

2

The Changing Consumer and the Emergence of Eco-consumption

*Natalia Rohenkohl do Canto, Marcia de Barcellos, Jane Eastham
and Luis Kluwe Aguiar*

Introduction

This chapter examines the challenges facing the food industry in developing an alternative sustainable supply chain. Consideration is given to the inhibitors in the development of alternative styles of production.

In ethical sustainable production, one key requirement is that there is a shift from conventional consumption, with all the issues of health, environmental impacts from waste food, packaging, and natural resources, towards more ethical consumption. Whilst at present the consumption of high animal protein diets, processed food, ready meals and fast food represents the mainstream, the question becomes, given current technology and consumer ethics, can the food chain serve sufficient food in an ecologically ethical manner?

This critical question is given in the context an anticipated population of circa 9 billion by 2050, and a demand for increased land productivity and processing. Farmers, primary producers, processors and distributors will be expected to deliver more with less. Although at present this seems a major challenge, doing more with less may be to the financial benefit of all parties.

The chapter explores some of the implications for businesses and supply chains of developing sustainable supply chain management practices. There is a

particular focus on the emerging eco-consumer and the challenges faced in developing eco-innovation projects. A case study of Econatura, a Brazilian example of an eco-innovative project, is explored to that purpose.

Consumer interests and concerns: the eco-consumer

A key consumer concern relates to the impact of consumers on the environment, from which there has emerged a particular alternative consumption model – that of the ‘eco-consumer’. In addition, fuelled by a constant flow of food scares and, to some extent, issues of food security, consumers have become more aware of not only food security from the position of greenhouse gases (GHG) but also of the distinctions between organic, local and fair trade. Some of the key concerns include those of food integrity and traceability, and the issue of food adulteration and malpractice by the players within the food chain. In this section, the chapter will examine one of the areas of consumer interest and the emergence of the eco-consumer. The issue for the food supply chain is how this might be delivered.

In recent years, growing concerns about environmental issues and the need for a more sustainable means of producing food have attracted the attention of many stakeholders, including consumers, within the food chain. This has been exacerbated by the predicted growth in the global population and the problems of food loss and food waste. In this context, and since all the activities that take place along a food chain have a high impact on both the environment and society, a more sustainable approach to food production has become very topical for managers. As a result, it is important to reduce the negative externalities on people, the planet and the economy, from production, processing, retailing and post-consumption in order to make the food chain more sustainable .

Food companies have become more aware of the growing concerns consumers have about how they have exploited the natural environment, extracting often non-renewable resources. Furthermore, there is increasing recognition that in safeguarding the environment, firms are able to benefit financially through reducing the costs of production. Consequently, some food companies have attempted to counterbalance the negative externalities that could detrimentally affect their economic performance. The Carbon Trust believes that supply chains that have embedded sustainability as part of their business strategy are actually ‘shaping the business models of the future’. Managers have, consequently, a key role to play in improving resilience and resource use efficiency to achieve competitive advantage. It is suggested that these could be achieved through collaborative procurement, supply chain optimization and process innovation (Carbon Trust, 2014). Thus the concept of eco-innovation has increased in significance for food managers, as it combines maximizing economic efficiency with environmental

gains. The Organisation for Economic Co-operation and Development defined eco-innovation as “the development of products, processes, marketing methods, organizational structure, and new or improved institutional arrangements, which, intentionally or not, contribute to a reduction of environmental burdens in comparison with alternative practices” (OECD, 2009: 2).

In the food chain, eco-innovation can be achieved through: the use of raw materials such as organic or free range; the use of recyclable or intelligent packaging; manufacturing processes that use energy and water efficiently; and lean logistics or distribution systems that use alternative shorter channels linking end-consumers more directly and/or reduce carbon footprint by reducing empty return journeys. It can also be achieved through certification systems such as traceability or origin, eco-labels, fair and solidarity trade, ISO 14001; and processes with low carbon footprint (Bossle, 2015:82).

De Barcellos *et al.* (2015) proposed that eco-innovation represented a change in philosophy regarding how businesses are conducted. Figure 2.1 below attempts to represent how innovation and eco-innovation are promoters of change. If change is to be implemented and return positive results depends upon company’s internal capabilities.

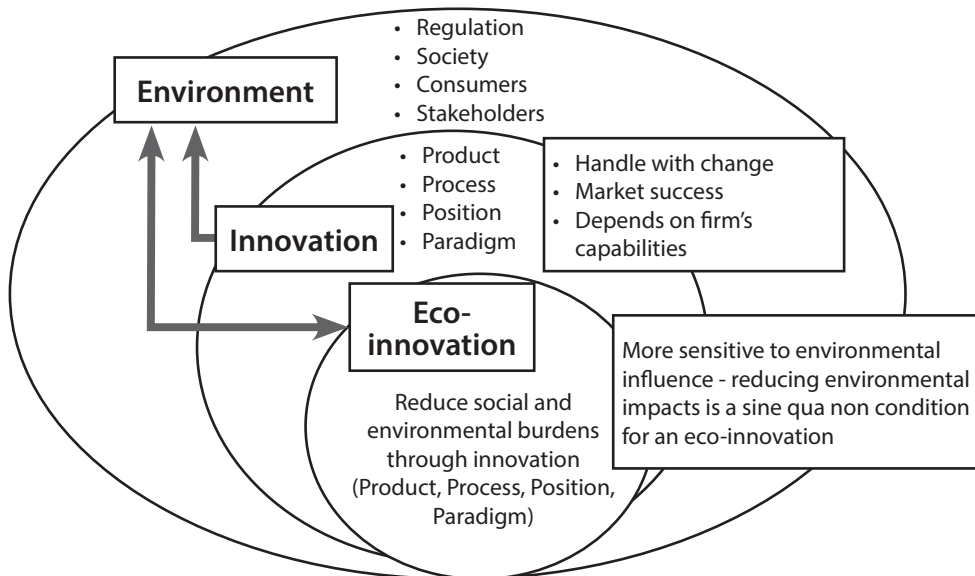


Figure 2.1: Innovation and eco-innovation. Source: De Barcellos *et al.* (2015)

To realize better results from the supply chain, companies have to be engaged with all stakeholders in an attempt to manage it more sustainably and innovatively. Seuring and Müller (2008: 1700) suggested this could only be achieved by employing sustainable supply chain management (SSCM), since it was about ‘the management of materials, information and capital flows as well as co-operation

among companies ultimately encompassing all three pillars of sustainability: economic, environmental and social’.

In this next section we explore how SSCM is used to aid eco-innovation practices. It directs the analysis to barriers and opportunities to eco-innovation in SSCM, in an attempt to alert stakeholders of the need to develop strategies to promote and facilitate eco-innovation. An example of a Brazilian grape juice chain where eco-innovation is embedded in its practices will be used as a case.

Eco-innovation and sustainable supply chain management

A sustainable supply chain (SSC) can be considered one which delivers positive benefits, economically, socially and environmentally. In turn, the concept of sustainable supply chain management (SSCM) emphasizes decisions or management attitudes, which enable the supply chain to be more sustainable (Pagell and Wu, 2009). Among the existing SSCM models, the models of Seuring and Müllers (2008) and Pagell and Wu (2009) offer a simplicity in their illustration of an eco-innovative process (Beske, 2012).

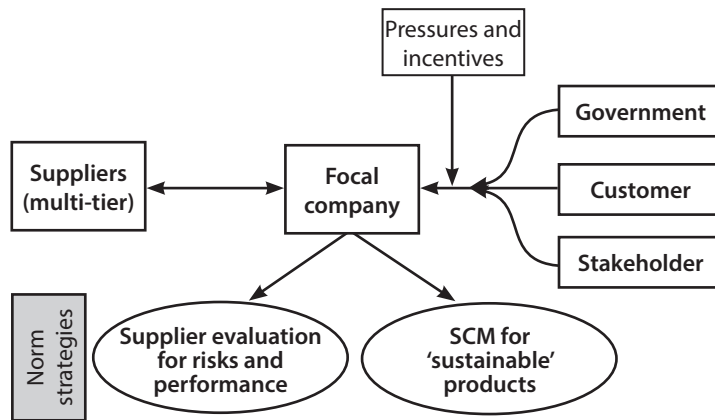


Figure 2.2: Seuring and Müller's (2008) model

Seuring and Müller's (2008) as illustrated in Figure 2.2 suggest that when focal companies, for example a bakery, offer a line of organic bread following customer demand, it can adopt an 'SSCM strategy for its sustainable products'. To do so, there is a necessity that the baker should collaborate with an organic flour miller, who in turn, would have to source the wheat from organic farmers. Alternatively, the same bakery could consider to better manage supply chain environmental risks and source its raw materials from ISO 14001 certified suppliers. In either case, buyers need to encourage suppliers to ensure the sustainable goals. The