today are experiencing profound pressures that derive from a wide range of stakeholders to use all resources efficiently to ensure sustainability. The most comprehensive definition of sustainability is 'ensuring that we meet our needs without compromising the ability of future generations to meet their own needs' (World Commission on Environment and Development, 1987, p. 43).

This has led a growing number of companies to have responsible sourcing practices. Responsible sourcing practices are important for almost every industry, especially in food industry, because of its direct effect on sustaining human life and ecological balance. Responsible sourcing can be defined as a voluntary commitment by the companies to take into account social and environmental consideration when managing their relationships with suppliers (Wassell, 2010, p. 259).

In general, firms may be liable for their purchased products or services but they have almost no legal responsibility towards the environmental activities of their suppliers (Simpson & Power, 2005, p. 60). But more and more companies are under increasing pressure from a wide variety of stakeholders, including consumers, non-governmental organizations (NGOs), local communities, public and governmental officials, to implement corporate social responsibility (CSR) management systems across the supply chain (Govindan, Khodaverdi & Jafarian, 2013, p. 347).

Changing market dynamics are increasing the importance of sustainability efforts:

- Customers are becoming more environmental conscious. Younger consumers, in particular, demand sustainable products and practices and will pay more to get them.
- Increasing scarcity of the natural resource (e.g. climate change, water scarcity) and rising commodity prices make resource efficiency and waste reduction the crucial variables for companies to remain profitable.
- Increasing pressures come from the regulatory environment and NGOs for being more transparent about socio-economic issues, drive non-compliance costs and can create a backlash from the marketplace (World Economic Forum, 2015, p. 6).

Because of these changes, increasing number of companies is exploring how to identify, assess and monitor supplier-related social issues and practices (Awaysheh & Klassen, 2010, p. 1247).

Food industry is placed between agriculture (previous step) and food retail and foodservice (next step), so they are faced with the demand from partners both upstream and downstream, and are therefore central to the discussion of sustainable food production (Global Reporting Initiative, 2008, p. 6). The challenge of the sustainable food supply is certainly not only a supply side problem but also reinforced by rapid global population growth (Gold & Heikkurinen, 2013, p. 277). Also, in the case of food products, the biggest sustainability impacts not happen during the transport or manufacturing of the final product, instead of this, it happens in the farming and production of agricultural raw materials (Springer et al., 2015). This inference drives companies in food industry to implement a sustainable sourcing strategy.

2. Responsible Sourcing

Social issues relating to sourcing are referred to in varied ways in the relevant literature, and sometimes the same terms are used with different meanings or vice versa. As seen in the Table 1, terms that refer to the social aspect of sourcing need a greater alignment.

Table 1. Definitions of various terms that refer to the social aspect of sourcing

Author(s)	Terminology	Definition
Pagell, Wu and Wasserman (2010, p. 58)	Sustainable sourcing	Managing all aspects of the upstream component of the supply chain to maximise triple bottom line (environmental, social and economic) performance.
Srivastava (2007, pp. 54–55)	Green supply chain management	Integrating environmental thinking into supply chain management including product design, material sourcing and selection, manufacturing processes, delivery of the final product to the consumers as well as end-of-life management of the product after its useful life
Seuring and Muller (2008, p. 1700)	Sustainable supply chain management	The management of material, information and capital flow as well as cooperation among companies along the supply chain while taking goals from all three dimensions of sustainable development, i.e. economic, environmental and social, into account which are derived from customer and stakeholder requirements
Wassell (2010, p. 259)	Responsible sourcing	It is a voluntary commitment by companies to take into account social and environmental consideration when managing their relationships with suppliers
Carter and Carter (1998, p. 660)	Environmental purchasing	The purchasing function's involvement in supply chain management activities in order to facilitate recycling, reuse and resource reduction
Maignan, Hillebrand and Mcalister (2002, p. 642)	Socially responsible buying	The inclusion in purchasing decisions of the social issues advocated by organisational stakeholders
Min and Galle (2001, p. 1223)	Green purchasing	An environmentally-conscious purchasing practice that reduces sources of waste and promotes recycling and reclamation of purchased materials without adversely affecting performance requirements of such materials.
Thornton, Autry, Gligor and Brik (2013, p. 68)	Socially responsible supplier selection	A firm's capabilities for and/or orientation toward selection of suppliers that embrace sustainability and CSR principles when conducting normal operations
Drumwright (1994, p. 1)	Socially responsible organisational buying	Is that which attempts to take into account the public consequences of organisational buying or bring about positive social change through organisational buying behaviour
Spence and Bourlakis (2009, pp. 291–292)	Supply chain responsibility	Is the chain-wide consideration of, and response to, issues beyond the narrow economic, technical and legal requirements of the supply chain to accomplish social (and environmental) benefits along with the traditional economic gains which every member in that supply chain seeks.

In this paper, the definition of Wassell (2010) was used which is simple but relatively comprehensive. Generally, firms build up a dual relationship assessment and collaboration with its suppliers to ensure sustainability.

Table 2. Assessment and collaboration practices

Assessment practices	Collaboration practices
<ul style="list-style-type: none"> Establishing written supplier requirements Selecting the supplier that most comply with the firm's corporate sustainability standards during an initial contracting/tendering phase, Requesting certifications from suppliers, proving that suppliers fulfil social or environmental requirements, Conducting audits to asses supplier sites and processes and consequently the identification of non-compliance with CSS Monitoring suppliers' sustainability performance 	<ul style="list-style-type: none"> Communication Training or workshops Employee transfers Technological integration Logistical integration Joint development

3. Methodology

3.1. Sample

Although hazelnut are grown in 43 provinces in Turkey, but it is mainly cultivated in Ordu, Giresun, Samsun, Trabzon, Duzce, Sakarya, Zonguldak, Artvin, Bartın, Kocaeli, Sinop, Gumushane and Kastamonu ve Rize. However, approximately 95% of production is carried out in Ordu, Giresun, Samsun, Sakarya, Duzce, Trabzon and Zonguldak provinces (Turkish Grain Board, 2014).

Table 3. Some indicators related to hazelnut in 2015

Provinces	Collective areas of orchards (decare)	Production (ton)	The average yield per tree (kg)
Ordu	2,271,830	200,938	2
Giresun	1,171,112	105,023	2
Samsun	906,229	90,857	2
Sakarya	725,981	82,708	2
Duzce	626,850	69,344	2
Trabzon	653,498	39,126	1
Zonguldak	235,929	22,572	1
Total production of seven provinces	6,591,429	610,568	
Total production of Turkey	7,026,279	646,000	

3.2. Method

To collect data in this study, survey, interview and secondary data analysis methods were used together. All accessible resources were examined to carry out the study. Websites, annual reports, corporate governance compliance reports, sustainability reports (if available) and news of companies are deeply analysed. Besides, interviews with commodity exchange were conducted in the seven provinces for getting their worthwhile information about business activities.

4. Results

A significant portion of the companies which have been examined is hazelnut cracking and/or processing plants. But processed kernels are not final product; they are in the form of semi-finished products such as hazelnut paste, sliced hazelnut, blanched hazelnut and roasted hazelnut which can be used in chocolate or pastry industry. There are also a few companies producing final products such as chocolate, hazelnut oil and hazelnut cream. Although both semi-finished product producers and final-product producers are affected from the quality and sustainability of their raw materials, the final-product producers are affected more.

As far as it has been able to determine that there are only five companies which have activities related to responsible sourcing and four of them are foreign-based.

4.1. Ferrero

Ferrero is a multinational company; it has commercial offices and production centres in many countries including Turkey. In July 2014, the company announced its acquisition of 100% of the family-run group Oltan, the leading company for collecting, roasting and trading hazelnuts in Turkey. The company has many well-known products such as Nutella, Ferrero Rocher and Kinder Bueno.

Ferrero remains one of the largest hazelnuts users globally and one of the largest buyers in Turkey. The company aims to reach the goal of 100% traceability of its hazelnut supply chain by 2020, and has achieved the full traceability of 5% of its hazelnut purchase at the end of 2014.

The company has Ferrero Farming Values Hazelnut programme and the programme has been implemented in Turkey. This programme is based on specific principles and focused mainly on enhancing farming skills of all farmers and improving their possibility of revenue increase with the aim that:

Hazelnuts should be traceable at all times, from the origin (the farmer) up to the factory gate.

Traceable hazelnuts should be recognised as a premium product all along supply chain.

General principles of the programme are:

Ensure excellence in processing hazelnuts starting from the field and post-harvest operations.

Make suppliers to respect work and labour conditions in compliance with all laws, regulations and local rules.

Avoid any use of child labour and ensure the full respect of human rights.

Implement a safe work environment that could be integrated upstream by each supplier in its supply chain.

Table 4. Assessment and collaboration practices of Ferrero

Assessment practices	Collaboration practices
<p>The company,</p> <ul style="list-style-type: none"> • makes a comprehensive check of Ferrero’s supply chain with an extensive round of audits. A representative sample of farmers was selected through rigorous criteria and visited by the auditors during harvest practices to prove the commitment and compliance of the producers to the standard. • monitors the supply chain in order to better understand the technical support needed by them. 	<p>The company,</p> <ul style="list-style-type: none"> • has a team of agronomical engineers who are providing assistance to the farmers • offers farmers free-of-charge consultancy service in: <ul style="list-style-type: none"> ○ fertilizer input evaluation and application ○ pest and disease control ○ weed control ○ pruning ○ soil carbon retention ○ harvesting/mechanisation ○ water and waste management • has model farms and farmers are invited to the model farms to learn the latest agricultural techniques and discuss their farming issues and necessities with technicians. In these farms, there are customised machines for hazelnut farming to promote utilisation of machines

Since 2012, the company has established a partnership with NGO Hayata destek (Support to life) to raise awareness of good social practices in hazelnut farming community and educate farmers' children. A mobilising team, composed of trained teachers and social workers, try to outreach the hazelnut farming communities and give out educational activities to farmers' children.

4.2. Nestle

The company has a partnership with its suppliers Balsu and Olam-Progida who account for 65% percent of its global hazelnut volume. Implementation of its responsible sourcing activities is being conducted by these two local firms.

Provide trainings for farmers on health and safety, child labour prevention and good agricultural practices to help the growers improve their yields. Also, a toll-free phone number is provided to the farmers during the training and on different materials to enable them to report any complaints.

Assessing farms randomly with regard to labour conditions

Provide personal protective equipment (hats & gloves), drinking water, adequate sanitation and hand-washing facilities and medical kits to the workers in the orchards.

Provide migrant worker families with humane conditions and facilities such as electricity, toilets and access to city water in the camp areas. Additionally, workshops and activities are organised for their children to occupy them during the day, and volunteers and paid teachers organise educational activities.

4.3. Ulker

Hazelnut is one of the major raw materials of the company. Ulker is one of the largest hazelnut buyers in Turkey. The company consumes 10 ton of hazelnut annually. Ulker is conducting a project named 'Sustainable Hazelnut Agriculture' with WWF to improve efficiency in hazelnut farming which has been initiated in 2015 (Most of their purchases are made from Giresun, so they make a project to increase biological diversity in Giresun). The project aims to demonstrate and evaluate the current situation; also, to find out Giresun's inventory for hazelnut agriculture and to develop necessary solutions.

4.4. Lindt & Sprungli

Lindt & Sprungli is a company producing chocolates with several global, regional and local brands. Since 2014, the company works with key hazelnut suppliers that have implemented sustainable hazelnut programmes in Turkey. This programme has two aspects. First, farmers are organised into groups to implement a system to trace hazelnuts back to their origin. Second, farmers are trained to learn more about good agricultural, environmental and social practices (e.g. preventing child labour).

4.5. Barry Callebaut

The Barry Callebaut Group, which is headquartered in Switzerland, has been producing chocolate and cocoa products. The company has a facility in Eskisehir and has joined a multi-stakeholder project by the International Labour Organization (ILO). The project is called 'Elimination of the worst forms of child labour (WFCL) in seasonal commercial agriculture in hazelnut harvesting in Ordu and the selected provinces of West Black Sea Region'. Besides the company expecting some criteria from its suppliers such as:

Ensuring healthy and safe labour conditions and providing decent living conditions for migrant workers,

Promoting the use of good agricultural practices, including good environmental practices,
Increasing the efficiency of water use, e.g. through trickle irrigation,
Ensuring biodiversity preservation

5. Discussion

In the past business, cost advantage were only considered while supplying needed materials but now there is increasing consumer and stakeholder expectation for firms to be fully accountable for their business operations (Ashby, Leat & Hudson-Smith, 2012, p. 497).

Responsible sourcing, as an extension of the concept of CSR, can be broadly defined as voluntary commitment by companies to take into account the social and environmental consideration when managing their relationships with suppliers. Businesses are able to both ensure the quality and sustainability of their raw material and integrate environmental and social considerations into the supplying process via responsible sourcing practices.

As mentioned earlier, Turkey is the world's leading producer and exporter of hazelnuts, accounting for around 75% of the world's supply. Turkey's export amount hit an all-time high in 2015 with 2 billion 833 million dollar (Turkey Exporters Assembly, 2016). Hazelnut fields, widely spread in the eastern Black Sea coasts of Turkey. There are important regional differences in terms of productivity in the industry. For example, hazelnut productivity is lower in the Eastern Black Sea than the Western Black and the Marmara Region. Some of the reasons of low efficiency are old hazelnut trees, improper fertilisation and lack of knowledge about modern techniques (Trabzon Exchange Commodity, 2015).

Turkey has a significant position in the production of hazelnut globally. However, there is a few business which has responsible sourcing practices despite the strong competitive position. The main reason for this is because most of the business in the industry are small sized and usually are not the final-product producer. Still, it is obvious that small business is required to engage in such responsible activities.

However, major foreign players are already located in the Turkish hazelnut industry. Especially, Ferrero is making significant efforts to supply its raw materials by considering economic, social and environmental concerns throughout the supply chain. The company's intend is to guarantee and further improve the quality of its leading raw material, hazelnut, and thus, protect its complete advantage due to these efforts. Moreover, the company is trying to make its supply chain more transparent and traceable because transparency has become increasingly important in food industry, as consumers want to know the origin of products. The possible next step of the company is the launching of contract farming. It has also many attempts to improve working conditions and to prevent child labour.

In recent years, there is an increase in awareness of child labour in society. ILO has a project named elimination of the WFCL in seasonal hazelnut agriculture in Turkey with its partner CAOBISCO (The Association of Chocolate, Biscuits and Confectionery Industries of Europe). This project has led to draw more attention to child labour issue in the industry.

Nestle, which is another foreign player has great effort in terms of responsible sourcing with its two important suppliers (Olam-Progida and Balsu). Most of the company activities related to responsible sourcing are based on training of farmers and preventing child labour.

Responsible sourcing activities of other businesses that are determined in the industry are very limited. Still some of the company, especially exporting companies, make effort to prevent child labour. For instance, one of the local company in Ordu organised a contest among the primary and middle school students with the theme of 'Children belong to the playgrounds, not the hazelnut grounds'.

According to the findings of the research, responsible sourcing practices are made by mostly foreign-based companies. However, unique factors of the industry make it difficult for companies to supply responsibly. Major unique factors are:

Hazelnut production efficiency is very low in Turkey (Siray, 2013, p. 7). Hazelnut production is made using the traditional methods rather than the modern methods.

Hazelnut cultivation is generally seen as a family heritage. A considerable amount of owners of hazelnut orchards reside elsewhere and they just come during harvest. Thus, the awareness of hazelnut producers about sustainability is low because they consider hazelnut production as an extra job.

There are many intermediary buyers and crackers, so connectivity and traceability are low and it is very difficult to establish transparent supply chains.

There are several problems relating to working conditions. According to Fair Labor Association, issues related to responsible sourcing are:

Lack of employment records

Long hours of work

Child labour

Wage discrimination between migrant and local workers

Transport safety's risk

All these problems play a role as a challenge for companies in the industry and push them to act more responsible. It is also important that sustainability effort in hazelnut industry fosters rural development in areas where rural–urban migration is significant.

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