Exploring the Opportunities for Sustainable Food Labelling - A Supply Chain Perspective

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Abstract

This study examines supply chain members' beliefs regarding the opportunities to develop foods produced under an "eco-friendly" label. The study involved in-depth interviews with 17 Australian senior managers in food organisations who have marketing responsibilities and who have expert product and consumer knowledge (c.f. Clift and Wright 2000, Peattie 2000). The findings suggest that respondents have widely different beliefs regarding the meaning of "eco-friendly" and believe that claims regarding "eco-friendly" characteristics are difficult to substantiate. They further suggested that "eco-friendly" considerations are not a major influencer of consumer food purchase decisions at present and thus "eco-friendly" production was not a strategic focus of their companies. Respondents felt that "eco-friendly" labelling would not be successful until consumers' value "eco-friendly" food attributes.

Introduction

A supply chain approach to eco-labelling of food would entail a comprehensive strategy in which all stakeholders are involved as the actions of an intermediary will influence the final outcome of the eco-friendly credentials of the product (Zhang et al. 1999;van der Grijp and den Hond 1999). Thus, eco-friendly claims are difficult to substantiate especially as they include immediate and long-term environmental impact of the product and the production process (Business for Social Responsibility 2001; Zhang et al. 1999). Past studies have canvassed supply chain members regarding the adoption of environmentally sustainable production and processes (c.f. Clift and Wright 2000, Peattie 2000).

It has been argued that environmentally sustainable production could increase profits (Business for Social Responsibility 2001; Menon and Menon 1997) and reduce product life cycle costs (Beamon 1999; Porter and van der Linde 1995). Integration of an environmental requirement in all supply chain activities also enables channel members to exercise greater control over the credence of the overall system (Backshall 2000; Business for Social Responsibility 2001). While there have been suggestions that eco-schemes could be voluntary and self monitored, past studies indicates that, given the importance of credence qualities, it may be necessary to establish mandatory systems (van der Grijp and den Hond 1999).

Supply Channel Members

Past studies on eco-friendly production and marketing initiatives have concluded that stakeholders beyond channel members influence activities (Blackshaw 2000; Vis and Standish 2003; Walley et al. 2000). To be effective eco-friendly production and marketing must be the outcome of collaborative initiatives of producers, processors, retailers, wholesalers, consumers, special interest groups and governments.

Producers and processors have the most impact on supply chain outcomes (Bhat 1993; Backshall 2000) and within the food sector producers are highly customer oriented and focus on meeting market needs (Clift and Wright 2000). As such, food producers/marketeers will integrate eco-friendly product attributes if consumers value these attributes (Peattie 2001). For producers eco-labelling would enable product differentiation (Dosi and Moretto 2001; Lonergan et al. 2001) and create competitive advantage in the market (cf McEachern, and McClean 2002). Eco-friendly initiatives could also generate cost savings, increase production efficiency (Porter and van der Linde 1995; Vis and Standish 2003) and consequently increase profits. However, differentiation strategies based on eco-friendly attributes may not be easy to implement because it is difficult to authenticate that the entire supply chain used eco-friendly protocols (van der Grijp and den Hond 1999). The believability of eco-friendly claims will hinge on there being processes to track and demonstrate that the entire supply chain adopted eco-friendly processes.

Wholesalers, distributors and retailers of products labelled as eco-friendly would have a different role in any eco-labelling program, as compared to producers and processors (Peattie 2001). Channel power enables resellers to influence producers' behaviour. For example, Starbucks Coffee mandates that suppliers conform to the company's eco-standards such as sustainable sourcing and recyclability of wastes. Retailers adopt eco-friendly strategies where it is seen to deliver some competitive advantage through being able to target consumers who value eco-friendly attributes (Bjørner 2004; McEachern and McClean 2002; Roe et al. 2001; Thogersen 1999). However, it is unclear whether resellers are motivated by altruistic reasons or by a desire to increase profits (Bigsby and Ozanne 2002; Kaberger 2003; Ottman 1998, Paulos 1998; Roarty 1997).

Consumers have generally responded positively to eco-labelling claims (Polonsky et al. 2002), although consumers have not embraced consumption of environmentally responsible products (Paulos 1998; McEachern and McClean 2002). It is also not clear whether consumers will pay the price premium that is needed to make significant production changes (Mori Polls 2003), which may only eventuate when eco-attributes are perceived to be valuable (Laroche et al 2001). Eco-marketing initiatives therefore need to be credible (Bjørner et al. 2004; Ozanne and Vlosky 2003; Tails et al. 2002), especially as consumers are becoming more environmentally knowledgeable (Maronick and Andrews 1999).

Special interest groups (SIGs) and government have the capacity and power to act as agents of change in eco-developments. SIGs frequently raise issues of concern within the media and this generates consumer interest, awareness and fosters political action (Ottman 1998). SIGs can also propose codes of acceptable conduct or develop codes with industry (Roe et al. 2001). SIGs can independently monitor performance and SIG sanctioned labels sometimes are more trusted than other efforts (Eco-Label 2004). Governmental action, on the other hand, can mandate changes to behaviour, although they also might propose voluntary eco-programs that they manage. Unfortunately, government programs require extensive resources for their support and without this support the programs can become ineffective.

Methodology

In-depth semi-structured interviews were undertaken with a convenience sample of 17 members of the food supply chain. Questions were asked to examine respondents' views regarding the definition of sustainable food, the perceived need for labelling and their views regarding possible barriers and drivers relating to system-wide sustainability food labelling programs. Key respondents were identified within each targeted organisation and these individuals had to be involved in the movement of food through the supply system, be knowledgeable of the strategic directions of the company, and be substantially involved in marketing strategy and planning initiatives.

In some cases more than one respondent was interviewed within an organisation and respondents' organisations sometimes were involved in multiple aspects of a supply chain. For example, in some cases producers were also distributors. The roles undertaken by respondents included: Manufacturer - 5; contract packer - 1; Distributor – 10; importer and exporter – 1; Consultant - 1; Producer 3; Food retail/wholesale 3; R&D facilitator 1. The structured interview allowed us to identify commonalities in themes and the responses were subjected to thematic analysis.

Study Findings

The interviews covered a range of issues in regard to the production, marketing and labelling of sustainable food. Based on an analysis of the common themes in the responses, in this paper we discuss three main areas identified by respondents: 1) clarity of meaning regarding sustainability and other related terms; 2) marketing initiatives associated with any sustainable branding; and 3) perceived drivers of change needed for a 'sustainable' brand to be developed and supported through the supply system.

Clarity of Meaning

Respondents generally felt that there was clear understanding of the term organic and that there were strict protocols for accrediting organic products. Some respondents commented that the accreditation processes for organic products sometimes involved multiple bodies and they (i.e. respondents) where not sure whether the standards applied were rigorous. While consumers, where generally aware of organic foods, there was a perception that there was confusion regarding the value propositions of organic products. Several respondents suggested that having a centralised coordinating body accrediting food as organic would clarify the issue significantly.

There was less understanding of other terms such as green, sustainable and environmentally responsible food products and it was suggested that these had "*fuzzier meanings*" for all supply chain members, including consumers. One respondent suggested *"I am not sure what environmentally friendly means"* and several others suggested that terms were interrelated, i.e. "*organic means sustainable*". Respondents were not aware of any standard definition of green or sustainable food products in Australia, although a few respondents were "*vaguely aware*" of such schemes elsewhere. Respondents belied that any potential "green" or "sustainable" food label would lack credence value for consumers and supply chain members and might be seen as greenwash and contribute to further clutter in an already complex market. Sustainability might have some meaning with regard to food products if there were some well defined accreditation criteria, although this was not seen as possible given the breadth of issues associated with sustainability.

Several respondents indicated difficulty in applying a "cradle to grave approach" to sustainability for food products. They claimed that there are core "food" issues as well as less significant packaging, processing and distribution issues that would need to be considered. For example, one retailer had an active recycling program with packaging and several growers were experimenting with water saving technologies. Both respondents indicated that they would not use these activities to promote themselves as sustainable.

Marketing Initiatives

Most respondents felt that final consumers and supply chain members have difficulty in appreciating the utility of vague concepts such as sustainability or green. As such, these terms would provide limited, if any, competitive advantage. Respondents indicated that they were aware that niche eco-segments might exist but respondents believed that at present this segment was more concerned with organic attributes rather than eco-friendly attributes. Some respondents suggested that consumers' interest in healthier eating options might translate into future market demand.

Developing eco-products were seen to be constrained by competition from the existing organic market, higher production costs, diseconomies of scale and possible shortages of eco-produced products. For example, all the retailers interviewed suggested that consumers were unwilling to pay for additional costs associated with organic products and that this would most likely be the case for eco-food products as well, unless there was a perceived higher value to sustainable foodstuffs, which did not appear to be the case presently.

Respondents all agreed that any increase in consumer demand would result in eco-food innovations, i.e. greening of the food supply system was demand driven. There was some suggestion however, that while demand might be increasing it would take a substantial time to result in supply system changes, for example one respondent suggested over the next 20 years demand for organic food would only increase to about 5 to 8 per cent of the market. This would be complemented by a reduction in costs and increased reliability of supply, thereby supporting growth of both organics and sustainable foods.

Respondents generally agreed that a broadening of consumer perceptions of 'natural foods' would also need to take place for demand to grow, as natural products tend to be more variable in size, color etc. Thus there would need to be a shift away from food as a *'commodity,'* if supply chain members are to develop specialised offerings and brands. All of these factors were suggested to restrict the marketability of sustainable-labelled food products.

Producers suggested that in some situations the supply system itself precluded the development of innovative foods because of the high costs of getting new products to consumers through traditional retail channels. Higher retail and consumer prices put downward pressure on demand, which constrained producers developing and marketing organic, sustainable or environmentally friendly, food products.

Drivers of change

While there was a consistent view that "*consumer awareness is the biggest driver*" within the supply chain, none of the respondents had undertaken formal marketing research into how consumers might respond to green/sustainable food. The retailers indicated that they track reports in trade journals regarding growth in organic and sustainable food production and that information that was collated was passed on through the supply channel back to producers, a point confirmed by the producers.

Most producers and intermediaries felt that retailers were critical in driving changes to the supply system through their quality assurance systems. Meeting major retailers' standards was essential if suppliers were to access consumer markets, as major retailers control up to 70% of the fresh food sector in Australia. It was suggested that if retailers wanted to integrate standards related to sustainability they could do so and suppliers would be forced to comply, or lose out on critical markets. Although, discussed previously, there was no perceived competitive advantage for retailers to taking such action because of a perceived reluctance of consumers at present to pay for these “value-added” attributes.

Some respondents commented that governments could take a more active role in developing and promoting sustainable food production through legislative mechanisms. Respondents generally felt that this did not appear to be a core focus of government policy at present and would possibly not become a focus, unless there was substantial pressure from consumers, the general public or interest groups. The special interest groups were seen to be too fragmented focusing on very specific issues such as genetically modified foods and the use of water in food production, rather than broader sustainability in the Australian food sector.

It was suggested that if the government were to put in place sustainable food programs there would be substantial benefits. These included having well defined standards, with high credence value, as well as monies to promote programs to consumers. Mandatory governmental standards or requirements would also place all suppliers in the same situation, i.e. they would all need to meet the same requirements and it would be a level playing field. Thus it would not be the case of one producer innovating on his or her own.

Conclusions and Implications

The results of the study suggest that the branding of food as ‘eco-friendly’ or ‘sustainable’ will be unlikely to occur unless there are significant changes in demand as well as supply. In addition, sustainable production, like organic production, was seen to be unable to serve mass markets, something that is critical when dealing with complex supply chains focusing on mass retailing. There appears to be some interest from some suppliers in developing niche food products; this was not seen as a wholesale option for suppliers without substantial changes within the entire supply system.

The perceived lack of clear meaning and understanding of green and sustainability seems to be an impediment. It is perceived that such branding will have limited ability to communicate value to consumers, because of the equivocal meaning of the terms. There is also a perception that the segment of eco-consumers is ill-defined segment and these consumers do not see sustainable food as a core component of “responsible” consumption.

This study did not examine consumer attitudes directly. Given the importance of demand in driving change, more research would be needed to better understand how consumers might react to eco-food labels and whether there are any factors that might result in shifts in their consumption. Past research suggests that clarity of meaning and confidence in marketing programs will be essential. A multi stakeholder approach will most likely be needed if broad based sustainability programs are to be successful within the food supply chain.

There is also ample room for public policy initiatives. These could potentially focus on supply side issues, such as reducing costs through subsidies or mandating responsible food production processes. Governmental schemes could also be developed to establish clearly defined meanings to green and sustainable food. Of course there would also need to be a systematic social marketing campaign targeting both supply chain members and consumers. In this way governmental action would be integrated across issues.

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