

INFORMATION OR CONFUSION ? THE ROLE OF ECOLABELS IN AGRIFOOD SECTOR

Antonicelli Margaret*, Calace Donato*, Morrone Domenico*, Russo Angeloantonio*,
Vastola Vincenzo*

*Lum Jean Monnet University, Department of Management, S.S. 100 Km. 18, 70010 Casamassima
(Ba), Italy, e-mail: antonicelli@lum.it, calace@lum.it, morrone@lum.it, russo@lum.it,
vastola@lum.it

Abstract

This work is focused on the analysis of ecolabelling in the agri-food sector. Actually ecolabelling is a very important practice in brand policy. It is an example of a CSR strategy aiming at communicating to differentiate products and services, signalling their environmental and social characterization.

The first step is an overview of the literature dealing with the key points, the effectiveness and the limits of the ecolabeling phenomenon. Consequently, we propose a descriptive analysis of 148 agri-food ecolabels extracted from the Elabel Index.

Results indicate that it is possible to register an interesting development of this practice, above all in the last decades. However it is necessary to make order in the actual context, being sometimes not so clear, considering the high number of ecolabels.

Key words: CSR, agri-food, ecolabelling, sustainability, communication

INTRODUCTION

Sustainability issues are progressively being embedded into corporate practices, becoming “a mantra for the 21st century” (Dyllick and Hockerts, 2002). Over the years, higher sensibility to this topic has been translated into the “development and implementation of a wide range of instruments for measuring, evaluating and comparing environmental performance”(Proto, Malandrino, and Supino, 2007, p. 669). In this sense, ecolabels have become a useful tool to summarize concisely products characteristics related to sustainability. “Eco-labelling seeks to inform consumers about the effects on the environment of the production, consumption and waste phases of the products/services consumed. Consequently, it seeks to fulfil two objectives: (i) to provide consumers with more information about the environmental effects of their consumption, generating a change towards more environmentally friendly consumption patterns, and (ii) to encourage producers, governments and other agents to increase the environmental standards of products/services”(Galarraga Gallastegui, 2002, p. 316-317).

According to International Organization for Standardization ISO, different types of ecolabels can be classified as follows:

- Type 1 - a voluntary, multiple-criteria based, third party program that awards a license which authorises the use of environmental labels on products indicating overall environmental preferability of a product within a product category based on life cycle considerations;
- Type 2 - informative environmental self-declaration claims;
- Type 3 - voluntary programs that provide quantified environmental data of a product, under pre-set categories of parameters set by a qualified third party and based on life cycle assessment, and verified by that or another qualified third party.

Although ecolabels attempt to decrease the market inefficiency of information asymmetry (Delmas and Grant, 2014), with the express purpose of reducing stakeholders' insecurity about the soundness of green product prerogatives (Pedersen and Neergaard, 2006), actually there is short evidence supporting their effectiveness.

Different consumer characteristics over the "willingness to pay" attitude towards ecolabeled products have been widely studied by existing literature. Differently, our aim is to analyze structural and upstream features hindering full accreditation and recognition of ecolabels.

Then, our focus is on the agri-food industry, one of the most debated sector with regards to sustainability, because of its visibility and its evident implications in term of social and individual concerns. Not by chance, almost one-third of the total amount of worldwide ecolabels is concentrated in agri-food sector.

The reminder of the paper is organized as follows. First, we review literature production over the main aspects hampering ecolabels effectiveness. Then, our analysis presents evidences on the spreading of ecolabel initiatives among temporal and geographical dimensions, together with insights on the peculiarities.

LIMITATIONS TO EFFECTIVE COMUNICATION OF ECOLABELS

Great attention devoted to ecolabels has been diffusing already since the 80s, following the wave of command and control measures being enacted by governments (Jordan et al., 2003). Indeed, the first ecolabel initiatives, as the German Blue Angel (1977) and the Nordic Swan (1989), were introduced by governments willing to contribute to a market take-up of certifications addressed to sustainability, at the same time pushing non-state bodies to follow in this direction (Gulbrandsen, 2006). Labeling expressing social and environmental themes can then result in influencing consumer

brand choices. It has the potential to increase the profitability of sustainability oriented companies offering “green” products manufactured following more respectful production techniques (Bjørner, Hansen, and Russell, 2004). In this sense, a price premium attached to ecolabeled products acts as a requital for the internalization of externalities (Lampkin and Padel, 1994). In addition to the profit driven rationale underlying the rise of such phenomenon, political consumerism provides a different driver (Micheletti et al., 2004). In particular, it inverts the perspective from producers to consumers. Institutional pressures (Di Maggio & Powell, 1983, Scott, 1995) push firms to adopt and show, by means of a synthetic and representative information as a label, ethical behaviours addressing the triple bottom line of economic, social and environmental issues, in order to prevent themselves from boycotts of their products and defend their brand and reputation.

Notwithstanding the great potential of ecolabels towards sustainability, and the nature of their drivers, being either profit oriented or institutional, their effectiveness appears to be impaired by several upstream features originating an incomplete recognition by consumers. As a result, even sustainability sensitive consumers do not trust and buy eco-labelled products, originating the so called „attitude behaviour gap” (Boulstridge, Carrigan, 2000).

Ecolabel’s issuer characteristics, as the features of the ecolabel itself, are determinant in allowing products to be recognized as credible and effective in showing truthfulness of responsible attitudes. Evidences show that NGOs are acknowledged to be more credible than other subjects as a guarantor and issuer of ecolabels (Nilsson, Tunçer, and Thidell, 2004; De Pelsmacker *et al.*, 2005). Furthermore, if ecolabels are backed by manufacturers, then falling in the Type II definition, credibility declines whereas confusion among consumers rises (Delmas and Grant, 2014). Similar results are presented when ecolabels are implemented by low quality producers (Bourgeon and Coestier, 1998). Finally, if a third party audit may improve the credibility of ecolabels, then it would turn in a necessary but not sufficient condition when ecolabels do not allow consumers to identify such features (Pedersen & Neergaard, 2006).

Indeed, when the information regarding „green” product features is not completely accessible and comprehensible, the virtuous circle stringing environmental responsible firms and consumers is compromised with consequence that companies are no longer encouraged in investing in their sustainability efforts (Iraldo, Testa, and Bartolozzi, 2014). Hence, if the characteristics of ecolabeled products translate into „credence qualities,” (Thompson *et al.*, 2010), then their attractiveness „may depend on

whether, besides the label, extra information is provided or not” (De Pelsmacker *et al.*, 2005, p. 516).

Furhermore, the nature of the ecolabel itself can have serious implications on consumer reactions, when precisely considering differences among the broadness of their scope. Namely, monodimensional rather than multidimensional labels, which address a precise and stringent social or environmental issue, have been recognized to be suffering of diverse shortcomings as diverting and confusing stakeholders. Such ecolabels induce consumers to believe that a firm operates completely more sustainably than its competitors, while actually failing to really shortening information asymmetry (Darnall and Aragon-Correa, 2014).

Lastly, ecolabels have seriously profirerated since their first appearance in 40s, resulting in a huge amount of examples covering different scopes and moving from regional, national to inernational areas. This great amount of labels has rather flooded consumers causing disorientation (Chrysochoidis, 2000; Hutchins and Greenhalgh, 1997; Nadai, 1999), which results to be futher magnified by the consequent presence of ecolabels competing in same fields (Harbaugh *et al.*, 2011; Leire & Thidell, 2005)

AGRIFOOD ECOLABELS PROLIFERATION

There are various lists of ecolabels. One of the most representative indexes, in the international context, is the “Ecolabel index”.

Ecolabel Index is the largest global directory of ecolabels, currently tracking 463 ecolabels in 199 countries, and 25 industry sectors¹. Ecolabel index is utilized by leading companies and institutions around the world including: American National Standards Institute (ANSI)², Capgemini³, The Organisation for Economic Co-operation and Development (OECD) and the United Nations Environment Programme (UNEP)⁴, DEKRA Industrial,

¹ Source: www.ecolabelindex.com .

² The American National Standards Institute (ANSI) empowers its members and constituents to strengthen the U.S. marketplace position in the global economy while helping to assure the safety and health of consumers and the protection of the environment. The Institute oversees the creation, promulgation and use of thousands of norms and guidelines that directly impact businesses in nearly every sector: from acoustical devices to construction equipment, from dairy and livestock production to energy distribution, and many more. Source: www.ansi.org .

³ Capgemini is one of the world's foremost providers of consulting, technology, outsourcing services and local professional services. It is present in over 40 countries with almost 180,000 people. Source: www.capgemini.com .

⁴ The United Nations Environment Programme (UNEP) is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations

FedEx, World Resources Institute, US Federal Government's General Services Administration (GSA) and Environmental Protection Agency (EPA).

The analysis made in this paper considered the ecolabels belonging only and exclusively to the agri-food category. They are, as of July 2015, 148. They have a relevant importance in general, being almost one third of the total ecolabels registered. It is also useful to specify that some of them are considered multidimensional, appearing in more than one category (i.e. food and energy or food and textile, etc.). These data are the basis to suggest some considerations and reflections.

A first investigation could be regarding to the continents where they were introduced and their geographical spreading. The analysis shows as the developed countries account for the 80% of them, since there are two continents, America and Europe with 122 ecolabels. In particular, America has 63, with the USA alone that counts the presence of 51 labels, while Europe has 59, with the relevant support of United Kingdom (14) and Germany (9). At the end of the classification there are the emerging area of Asia (13), Oceania (10, 6 of which only from New Zeland) and, in last position, Africa (3).

Therefore the outlook is the following:

Table 1

Geographical concentration of agrifood ecolabels

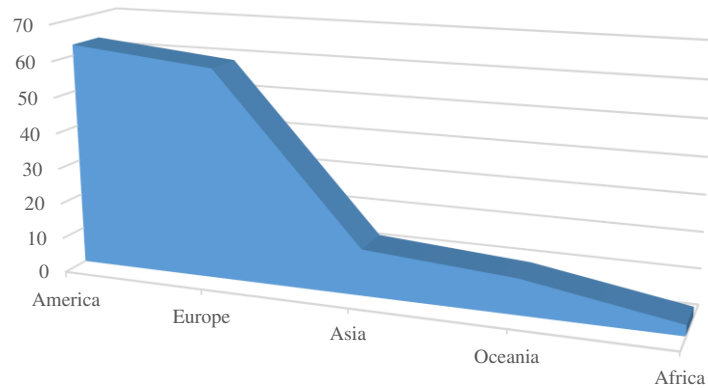
<i>Continent</i>	<i>N. of ecolabels</i>	<i>%</i>
America	63	42.6
Europe	59	39.9
Asia	13	8.8
Oceania	10	6.8
Africa	3	2.0
Total	148	100

system and serves as an authoritative advocate for the global environment. Source: www.unep.org.

The concentration is below represented:

Graphic 1

Geographical concentration of agrifood ecolabels



These ecolabels could have a relevant importance not only in the national context, but also beyond national borders. It is possible to find the diffusion of 63 of them not referred exclusively to the country of origin. They could mark products or services available abroad, in the close territories or in other continents too.

Here it is the table and the graphical representation:

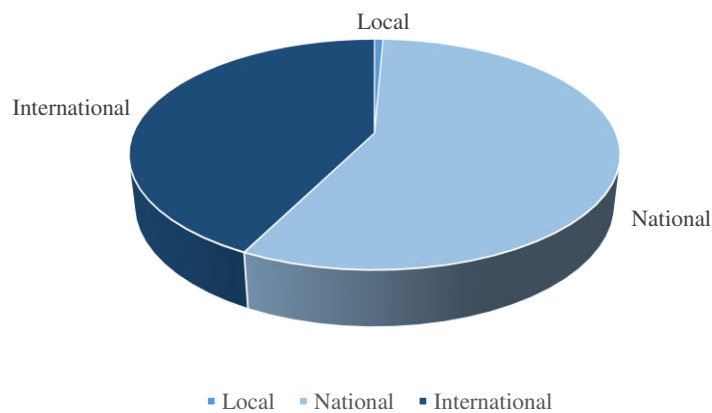
Table 2

Geographical diffusion of agrifood ecolabels

<i>Diffusion</i>	<i>N. of ecolabels</i>	<i>%</i>
Local	1	0.7
National	84	56.8
International	63	42.6
Total	148	100

Graphic 2

Geographical diffusion of agrifood ecolabels

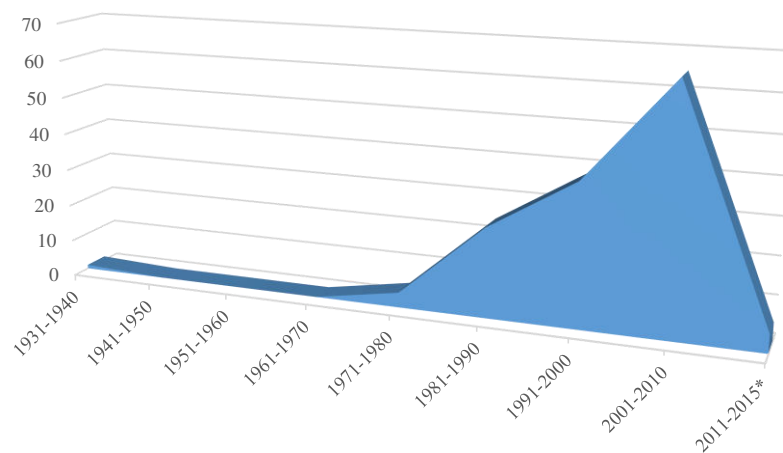


It is the evidence of the growing “global” importance that can be referred to agri-food products and how they are present in international markets, where the consumers’ attitude to environmental and social aspects is increased.

This last concept can be emphasized by a temporal analysis. Observing the different periods when agri-food ecolabels were born, there is a strong concentration in the last decades.

Graphic 3

Temporal concentration of agrifood ecolabels



CONCLUSION

This work shows clearly the positive acceptance of ecolabelling from private and public organizations in a global and worldwide perspective, observing in a few decades the birth and the development of 148 ecolabels.

However there is the necessity of an important work to simplify the message and the information related to this practice. The final results evidence an objective proliferation of ecolabels, sometimes verified by third parties, and consequently more warranted, and other times referred only to a company „self declaration”, with a serious risk of green washing policies. This framework can not be a reinforcement for the development of ecolabelling, especially if it is considered in a continuous and profitable relationship with stakeholders.

Data suggests a more environmental and social orientation in the developed countries, since they count the highest presence of ecolabels, even if a little presence is also verifiable in developing areas.

A good proposal can be the identification of such measures or guide lines to simplify the comprehension of ecolabels, including both social and technical aspects. The confusion until now generated can be, at the contrary, a real threat for these messages that declare a particular attention related to sustainability in all its spheres.

A future development of this research can be a deeper analysis of the confusion generated, investigating the drivers that can really influence the customer's reaction.

REFERENCES

1. Bjørner, T. B., Hansen, L. G., & Russell, C. S. (2004). Environmental labeling and consumers' choice—an empirical analysis of the effect of the Nordic Swan. *Journal of Environmental Economics and Management*, 47(3), 411–434.
2. Bourgeon J, Coestier B. (1996) Private versus public product labeling. THEMA Working Paper, Université de Paris X, Nanterre
3. Chrysochoidis, G. (2000). Repercussions of consumer confusion for late introduced differentiated products. *European Journal of Marketing*, 34(5/6), 705-722.
4. Darnall, N., & Aragon-Correa, J. a. (2014). Can Ecolabels Influence Firms' Sustainability Strategy and Stakeholder Behavior? *Organization & Environment*, 27(4), 319–327.
5. De Pelsmacker, P., Janssens, W., Sterckx, E., & Mielants, C. (2005). Consumer preferences for the marketing of ethically labelled coffee. *International Marketing Review*, 22(5), 512–530.
6. Delmas, M. a., & Grant, L. E. (2014). *Eco-Labeling Strategies and Price-Premium: The Wine Industry Puzzle. Business & Society* (Vol. 53).
7. Delmas, M. A., & Grant, L. E. (2014). *Eco-Labeling Strategies and Price-Premium: The Wine Industry Puzzle. Business & Society* (Vol. 53).
8. DiMaggio, P., & Powell, W. W. (1983). The iron cage revisited: Collective rationality and institutional isomorphism in organizational fields. *American Sociological Review*, 48(2), 147-60.
9. Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130–141.
10. Galarraga Gallastegui, I. (2002). The use of eco-labels: a review of the literature. *European Environment*, 12(6), 316–331.
11. Gulbrandsen, L. H. (2006). Creating markets for eco-labelling : are consumers insignificant ? *International Journal of Consumer Studies*, 30(5), 477–489.
12. Hutchins, R. K., & Greenhalgh, L. A. (1997). Organic confusion: sustaining competitive advantage. *British Food Journal*, 99(9), 336-338.
13. Iraldo, F., Testa, F., & Bartolozzi, I. (2014). An application of Life Cycle Assessment (LCA) as a green marketing tool for agricultural products: the case of extra-virgin olive oil in Val di Cornia, Italy. *Journal of Environmental Planning and Management*, 57(1), 78–103.
14. Jordan, A., Wurzel, R. K., & Zito, A. R. (2003). Has governance eclipsed government? Patterns if environmental instrument selection and use in eight states and the EU (No. 03-15). CSERGE Working Paper EDM.
15. Nilsson, H., Tunçer, B., & Thidell, Å. (2004). The use of eco-labeling like

initiatives on food products to promote quality assurance—is there enough credibility? *Journal of Cleaner Production*, 12(5), 517–526.

16. Micheletti, M., & Stolle, D. (Eds.). (2004). Politics, products, and markets: Exploring political consumerism past and present. transaction publishers.
17. Padel, S., & Lampkin, N. (Eds.). (1994). The economics of organic farming: An international perspective (pp. 201-222). Wallingford: CAB International.
18. Pedersen, E. R., & Neergaard, P. (2006). Caveat Emptor - Let the buyer beware! Environmental labelling and the limitations of “Green” consumerism. *Business Strategy and the Environment*, 15(1), 15–29.
19. Proto, M., Malandrino, O., & Supino, S. (2007). Eco-labels: a sustainability performance in benchmarking? *Management of Environmental Quality: An International Journal*, 18(6), 669–683.
20. Scott, W. R. (1995). Institutions and organizations (Vol. 2). Thousand Oaks, CA: Sage.
21. Thompson, D. W., Anderson, R. C., Hansen, E. N., & Kahle, L. R. (2010). Green segmentation and environmental certification: Insights from forest products. *Business Strategy and the Environment*, 19(5), 319–334.