Evaluating the Comparison of Sustainability Programs in the Wine Industry

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Abstract: 100 words

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The international wine industry's focus on environmental sustainability has a sound record over a long period of encouraging adoption of environmental sustainability programs. Many of the sustainability programs introduced focus on general environmental standards, however, each country has developed sustainability program which varies according to their circumstances. This paper evaluates the initiatives of four new world countries that have a well-developed sustainability program in place, that is, South Africa, Australia, New Zealand, and California, USA. All of the sustainability programs require accreditation by a third party, and are independently audited on a three year cycle. However, differences are apparent with biodiversity initiatives, compliance, programs focus and uptake of membership.

Key words: Sustainability programs, wine industry

Comparison of Sustainability Programs in the Wine Industry

Environmentalism has matured into a significant social issue, which now has a great impact on public and corporate policy (Follows & Jobber, 2000). The international wine industry's focus on environmental sustainability. It has a sound record over a long period of encouraging adoption of meaningful environmental sustainability programs. A popular definition of sustainable development can be described as the development that meets the needs of the present without compromising the ability of future generations being able to meet their needs (World Commission on Environment and Development, 1990), which is referred to as ecological and social sustainability by Lele (1991). The triple bottom line paradigm is that not only is should financial health be measured, but also the social/ethical and environmental performance/sustainability (Norman & MacDonald, 2004). More specifically, sustainability within the wine industry incorporates the promotion of natural solutions to provide biological control of pests and diseases in the vineyards. Other ecological engineering initiatives are also focused on areas such as pollination, soil fertility, filtering of vineyard effluent, and the restoration of natural habitat (Forbes, Cohen, Cullen, Wratten, & Fountain, 2009). Additional initiatives include wind power, water conservation, employee benefits, materials handling and providing natural habitat for birds and predators.

FIVS, an international organisation, developed a strategy to recognize the solid environmental credentials which are essential to the industry's survival and success, aptly titled The Global Wine Sector Environmental Sustainability Principles (GWSESP) (FIVS, 2012). GWSESP identifies that the continued health of the wine industry rests entirely on natural resources, namely, solar energy, appropriate climate, clean water, healthy soils, and the successful integration of these elements with sound ecological processes. Although many of the sustainability programs introduced focus on general practices that reduce a vineyards environmental impact according to recognised standards (Webb et al., 2011), each country has developed sustainability programs that meet the objectives of the principles and also fit their unique circumstances. This paper will evaluate the initiatives of four new world countries that have well developed sustainability program in place, that is, South Africa, Australia, New Zealand, and California, USA.

South Africa:

Sustainable Wine South Africa (SWSA) is the alliance between the Wine and Spirit Board (WSB), the Integrated Production of Wine (IPW) scheme, the Biodiversity & Wine Initiative (BWI) and Wines of South Africa (WOSA). The South African wine industry has become a world leader in production integrity, through their Integrated Production of Wine (IPW) scheme. This is an industry-wide technical system of sustainable wine production which was introduced in 1998. IPW consists of a set of guidelines specifying good agricultural practices related to grape production (farm component), as well as a set of guidelines specifying good manufacturing practices related to wine production (winery component) and packaging activities (bottling activities) (SWSA, 2012). Compliance with the IPW guidelines is assessed on an annual basis through the completion of a self-evaluation questionnaire, compulsory training every three years and is independently audited on a random basis over a three-year cycle. In order for cellars to be IPW accredited, they must have a rigorous and recorded IPW system in place with all the farms that supply them with grapes.

The WSB currently runs two certification systems: Wine of Origin (WO) and IPW seal. The Wine of Origin (WO) system is administered by the Wine and Spirit Board (WSB), a statutory board representative of the wine industry and appointed by the Minister of Agriculture, Forestry and Fisheries. The WO seal on the neck of the bottle means it has been

certified by the WSB, and it guarantees the trustworthiness of all information relating to origin, cultivar and vintage as stated on the label. A new seal was introduced by the IPW system for sustainable, environmentally friendly production which covers both WO and IPW from the 2010 harvest year. To qualify for the new seal, every link in the supply chain has to be IPW accredited – the farm, the winery and the bottling plant. The seal is printed on every bottle; however there is limited consumer awareness. No other country currently offers this type of seal.

South Africa extends its sustainability program with biodiversity initiatives. Running in parallel is the Biodiversity and Wine Initiative (BWI) in partnership with World Wide fund for Nature (WWF), which is one of the most successful business conservation partnerships in the world (Birch, 2012). Su Birch, the CEO of WOSA, describes the BWI initiative as a wonderful success story within the wine industry, which not only focuses on plant life up and down the biodiversity chain but also animal life.

Prior to 1994 the South African wine industry was highly regulated which meant an efficient bureaucracy was developed so that industry regulations were followed by producers. As a result, systems have been in place for much longer than the other countries. This has resulted in a large uptake of the certification within the industry (SWSA, 2012) together with the requirement that all exported wine must be certified. The trade has embraced the new sustainable seal due to the credibility and traceability of the wine which provides confidence to their buyers. In 2011, 85% of certified wines qualified to carry the new seal. As from 2011, the guidelines also include climate change/carbon footprint. In the future, there is expected to include more efforts on water conservation. The next project, WEITA, is a project focusing on people and their health and safety, which is being launched in May 2012 (Birch, 2012). An interim seal will be established with the goal of amalgamating the seal with IPW. This ultimate seal with include not only environmental sustainability but also accrediting wineries with social responsibility.

Australia:

Entwine Australia was developed by the Winemakers' Federation of Australia (WFA) with support initially from the Federal Government through the *Caring For Our Country* program and then the Grape and Wine Research and Development Corporation. The project began as the Australian Wine Industry Stewardship (AWIS), a four-year project based on annual vineyard environmental stewardship reporting. AWIS was initially renamed to Australian Wine Environmental Stewardship (AWES) and became a membership based program in 2009, before the name Entwine Australia was adopted later that year. The new program retained some of the AWIS environmental reporting with the addition of the new requirement to hold an environmental certification and report on greenhouse gas emissions.

The Winemakers Federation of Australia (WFA) outlines Australia's approach to sustainability, where to achieve market potential; Australia's wine businesses must be sustainable in the broadest sense of the word. They must be profitable enough to take advantage of new opportunities, while being aware of the need to protect and enhance wine's image through a commitment to their environmental and social responsibilities (WFA, 2008). Sustainability manifests itself across four dimensions: 1) partnerships with governments; 2) continuous improvement in business skills and practices for the Australian winesector through the creation of a dynamic culture of self-reliance; 3) continuous improvement to meet the changing consumer and community demands for sustainability; and 4) to ensure widespread social responsibility within the Australian wine sector.

Entwine Australia is a voluntary environmental assurance program that allows winemakers and wine grape growers to receive formal certification of their practices according to recognised standards. Members must hold a recognised, independently audited environmental certification and be audited at least every three years; report a scope 1, 2 and 3 (packaging) carbon footprint each year (Winery only); and report each year against the Entwine Australia Indicators. Jonathan Green, the Manager of Natural Resources at the WFA states the scheme is one of the most robust in the world and considered to be comparable to that of our international competitors (WBM, 2012).

Currently there approximately 620 members made up of 560 vineyards and 60 wineries, which represent 33% of the crush in 2011 (Green, 2012). Green states WFA aims to reach 85% of crush by 2013. WFA outline member benefits which include: provision of independently certified environmental credentials; improved marketing opportunities; sustainable practices that ensure long-term future; improved environmental management; assurances of best environmental practice to domestic and international markets; recognition of current environmental management systems under one national scheme; access and use of the Entwine Australia logo; free Entwine Australia farm gate sign; access to members only resources; and access to members only updates. Currently there are very few producers who are using the Entwine logo on their bottles. Motivation to become sustainable is also driven by increasing international demand of distributors such as Tesco, Marks & Spencer and Sainsbury's, in reaching environmental KPIs. This is a challenge in Australia due to inefficient carbon footprint posed through transport supply chain (WBM, 2012). Other market drivers which are encouraging the development of sustainability initiatives include: government, retailers, competitors, NGOs and consumers.

Australia recently launched a program that integrates performance metrics into an on-line self-assessment. Future initiatives will be increasing relationships with organic producers and assisting their efforts in becoming sustainable.

New Zealand:

Sustainability forms a significant part of New Zealand's message in the market, and the New Zealand wine industry has a strong commitment to sustainable production in both vineyards and wineries. Sustainable Winegrowing New Zealand (SWNZ) was established in 1995 as an industry initiative directed through New Zealand Winegrowers (NZW) and was commercially introduced in 1997. In 2002, a new module was launched to provide guidance on sustainable management of wineries. Following wide industry consultation, in 2007 New Zealand Winegrowers announced a bold Sustainability Policy aimed at having all New Zealand wines being produced under independently audited environmental programmes by 2012 (NZWine, 2012).

To support voluntary adoption of this Policy, New Zealand Winegrowers has made compliance a prerequisite for participation in all events they organise. As a result, to meet the NZW policy and enter NZW events, promotions and awards, wines from 2010 vintage onwards have to be recognised as coming from wineries and vineyards operating in accordance with an independently audited sustainability programme (or a combination of), the criteria for which are: 100% of grapes (vineyards) that go into the wine are accredited/certified; and 100% of wine processing plant(s) where the wine is produced and bottled is accredited/certified (NZWine, 2012). Self-auditing is required every year, with independent certification occurring every three years, by a recognised certification program, such as BioGro-NZ or ISO 14001. Generally, New Zealand holds strong environmental protective act, animal welfare act and labour laws, so the sustainability policy does not have

to cover these areas and can focus on the overall protection of the environment (Van der Zijpp, 2012).

Since the Policy was announced there has been significant increase in participation in SWNZ programmes. It is estimated that over 94% of the producing vineyard area is participating in SWNZ. The SWNZ winery programme has been adopted relatively quickly where approximately 90% of the winery productive capacity is included in the programme (Van der Zijpp, 2012). In order for wineries to use the SWNZ logo on their bottles, they have to be 100% sustainable or accredited through Bio-Gro. Currently there are over 20% of wines using the SWNZ logo on their wine bottles.

New Zealand Winegrowers are 100% committed to preserving the unique places that make our wines famous and sustainability will be a key theme in their 2011/2012 marketing and communication plans. Future development will occur with carbon foot printing in order to provide industry standards against which to benchmark performance.

California:

The Code of Sustainable Winegrowing Practices workbook was introduced in 2002 by members of Wine Institute and the California Association of Winegrape Growers (CAWG) to promote environmental stewardship and social responsibility in the California wine industry. The organizations formed the California Sustainable Winegrowing Alliance (CSWA) in 2003, to promote the benefits of sustainable winegrowing practices, enlist industry commitment and assist in implementation of the Sustainable Winegrowing Program (SWP).

In January 2010 the California Sustainable Winegrowing Alliance (CSWA) developed a third-party certification program, called Certified California Sustainable Winegrowing (CCSW-Certified). The goals are to enhance transparency, encourage state wide participation and advance the entire California wine industry toward best practices in environmental stewardship, conservation of natural resources and socially equitable business practices. CSWA has accredited more than a dozen third-party auditors to conduct certification. At some point in the future, the entire administration of certification may be turned over to one third-party certification organization states Allison Jordan, Director of Environmental Affairs, California Wine Institute (2012).

At present, there is no legal term or official category for "sustainable wine." CCSW-Certified provides third-party verification of a winery and/or vineyard's adherence to a process of continuous improvement in the adoption of sustainable practices. In the interest of clearly and accurately presenting the program, CCSW-Certified does not attempt to create a definition for sustainable wine nor does it allow the use of a CCSW-Certified logo or claim on the bottle. Currently the program is not a consumer facing program, but to buoy the entire industry's sustainable profile (Nigro, 2010). CSWA are considering the possibility of evolving the existing program or creating a new one for product certification that would allow the use of the logo on the bottle.

CSWA reported representing 40% of wine production and 25% of the vineyards in California in its first Sustainability Report in October of 2004. As of October 2010, 68.6% of the total number of vineyards and 51.1% of the total of number of wineries in the state participated in the Sustainable Winegrowing Program. As of February 2012, a total of 31 organizations, including 40 winery facilities and 117 vineyards (59,761 acres – 11.3% of 526,000 total state wide acres) have been CCSW-Certified (Jordan, 2012). In order to increase participation, the CAWG outline potential benefits of sustainable winegrowing practices, outlining economic, environmental and social benefits. Additional initiatives instigated include the International

Wine Industry Greenhouse Gas Protocol and a Comprehensive Guide to Sustainable Management of Winery Water and Associated Energy.

A new online performance metrics project is being developed which will eventually be linked to certification, after the pilot phase this year (CSWA, 2012). Proactive sharing of aggregated, fact-based performance will be used in the future as benchmarking data (Jordan, 2012). A full life cycle analysis and greenhouse gas projects are intended to result in user-friendly tools for growers and vineyards and will likely eventually be linked into their metrics.

Discussion

There are a range of similarities and differences between the four programs. All of the sustainability programs require accreditation by a third party, and are independently audited on a three year cycle. Biodiversity is well entrenched in Wines of South Africa, and becoming an important initiatives in many larger wine producers. New Zealand and Australian also offer biodiversity initiatives, although not considered compulsory in the sustainability accreditation.

South Africa is very focused on compliance, and has a long history of processes in place. The sustainability seal provides the greatest transparency of the sustainable process of wine production. This is unique from any other country. Although each program is optional for wine producers, South Africa and New Zealand provide the greatest incentive. In South Africa it is a requirement to be a member in order to export wine, and New Zealand makes it a prerequisite to participate in NZW events. Both of these countries have highest uptake than Australia and California.

Australia presents sustainability in broad terms encompassing issues of government relationships; expectations of the wider community and consumers; create knowledge capacity building. California's focus on sustainability is one of continuous improvement. Although training is necessary for all of the programs, California tend focus on education and training of vineyards and wine producers as part of their continuous improvement.

The use of the seal is used in South Africa but has very little consumer understanding or focus. Whilst New Zealand felt that their image of sustainability is well known, they have quite a large use of their sustainability logo. Australia and California however, discuss the importance of consumer and the wider community, but the logo is not yet used on bottels. Although South Africa does not focus on consumers, the next element of sustainability is the social impacts.

Future research efforts can include wine producers attitudes toward sustainability. A recent study found ambiguity amongst terms such as sustainability, organic and biodynamic farming with winemakers (Szolnoki et al., 2011). It should be noted that of the seven countries where the wineries were surveyed, only one country was a new world country (USA).

Concern for the environment is widespread and culturally diverse (Ignatow, 2006), as a result, it would be insightful to compare initiatives by the national bodies within each country and the attitudes sustainable practices of consumers in those countries. Certain consumer segments are beginning to questions companies green credentials when purchasing (Webb et al., 2011). Research has evaluated the effectiveness of eco-labels (Delmas & Grant, 2008) which are generally not familiar with consumers and vary based on cultural attitudes. Further research can evaluate the awareness and effectiveness of the labels/logos of the national sustainability programs.

Acknowledgements

Much appreciation goes to: Su Birch, CEO, Wines of South Africa; Jonathan Green, Manager, Natural Resources, Entwine; Allison Jordon, Director, Environmental Affairs, California Wine Institute; and Sally van der Zijpp, National Coordinator Sustainable Winegrowing, New Zealand Winegrowers.

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