Climate change: economic and social futures for South Africa’s wine industry

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1. Introduction

South Africa’s wine industry has performed well since the first democratic elections in 1994. Wine exports have increased to 20% of the country’s total agricultural exports, and investment and employment in the industry has increased. There is however evidence that the industry has already been affected by climate change, and that this impact will continue in the future. How then should the industry react to the twin challenges of building international competitiveness and coping with the effects of climate change?

In this paper the literature on the impact of wine industries on local economies is reviewed, and then the South African evidence of economic performance is provided. This is followed by a review of the literature on climate change in the industry. In the third section a range of possible strategies for building competitiveness and managing the climate change effects are discussed. In conclusion, the possible effects of these strategies on the competitiveness of the industry are assessed.

The boom period since the end of apartheid and regulation manifested itself in a rapid growth in the number of wineries, a considerable growth in wine exports, and increased employment. Yet the export performance has not been as strong as that of Australia and Chile, while both domestic sales and per capita consumption of wine is declining. Furthermore, bottled wine exports have been dominated by blended wines of a ‘basic’ quality.

Research on climate change shows that a sharp increase in temperature is already being experienced in the Western Cape Province, and future climate projections show that this upward trend is expected to continue and rainfall is expected to decline or to be distributed differently throughout the seasons. In this regard, South Africa’s wine grape growing regions are characterised by diversity (in climate, topography, soil type, etc.), and for most farmers diversity is the key to managing the effects of climate change, mainly in terms of increasing wine complexity and style brought by blending wines from different terroir units/regions.

These observations form the basis of an assessment of the impact of climate change on the industry, and of steps that can be taken to manage this impact. The dimensions of the impact relate to geographic shifts, viticultural practices, the style of wines produced and the need to improve the skills of farm workers. In brief, the South African wine industry has already shown considerable flexibility in shifting geographically to new production areas that are characterised by cooler climates, in adapting viticultural practices to wine styles, and upgrading the skills of farm workers. However, regarding the latter more needs to be done.

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Whether the resultant pursuit of diversity in the production of wine will strengthen or weaken the international competitiveness of the industry will depend on a number of factors. First, diversity may be threatened by climate change unless appropriate strategies are put in place. Second, climate change could have consequences for the industry that are not yet fully understood (e.g. in the form of logistical challenges in the new areas, over-capacity in infrastructure in existing areas, etc.). Third, greater diversity should increase the demand for a wider combination of wine varieties, vintages, wine styles and terroir characteristics, which could lead to a greater number of (branded) products that have the prospect of fetching higher prices than more undifferentiated wines. Fourth, there is likely to be greater demand for wines with lower alcohol levels, especially as health concerns become more important in shaping consumer choice. Finally, consumer choices are also driven by concerns over the sustainability of agricultural production. Producers will benefit in situations where the exploitation of natural diversity leads to a smaller environmental impact or to greater social responsibility toward farm workers, etc. Ultimately, however, the impact of the pursuit of greater diversity on competitiveness will depend on whether this will result in higher quality products moving the industry away from its reliance on ‘basic’ and bulk wines.