Carbon Footprint, Food Miles and the International Wine Trade: Some Implications

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Food production and consumption is one of the most resource and energy demanding activities of households in the developed world. Throughout the life cycle of foods, the provision and use of materials and energy result in contributions to a wide range of environmental impacts. Wine industries have significant impact on vineyard microclimates alteration, and they also incur costs that are passed on to society. These externalized costs include non-product output such as Carbon Dioxide (CO2) emission, chemical effluent, and other wastes that contributed to the global tragedy of commons. Understanding the type and magnitude of these externalities helps prepare companies and industries for potential impacts from regulation on such externalities, helps to promote accountability to consumers, and helps to identify opportunities for innovation and cost-savings. The environmental performance of products and processes has become a key issue, so that some retailers took position in relation to imported wines: eg the British TESCO since January 2007, announced that every product sold would have a carbon rate or the "carbon footprint" displayed on its label (Rigby et al, 2007): Wal-Mart, has recently introduced a 'Global Sustainable Sourcing Initiative', committing it to prefer suppliers that aggressively reduce CO2 emissions and use recycled or recyclable packaging, which is why some research centres and companies are investigating ways to minimize their effects on the environment. Wine is a widely consumed product and has an important role in world trade, with the United States and the United Kingdom being the largest importing countries, so this could also lead to implications for the Italian market.

By directly or indirectly encouraging discrimination against products originating in geographically distant markets, however, importing states risk breaching the Marrakesh Agreement and in particular the General Agreement on Tariffs and Trade and the TBT Agreement. Although the objective of sustainable development has been embedded within the World Trade Organization framework, under these Agreements environmental measures must be WTO compliant and must not constitute disguised restrictions on international trade. Arguably, discriminating against food products on the basis of food miles without scientific evidence, establishing a link between long distance transport and negative impact on sustainability amounts to a disguised restriction on international trade.
In the food miles debate, several authors have calculated the consumption of CO2 associated with the distance traveled by the wine to reach the target markets and means of transport used: It seems that the distance travelled may not be as important as the transportation method. Nigel Greening of Felton Road Vineyard in New Zealand has calculated that shipping a case of his wine by container vessel to London uses 4.048kg of CO2 which is equivalent to 1,150km by truck, giving a bottle a 337g carbon count.

That could mean it's better to buy wine from New Zealand than it is from southern France, Italy or Spain where it comes by truck to the UK. But this area is under-researched and more reliable data is needed.

Alternatively, adopting a mandatory carbon footprinting framework which imposes significant cost upon exporters in distant markets discriminates unnecessarily against those exporters and creates a substantial impediment to international trade. The embrace of carbon footprinting and local food sourcing as environmental measures designed to reduce greenhouse gas emissions poses a potential threat to Italian wine export industries which are geographically distant to importing market and vice versa. Food transport costs can add considerably to a product’s carbon footprint and detrimentally affect sales. The raison d’être of carbon footprinting is to encourage responsible environmental production methods. However, the author questions whether this aim can be effectively fulfilled and whether carbon footprinting and local food sourcing policies are instruments of anti-globalisation sentiment and thus can be challenged under the World Trade Organization framework.

So, the aim of this paper is to reasoning around these demands: Does Food Miles Labelling or Carbon Footprinting Lead to Discrimination against Imported wines? What solutions are proposed to reduce the cost of transportation of wine and what impact it can have on the final consumer? And so on.