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Selling Australia as 'clean and green'*

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'Clean and green' has been used as a marketing tool by Australian governments to promote agricultural products overseas. But how valid are these claims? Is the 'clean and green' image campaign effective? And should government be involved? We conclude that Australia may have had a 'clean and green' image in some markets, but in the future, concrete proof of environmental and quality credentials will be required to satisfy increasingly better-informed and more demanding customers. We argue that governments cannot, and should not, continue to promote Australian products based on an undefined 'clean and green' image. Rather, more resources should be directed to the development, promotion and wide adoption of integrated, credible and well-defined environmental management and quality assurance systems if Australia is to compete effectively in export markets, especially in the longer term.

Key words: clean and green, EMS, export marketing, food production, food quality, QA.

1. Introduction

Australia has been promoting its 'clean and green' image overseas, particularly since its 1993 export drive to sell 'pure' Australian food to its Asia–Pacific customers (Short 1997). In recent years, Victoria and Tasmania have also campaigned hard to promote their natural advantages in producing 'clean and green' products (DPIWE 1996; VDPI 2002). These promotional campaigns take advantage of the fact that consumers are generally concerned about their health and the environment, and that 'green' and 'clean' are not meaningfully defined and not readily verifiable. These claims have been dubbed as merely a marketing ploy given the increasing severity of environmental problems in Australia (Miller 2000; NLWRA 2001; Ridley 2001). Nevertheless, producers and industry groups continue to call for more stringent quarantine measures and import restrictions on the grounds of protecting Australia's 'clean and green' image and export sales.

We argue that the decade-long image campaigns by Australian governments have led to complacency and hampered efforts to promote on-farm quality assurance (QA) and environmental management system (EMS) programs that underpin the 'clean and green' credential. In this paper, we focus on the

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'green' component, given the state of the environment and the current debate on how best to resolve environmental issues in agricultural production. The paper provides an assessment of the effectiveness of the campaigns and proposes alternative strategies and policy options.

2. Selling a 'clean and green' image

Major issues facing the agrofood industry include growing consumer concerns over personal health and the environment, particularly in the industrialised countries (Mech and Young 2001), because of incidences of food scares and widespread environmental problems. In the past, consumers have taken for granted that the food they ate was safe and was produced in a socially responsible way. However, in recent years numerous food scares around the world, such as mad cow disease (bovine spongiform encephalopathy, BSE), foot-and-mouth disease (FMD) and food poisoning, have caused alarm among the general public about food safety and the trustworthiness of the food system. Increasing environmental awareness is another important development in the agrofood sector. Areas of serious concern include soil degradation, pollution of drinking water and rivers, the greenhouse effect, climate change, the loss of biodiversity and perceived risks associated with allowing genetically modified organisms (GMO) in food production.

Recognising the demand for safe and environmentally friendly products and consumers' willingness to pay price premiums for those products, marketers have been promoting products as natural, clean or green. The Australian government has justified its 'clean and green' claim for domestic agricultural produce based on its 'commitment to strict quarantine practices and excellent chemical residue status' (AFFA 2002). Strict restrictions, however, may be seen as a way to impose technical restrictions on imports, which, without a scientific basis, may be violations of World Trade Organization rules and seen as protectionist (AgriWorld 2003). Capitalising on the aftermath of food scares in recent years, 'clean and green' is applied especially to being free from exotic diseases and pests such as BSE or FMD (Troeth 1999) or GMO-free (ABC 2003). State governments are also keen to use such a marketing strategy, including the 'Naturally Victorian Initiative' (VDPI 2002) and Tasmania's 'Natural Advantage' (DPIWE 1996). Similarly, New Zealand also claims to be 'clean and green' (Ministry for the Environment 2001). The claimed 'clean and green' image builds on the positive perception of the nations' environment (Hughes 1993) as containing unspoiled natural beauties (pristine beaches, green pastures and rolling hills).

The general rationale behind using the 'clean and green' image as a marketing strategy is that if a state or country has a natural environment that appears visually 'clean and green', then what it produces also may be perceived to be 'clean and green', and consumers, those overseas in particular, will want to buy, and pay a premium for, the goods it produces. More importantly, it is banking on the fact that such claims cannot and will not be

challenged because descriptors such as 'clean', 'green' and 'natural' are not well defined (Consumers Union 2003) and it is difficult for consumers to verify the existence, or otherwise, of those credence attributes. It is also interesting to note that the terms, 'clean and green' and often 'clean green', are used jointly as one and the same, without any intention to differentiate between the two words. Finally, given that the campaigns have been aimed at Asian and Middle Eastern markets, there is a presumption of some degree of ignorance on the part of potential customers with regards to the meaning of the claims. By the same token, the fact that similar campaigns have not been used in the domestic market (other than to block imports) indicates that consumer knowledge of the state of the environment and production practices, or rather the lack of it, is the key element behind the image campaigns.

So, how effective is a 'clean and green image' as a marketing tool? Does a 'clean and green' image really motivate consumers? And is Australia 'clean and green'? A study commissioned by the New Zealand Ministry for the Environment (2001) has attempted to answer these questions for New Zealand. The study found that New Zealand's 'clean and green' image did exist and had a significant export value, despite the fact that some environmental problems were serious enough to potentially tarnish the image. It was concluded that since consumers worldwide are increasingly more aware and better informed about environmental issues, such an image would eventually need to be backed up by reality, as well as product quality. Yet other research has shown that consumers are generally more concerned about price and personal benefits associated with the purchase and less concerned about the impact on the environment (Twyford-Jones *et al*. 2003). Therefore, overseas consumers are unlikely to be concerned about protecting the environment of a foreign country, such as Australia or New Zealand.

In Australia, some analysts are critical of the 'clean and green' claim made by governments because 'the reality belies the rhetoric' (Miller 2000) and 'most farming systems are a long way off being acceptably "green" at present' (Ridley 2001). It was argued that while exotic diseases and chemical residues status is an important aspect of 'clean and green', major indicators of environmental health – water, soil and biodiversity – continue to decline in Australia because the environment remains a low priority on the political agenda (Miller 2000).

However, the environmental movement appears to be gaining momentum. It is recognised that:

> Given the growing sophistication of the international market place, it is no longer enough for us to simply claim to be 'clean and green'. Consumers are demanding credible evidence to support our claims. And it is here that EMS can play a role because it is a management system that substantiates them. (Troeth 2002)

This reality check may lead to greater adoption of integrated QA and EMS, whereby QA (based on HACCP (Hazard Analysis Critical Control Point)

and ISO 9000 quality management systems) provides a guarantee on the quality and safety of the food product, that is the 'clean' component, while EMS (based on ISO 14000 EMS series or other frameworks) addresses concerns over the impact of food production on the environment, that is the 'green' component (Ridley *et al*. 2003).

3. Environmental management systems in Australia

With the increasing demand for authenticity in environmental claims, many environmental management systems have become popular in primary industries including agriculture, fisheries, forestry and mining, as well as in other industries such as paper manufacturing, photocopier construction and cleaning products. Environmental claims and eco-labels can be grouped according to their method of evaluation and certification (if any), whether or not they are voluntary, and whether they are audited or not and by whom (Chang and Kritiansen 2004). The mandatory claims commonly relate to warnings and disclosures required by government, such as applications and disposal of chemicals on farms. Among the voluntary schemes, there are three categories, including (i) self-declaration by individual companies (first-party certification); (ii) programs developed by industry associations for their members' products (second-party certification); and (iii) programs established and run by independent certification bodies (third-party certification) (US Environmental Protection Agency 1998). The credibility of the system therefore depends on how stringent and transparent the certification and accreditation processes are in terms of standard setting, the level of auditing, and enforcement. In any case, certification, either voluntary or mandatory, can be effective in assuring the authenticity of the marketing claims and labels.

The evolution of EMS began to take shape in the 1990s with the release of ISO 14000 – the International Standard for Environmental Management. Since then, several voluntary EMS or related schemes have been created in Australia and overseas. The recently developed Australian *National Framework for EMS in Agriculture* (NRMMC 2002) uses EMS to describe any systematic management approach adopted by an enterprise or an organisation to manage its impacts on the environment. The aim of an on-farm EMS is to provide a management framework that achieves continuous improvement through a 'plan, do, check, act' cycle. The *National Framework* notes that an effective on-farm EMS will be industry driven, simple to use and integrates smoothly with the existing management practices. In principle, an EMS can be externally audited and may be certified to a known standard, such as the internationally recognised ISO 14000, and the results used to support a 'green' claim.

4. Adoption of on-farm EMS

The demand for environmentally friendly products and goods with 'clean and green' credentials has resulted in a diverse range of EMS and eco-labels.

Worldwide, there are more than 30 300 EMS certifications in all sorts of business sectors. The number is more than 1000 in Australia, with about 30 within agriculture (Rowland 2001).

However, several factors have prevented wider adoption of EMS by farmers and land managers, including credibility, complexity, financial risk and consumer demand. These influences that lessen adoption, however, are not unique to EMS (Geno 2001; Marra *et al*. 2003).

4.1 Credibility

A serious credibility issue for EMS schemes is whether they will provide any real environmental benefits. While a well-designed EMS will have an inherent process of measuring and reviewing performance, and modifying management practices based on the review cycle ('plan, do, check, act'), it remains unclear whether the systems genuinely improve environmental performance in areas where it is most needed. A number of international reviews of EMS programs from various industries (not only agriculture) have found little evidence of improved environmental performance and questioned their economic efficiency as an environmental policy tool (Coglianese and Nash 2001; OECD 2003).

4.2 Complexity

In general, credible EMS- and eco-labels require scientifically sound tools to quantify environmental impacts. However, selecting the appropriate environmental indicators is a difficult task and there is no clear consensus on which indicators are most useful for measuring agricultural impacts. Different land managers may be interested in monitoring different things – economic goals versus conservation goals – and will commonly have widely varying levels of expertise in using the indicators effectively (Duelli and Obrist 2003). In addition, many 'clean and green' production systems (e.g. organics, ISO 14000) are information and labour intensive. Such demands on management may pose problems for many small operators intending to use an EMS (NRMMC 2002; Ridley *et al*. 2003). On-farm environmental management systems are also more complex than off-farm programs because of the diversity in the scale of production, farming practices, and environmental issues pertaining to different geographical locations and commodities.

4.3 Financial risk

While altruistic interest in environmental stewardship is a key driver for many EMS users, financial returns also play a major part in determining whether EMS schemes are adopted. For many potential users, the financial risks are high (OECD 2001; NRMMC 2002). First, there are new expenses for certification, training and modifying operations and infrastructure. The

costs of using certification systems are widely reported as prohibitively high, ranging from $A3000 to $A8000 for certification audit and $A3000 per year for continuing surveillance audit (Francis 2003a). In response to concerns about costs and complexity for small producers, some schemes allow for joint certification of collaborating, but independent, producers (Handley 2003). There are also suggestions that the EMS accreditation be achieved at different levels or tiers to suit individual farmer's aspirations and market requirements, for example, beginning with environmental awareness and self-assessment and self-auditing and leading to third-party accreditations such as ISO 14001 or eco-labels (Ridley 2002; Adcock 2003; Banny 2003). Although a tier system may encourage farmer participation, there are concerns that a proliferation of possibly incomparable systems may cause consumer confusion and reduce their credibility (EMS Working Group 2001). Therefore, the market demand for quasi-EMS, EMS-certified and eco-labelled products needs to be carefully considered (Toyne *et al*. 2004).

4.4 Consumer demand

Ridley (2001) has suggested that premium prices for EMS-certified products are generally not likely, except in some niche markets, because the market signals to reward good environmental performance are still weak. Most consumers will not pay extra for goods with unfamiliar 'clean and green' claims and unproven environmental outcomes. There is evidence from Denmark (a country eagerly embracing the 'clean and green' ethic) and elsewhere in Europe that consumers are reluctant to recognise 'integrated production' labels (systems with reduced chemical inputs and other environmental benefits) to the same degree as organic labels. Low-input branding has been unsuccessful so far because conventional produce is cheaper for consumers and it is expected that similar difficulties will be experienced by EMS-certified products (Bishop 2002). Similarly, consumers are in general not willing to pay more for in-conversion organic products.

In Australia, although marketing opportunities exist for environmentally friendly (meat) products, consumers are in general not aware of environmental problems and, even when they are, they are not willing to pay premium prices for such products (Twyford-Jones *et al*. 2003). Consumers, however, have been found to be more willing to pay for products that are perceived to be safe (especially low in chemical residues) and more nutritional, such as organic products. The gap that exists between consumer purchasing decisions of green products and community expectations and public support for environmental protection seems to be a worldwide phenomenon (Canadian Commission for Environmental Co-operation cited in Francis 2003b). The gap exists because the general public tends to believe that it is the responsibility of governments and producers to protect the environment. Therefore, the general public does not draw strong links between individual purchasing decisions and the overall state of the environment. Hence, despite strong

public concern for the environment, green markets have not grown as expected. On the other hand, farmers are unwilling to carry the duty of care and bear the whole costs of implementing environmental stewardship beyond their own management plans. The public good nature of the environment and the associated problem of free-riding mean that there is a need for government involvement and assistance (Francis 2003b).

In general, for environmental certification and labelling to be effective, it must meet a number of conditions (US Environmental Protection Agency 1998). First, product evaluation must be known and accurate. Second, product standards must be associated with significant environmental differences among products. Third, product information must be disseminated to consumers. Fourth, consumers must understand environmental issues and product-specific information well enough to make informed purchasing decisions. Finally, the label must have substantial market penetration in order to affect a significant number of producers. Meeting all these requirements remains an ongoing challenge for EMS development, implementation and adoption. Without the support from government, producers and the general public, EMS products, certified or not, are likely to remain a niche sector with minimal impact on improving the environment.

5. An assessment

Environmental certification and eco-labels can be an effective means for promoting a company's product and environmental credentials. Combined with compatible QA schemes, companies may be seen as 'clean and green'. But, will this work for a country? That is, can Australia claim itself to be 'clean and green', as individual firms can through certification and other means? And should government be involved in promotional activities of this sort? We argue that it cannot and should not.

First of all, certification programs are developed for individual businesses. Although group certification exists, it only applies to a group of qualified, and often small, producers. And for the group to be certified, each member of the group must abide by the rules. This means that Australia cannot ever be certified as such unless all of the producers in Australia are certified as such. Second, it should not be involved in such promotional activities because of the private good nature of certification and the risks of reputation spillovers (Harris and Cole 2003). This means that private firms would generally invest in reputation or third-party certification on their own initiative to back up their claims if such actions are deemed to be profitable. Government intervention, on the other hand, could cause problems if a false claim by an individual firm or product results in a cascade of lost sales and market access. Harris and Cole (2003) conclude, 'it may be better if governments do not focus on claiming that all exports deliver environmental or animal welfare benefits above basic standards in export markets.' Rather, they suggest that government help promote credence attributes such as 'clean and green'

by developing metrics to facilitate quality substantiation, rigorously enforcing truth in labelling laws and encouraging monitoring of these labels by consumers and green groups. Similar arguments can be applied to regional branding and promotion.

So, how effective has the 'clean and green' image campaign been as a marketing tool for Australia? No one really knows. As pointed out earlier, it is difficult to prove a product to be 'clean and green' because of the credence good nature of those attributes. It would be even more difficult, if not impossible, to prove that such an image exists, let alone its impact on sales. However, there are clues to suggest that an image alone is not enough to combat real problems. In a story on the FMD outbreak in Japan, the headline read 'Clean image may not save Australia's beef industry' (Stewart 2000). The article said 'while the Australian government is trying to play down the scare and rely on Australia's "clean green" image to overcome any backlash against beef exports, … Japanese consumers will be difficult to console' and 'Australia's "clean and green" image will not overcome a general (food safety) concern about beef.' The BSE incident in Japan in September 2001 caused a significant fall in beef demand in Japan and in Australian beef exports to Japan, despite the strong campaign from Meat and Livestock Australia to guarantee the safety of Australian beef (based on its 'clean and green' image).

The BSE incident in Canada in May 2003 also prompted bans on Canadian beef and the mandatory testing of BSE of all beef, despite Canada's alleged 'clean and green' image. These examples point to the 'clean and green' image being like any other image or reputation, something nice to have, but also potentially fragile and easily damaged by negative publicity, such as a disease outbreak, a GMO contamination or an environmental disaster (e.g., O'Loughlin 2002; ABC 2003). Images are built on perceptions, rather than facts, and are often not robust enough in times of crisis when verifiable product quality is the only guarantee that consumers rely on.

Finally, how do our competitors (e.g. the United Sates, Canada and New Zealand) respond to consumer demand for 'clean and green' products? Evidence suggests that concerted efforts have been made to establish 'clean and green' credentials through on-farm QA and EMS (e.g. Ministry for Agriculture and Forestry 1998; Canadian Pork Council 2002). Therefore, a race is on to prove who is cleaner and greener. As competition intensifies, Australia's ability to maintain and build on its previous success in export markets will be increasingly based on its treatment of the environment and quantifiable environmental performance.

6. Conclusion

As consumers become more concerned about food safety and environmental impacts of industrialised agriculture, the demand for 'clean and green' products will increase. The strong growth in the demand for organic food is a

clear example. Governments and business organisations are responding to such consumer preferences by marketing their products as 'clean and green' based on the image of unspoilt nature. However, examination of most 'clean and green' claims indicates that they have serious shortcomings. Flying the 'clean and green' flag may have helped exporters in the past, but as consumers become more sophisticated and demanding and as global competition intensifies (who is cleaner and greener?), it is no longer enough to simply claim to be 'clean and green'. Rather, credible evidence to substantiate such claims will be required. Therefore, the key to success is not a 'clean and green' image but a 'clean and green' credential.

For Australia to gain a 'clean and green' credential, data collection and documentation of the extent of adoption of QA and EMS programs and their actual performance must be monitored and reported as solid proof of claimed environmental and quality credentials. Further, government should provide an enabling environment that is more conducive to better environmental management. Policy options should focus more on educating the general public about the state of the environment; establishing laws and regulations to protect consumers from misleading labels and claims; developing incentive schemes that reward good agricultural management and penalise non-compliance; providing more funding for the research and extension of practical but rigorous sustainability indicators; ensuring integration and harmony between the various certification systems; and fostering environmental partnerships. To continue promoting a 'clean and green' image will be counter-productive if it leads to complacency rather than required changes in response to public concerns over the environment, food safety and quality.

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