A discovery of the cooler climate areas in South Africa and their potential in producing quality wine.

Just South Africa is my sole motivation for this research. Almost eight years ago I printed my first footstep in the Cape winelands, since then I am in love. Every year I visit the winelands and I dream of buying a piece of land. Recently I decided that one day I will live there. Somehow it is possible to fall in love with a country and its wines. I realized after choosing this topic it might be hard for me to stay objective. Luckily after completing this research I can be relieved, because I managed to do so.
Since its return to democracy South Africa has become a significant player in the world wine industry and there is a definite trend in increased quality. Right now a new and even more exciting chapter in South African wine has begun, the establishment of new wine regions. It has a whole new generation of well traveled, educated, young winemakers with experience, confidence and enough funds to strike out on their own. Now the time has come to discover South Africa completely, all her cooler areas and their potential for the future in producing quality wine.
In this thesis I have not sought for a definitive truth about South Africa and its future of winemaking in cooler climates, I wanted a panorama of views on this topic. I did so by talking to prominent scientists, teachers, professors, viticulturists and winemakers, during my stay this March. I felt privileged to meet with them, very lucky that they wanted to help me with this research. Before I traveled for the eight time (!) to the Cape winelands I researched the potential cooler areas in depth; their terroir, the development in the area, analyzing its data and reading about it. Already I had set up a network of contacts in South Africa from my previous visits and my traineeship at Rustenberg estate. With their help and a little bit of luck I made appointments to visit the areas personally. Interviewing these experts gave me a lot of information on developments and helped me to complete a SWOT analysis on the areas. Literally step by step my journey in South Africa helped me to achieve this goal.

The geology of the Western Cape vineyards is truly unique. The Western Cape is a biodiversity hotspot and a World Heritage Site, one of the richest reservoirs of animal and plant life on earth. The arsenal of mesoclimates in the Western Cape are considered an enormous asset of the wine industry, especially in this search for cooler climates.
In general the Western Cape wine regions fall into a warmer winegrowing zone, but at latitudes of 31-34 degrees South, the Western Cape is cooler than its geographical position suggests. This Mediterranean climate is characterized by warm summers and wet, cold winters, with frost rarely a problem. The closer to the Atlantic or Indian Ocean the more maritime influenced the area becomes. The summer warmth, during growing season is moderated by the constant cooling moisture-laden breezes blow in from the ocean(s).
A research programme on terroir is being carried out and the latest publication of these natural terroir units (NTU) explains how this can be helpful in search for cooler climates. NTU is a unit of the earth's surface that is characterized by relatively homogenous patterns of *topography, climate*, *geology* and *soil.* A map of NTU's is an in-depth research on the interaction of each NTU component to a better understanding of the new vineyards and finally their wines. It helps with decisions on viticultural practices and aids winemakers in planning and making decisions on harvest and fermentation especially in these new winegrowing areas.
An important conclusion from these factors is that temperature is a vitally important factor, influencing every aspect of the vines functioning and mankind having no influence on it! The benefits of the maritime influence, meaning optimal physiological functioning, became clear. After this conclusion I questioned could this become a future problem, if the climate turns warmer? Fortunately according to the climate models which predict the whole of the Western Cape becoming drier and not significantly warmer.
In more detail I have investigated the *Strengths, Weaknesses, Opportunities* and *Treats* of the cooler areas trying to come to a solid conclusion which of these areas have the highest

potential for the future. It turned out to be just as I thought, the annual growth of almost 11% in vineyard land, made Elgin, Walker Bay and Cape Aghulas, the most dynamic of all. I have spent more time there with Lomond vineyards near Cape Aguhlas and Almenkerk wine estate in Elgin, being some of the great pioneers in this area.
The combination of low average February daytime temperatures, the prevailing south-easterly winds and some elevation which greatly influences this important factor is unique. Also they have done proper site selection of varying soil potential and difference with closeness to the ocean and different altitudes. With especially in Elgin and Cape Aghulas a lot more space to discover vineyard land, in which future NTU's research could play an important factor.
I have been interested in competition results to measure if the quality was high enough in these areas. Because of the experts I have not concentrate on local wine shows, they explained that unfortunately these shows are not independent and you have to pay to participate. For them it is more a way to market their wines. Luckily they do have confidence in one and that is Platter's South African wine guide. Interesting is that in this years Platter's, many five star wines are from the cooler areas. Besides being a professional taster myself I would have draw the same conclusion. They might create a unique selling point in bottle aging their wines, experience tells me that the wines get better after a couple of years.
As I write, the first sustainability seal has just been launched which is a great opportunity to use as a visual guarantee of their commitment to environmentally-sensitive winemaking. In Elgin, Walker bay and Cape Aghulas more than 95% of the wineries are allowed to use this seal from this years harvest. The whole area is becoming popular as eco-friendly and with also the world's first biodiversity wine route they are penetrating an important market.

To summarize South Africa has great cooler climate areas with high potential soils and good skills in the still developing site specific plantings. The areas of Walker Bay, Elgin and Cape Aghulas are most promising for the future. Their *strengths* are a maritime influenced climate which a fantastic terroir of high potential soils and the cooling Cape Doctor wind blowing from the best possible south-easterly direction. In general there is already a lot of quality wine coming from here and their wines are highly valued.
The *weaknesse*s are that in general a new area means a lot of investment. This together with lower yields through some wind stress or not always ripening vines, this is challenging in a cooler climate. Last weakness is the local award shows, they are not independent and need to win trust in objective tasting.
The *opportunities* are the NTU's, their research means better site selection and discovering more high quality vineyard land in this area full of opportunities. Luckily in this area there is more than enough sweet water. Also I valued the wines for some bottle aging, if they are marketed in this way they could create a unique selling point for their wines. In this area the first biodiversity wine route has just recently been established, together with the launch of the sustainability seal, the area is set on the map.
Economic recession might become one of the *threats* for the future, influencing money for researches such as the NTU's. Another threat might be the lack of dormancy and the climate change in general. Although the climate models predict the whole of the Western cape becoming drier and not significantly warmer. The area might even become more important if other regions do get warmer and might turn too hot for quality grape growing or will have water retentions because of draught. The producers should be aware and interact with the threats and try to turn it into opportunities. With South Africa's dynamic transformation of wines in the past decades it will probably not be a big deal!

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