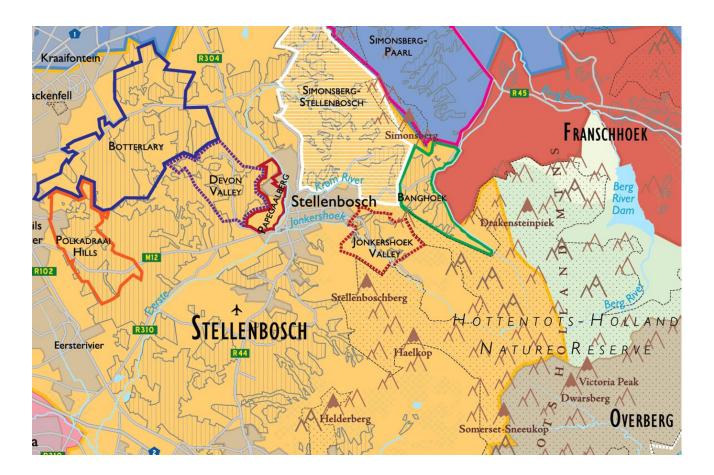
STELLENBOSCH;

What is the relationship between terroir and the ward classification in the South African wine district Stellenbosch? Past, present and future.



Dissertation submitted in partial fulfilment of the requirements for Magister Vini

Arjen Pleij, June 2018.

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Dissertation supervisor: Job de Swart

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Arjen Pleij, Hummelo, 30 June 2018 Translated by Miriam Begley

Foreword

For the past decade I have worked with South African wines on a daily basis. In my profession *terroir* is a relevant subject. However, more important is the fact that this subject appears to be becoming better understood. It is now a 'hot-topic' that not only fascinates me, but also the wider wine world where it appears to be gaining attention among the wine growers of South Africa. Some understand the subject well and already make use of the available knowledge. Others are learning to understand it - and some don't seem to want to understand it, or are being guided by other motives.

Terroir is a word used to describe differences between wines, between countries, between different regions and even within certain regions. Was terroir a central feature in the definition of the various wards within Stellenbosch? Whether the answer points to yes or no, it is interesting and relevant to investigate this further. Alongside the official classification of the *Wine of Origin (WO) Scheme*, more classifications are used, which of course is strange as the official classification should be the only one used. I will investigate why this is not the case and shall (or must) give an answer to the question of whether the official classification is indeed the best and most relevant one.

Up until a few years ago the concept of terroir appeared to be solely a European phenomenen. Now, in 2018, it appears that wine growers, grape growers and winemakers the world over recognise this concept; depending on the philosophy of the person and the type of wine they wish to make. However, the concept terroir is not important for everyone and therefore also not for every type and variety of wine. Up until about 10 years ago Stellenbosch had the name as the quality wine region of South Africa. Due to this capacity and the history of wine growing dating back 360 years, it is relevant in my opinion, to carry out research on the relationship between the wards in Stellenbosch and the specific terroirs of that wine district.

Acknowledgements

The list of people who have helped me in the last number of years is extremely long. From giving advice to arranging appointments, from education to sharing knowledge: many have helped in a large or small way in the completion of both my MV dissertation and to the success of my tasting and theory exams which were completed prior to this dissertation. The motivation provided to me by some individuals is definitely the best support I could have received!

My wife Marchien and son Thom have thankfully supported me through thick and thin and have believed in me during the whole MV process. In addition, without the support, motivation and knowledge of Udo Göebel, Johan Agricola, Sara Channell, Jan Vegter and Frank Jacobs this whole journey would never have reached it's conclusion. A special word of thanks goes to Job de Swart, a very good dissertation supervisor against his better judgement!

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Abstract

This MV dissertation investigates the relationship between terroir and the organisation of the South African wine region Stellenbosch into wards. Firstly, the history of wine growing will be briefly explained. This is to provide perspective on the subject. From the history of wine growing in South Africa and particularly in Stellenbosch we will move forward to the present.

Attention will be drawn to terroir and the various aspects of terroir. These aspects are important in the literature research of this dissertation. Due to a lack of research into the seven wards of Stellenbosch and the lack of resulting literature, the investigative nature of this dissertation is important.

In the exploratory investigation attention is given to the Demarcation Committee, the official body charged with the allocation of designated areas of origin in South Africa. Through the recorded interviews attention is given to the opinions and views of 55 other interested parties, including wine makers, oenologists and wine company owners.

On the basis of the formulated questionnaires and four statements relating to the functioning of the Wine of Origin system and the creation of the wards, this exploratory research will reach conclusions and produce three recommendations.

Firstly, producers must be better informed about the rules and possibilities of the current WO system. In this respect, better information sharing with the wine consumer is also an important point of attention.

Secondly, improvements are necessary in the boundary definitions of WO Stellenbosch. While the system appeared to be sufficient when it was set up, more attention needs to be paid to characteristics of terroir, municipal boundaries, commercial interests, political factors and the current flow of funds. Furthermore, whenever unwanted government restrictions are imposed, the producers themselves must provide counter arguments. With the establishment of designated areas of origin, including wards, scientific evidence must always be used as the basis of this decision. The Demarcation Committee could appoint a new work group for this. In South Africa in the past 45 years, there has been a lot of progress made in the areas of soil composition, geography and climatology

Thirdly, ward names must be promoted and terroir wines in the form of single vineyard wines deserve more attention. These new insights on the basis of the research could further help the South African wine industry and in particular Stellenbosch.

Arjen Pleij 30 June 2018

Introduction and questions asked

STELLENBOSCH;

Title:

What is the relationship between terroir and the Wards classification in the South African wine district Stellenbosch? Past, present and future.

Definition of the dissertation subject and specification of the related investigative questions

A ward is a subdivision within a demarcated wine district. A ward is not the smallest geographical unit in the Wine of Origin (WO) System in South Africa, as that is an estate wine or single vineyard wine. There are 77¹ wards in South Africa, of which seven are in the Stellenbosch district. This is the demarcation which corresponds to appellation, or designation of origin as it is known in Europe for example. The setup is a dynamic process whereby new wards are continuously added. There are seven wards in Stellenbosch: Banghoek, Bottelary, Devon Valley, Jonkershoek Valley, Papegaaiberg, Polkadraai Hills and Simonsberg-Stellenbosch. Currently, the process of adding an eighth ward (Helderberg) is in progress.

Stellenbosch is South Africa's best known wine region. The demarcation of Stellenbosch is older than that of other wine regions, and the region itself is continuously changing in relation to wine growing, wine quality and wine styles.

In the context of my dissertation, I have completed a literature study to discover what the criteria were which led to the establishment of the wards in Stellenbosch since 1980, linked to an investigation using the questionnaire completed by 162 interested parties in South Africa. To what extent do the parties involved find that the current wards are a good reflection of the different terroirs within Stellenbosch? The interested parties are wine makers, wine company owners, wine growers and wine journalists. The intention is not only to provide an answer to the research questions, but also to provide suggestions on how the relevancy of the wards can be improved if necessary in the future.

¹ www.sawis.co.za (2017)

Reasoning and research methods

Type of research: exploratory

The process of the establishment of the current seven wards in Stellenbosch will be investigated. Who, what and why did these demarcations come about? Which factors played a role in the definition of boundaries and is the current demarcation the correct one? What role does terroir play in the demarcation of wards in South Africa, and particularly in Stellenbosch? Via the past and present we arrive at the specific research. The questionnaire is completed by both authorities and other interested parties and should give an answer to the research question and statements.

Terroir

The scope of this work will not include research into the subject of terroir, or as to which aspects play a part in that subject. My research will cover the differences in terroir in the various sub areas in Stellenbosch and the role that they have played in the demarcation of the different areas or wards. Which aspects of terroir have played a central role in the demarcation of the wards in the Stellenbosch wine district, or is it simply a division based on information, facts and natural areas outside of terroir?

Motivation for the research

Following various visits to wine land South Africa and the wine district Stellenbosch in particular, I began to ask why the region Stellenbosch is split into seven different, demarcated wards. Why these particular wards as sub regions? How did this come about? Who came up with the idea and divided them and did terroir play a deciding role? The following quote from a very good Stellenbosch winemaker is intriguing: "the best terroir in South Africa can be found in Stellenbosch, only the winemakers still need to realise that!" (C. van der Merwe²)

Goal of the research and research questions

The aim of the research is to gain insight into the demarcation of Stellenbosch. The research questions must provide answers and the exploratory research must produce insight. The Demarcation Committee, which is responsible within the Wine & Spirit Board (WSB) for the demarcation of the wine regions in South Africa, were first to respond to my research questions below. The same questions were subsequently posed to the involved parties from the South African wine industry. The focus lies with the involved parties from Stellenbosch. It is of utmost importance to get a broad view of the satisfaction level among those involved.

To get answers to the questions on the questionnaire, I would first like to posit a number of statements, so that based on the research these can be confirmed or denied at a later stage.

Statement 1: The WO system as implemented in 1973 is still sufficient.

² Carl van der Merwe (2017)

Statement 2: The best possible system is based on origin.

Statement 3: Terroir must always be central to demarcation.

Statement 4: Stellenbosch needs more wards.

The aim of this dissertation is to get answers to the following research questions:

The research questions from the questionnaire (see addendum V)

- 1. Does the Wine of origin (WO) system work?
- 2. Are there enough rules set in the system to control quality?
- 3. Is the concept of terroir reflected in the WO system?
- 4. The system started in 1973 and changed through time, does it need to be adapted?
- 5. Does South Africa need more specific defining via wards in the (total) winegrowing regions?
- 6. Are seven wards enough for a wine district (such) as Stellenbosch?
- 7. Are the wards in Stellenbosch set by the best intentions (read: terroir) and the best boundaries?
- 8. Does Stellenbosch need wards like: Ida's Valley, Helderberg, Somerset West, Blaauwklippen Valley, Stellenbosch Kloof, Faure, Paradyskloof or others?
- 9. When were the different wards introduced? Do you know when each of them was introduced and why in this order?
- 10. If boundaries like roads, rivers and railroads were more important than terroir by setting the seven wards of Stellenbosch; can we still talk and consider different terroirs of each ward/subgebied/appellation?

On the basis of the ten research questions I expect to draw conclusions and provide recommendations.

Chapter 1: The past, 1652 to 1990

The following paragraphs shall briefly describe the beginning of wine production in South Africa: Where it began, why and who was important in this development.

1.1 The history of wine production in South Africa³

To put this subject into perspective, it is necessary to go back to the time of Jan van Riebeeck. The beginning of wine production in South Africa can be briefly explained through a small number of historical figures. Before the arrival of the Dutch in the Cape, there were no grapes and therefore no wine production.

Jan van Riebeeck⁴

The Dutch East India Company (DEIC/VOC) decided 360 years ago to establish an outpost on the Cape. In 1651 the leadership selected Jan van Riebeeck to found this settlement. This post served as a refreshment outpost and was strategically advantageous in the war against the English. Following a hundred day journey, Riebeeck arrived with three ships on 6 April 1652 at the Cape of Good Hope. This resulted in the birth of Cape Town as the first city in a new nation.

Van Riebeeck decided to plant European grape vines. Wine could after all enhance the necessary food stores. In his opinion, vines could survive well in the Cape due to a climate similar to that of the Mediterranean: Cool and damp winters, long summers and a relatively stable temperature.

On Sunday 2 February 1659, four years after the first planting, Jan van Riebeeck noted in his diary that the first wine had been made from grapes planted on the Cape. Due to Van Riebeeck's journal, South Africa is the only country in the world where is it is known on which date the first wine was made.

Simon van der Stel and the French Huguenots

The arrival of Simon van der Stel in 1679 as governer of the Cape is of great significance to the further expansion of wine production on the Cape⁵. He organised the planting of vines in the Wildebosch valley, amongst others. This valley was later renamed to Stellenbosch after him.

In 1684 Van der Stel received 800 hectares of land as a thankyou gift from the DEIC in honour of his special achievements. On this land, he built his estate Constantia and planted many thousands of vines, trees and other crops. He also wrote a wine handbook for other farmers containing rules about harvest times, hygiene and the preparation of wine.

In 1685 the management of the DEIC sent dozens of Huguenots to the Cape. They were offered pieces of land in the valleys of the current Paarl, Drakenstein and Franschhoek wine regions. These French Huguenots brought a better knowledge of wine production and preparation with them, which provided a positive quality stimulous to the total wine production in the Cape.

³ Tim James: Wines of the new South Africa (2013)

⁴ www.wosa.co.za

⁵ www.wosa.co.za

Willem Adriaan van der Stel and the English

Simon van der Stel's son, William Adriaan, suceeded him and settled in the wine estate Vergelegen. He experimented there with grape varieties new to the Cape and developed an important wine calendar suited to Cape wine production. In addition, he extended the wine production northwards in the present day Tulbagh

In 1806, the English took over control of the Cape and this meant a time of great growth for the wine industry. Due to the boycott of French wines and a reduced tariff for South African wines, Cape wine production grew greatly. 50 years later, the tariffs were scrapped and Cape wines couldn't match the competition from European wines. It was a disaster. A second disaster emerged in 1885, when the North American originating louse *Phylloxera* totally destroyed the vineyards in Constantia and Helderberg.

The Twentieth century and the KWV⁶

At the beginning of the twentieth century many co-operatives came into being, partly stimulated by the government. Through overproduction the price per litre remained low. On 8 January 2018 Charles Kohler set up a national organisation under the name The Co-operative Wine Growers' Association of SA (KWV). About 95% of all the wine growers became members and started to work together. In the years that followed, the government gradually gave the KWV more power and control. The KWV set the selling prices and decided how much of the harvest could be exported, which part of the harvest was destined for wine production and which part for distillation.



Vergelegen wine estate close to False Bay

⁶ Tim James: Wines of the new South Africa (2013)

1.2 The history of the Stellenbosch wine region

History

The town of Stellenbosch was founded in 1679 by Simon van der Stel and is the second oldest town in South Africa after Cape Town. Van der Stel named the new town after himself and in 1683 it was inhabited by around thirty families. In 1753, a century and a year after the arrival of Jan van Riebeeck, Stellenbosch counted more than a million vines; then approximately a quarter of the total number of plants in the colony (T. James⁷). At the end of the eighteenth century around four million vines grew around Stellenbosch, about a third of the total. Many grand wine estates originate from the late eighteenth and early nineteenth century.

Stellenbosch town⁸

Stellenbosch lies 34 degrees south of the equator. The town of Stellenbosch is situated approximately 40km north of Cape Town and 10km from the coast at 300 metres above sea level. The historic town of Stellenbosch boasts many examples of original Cape architecture. The hilly terrain with adequate rainfall, and deep well drained soils and a great diversity in terroirs make Stellenbosch into an important wine area. Furthermore, Stellenbosch, the 'oak city' is the education and research centre for the region. Stellenbosch University is the only university in South Africa with undergraduate and post graduate programmes in viticulture and oenology. The Elsenburg Agricultural Training Institute can be found close to Stellenbosch as can the Nietvoorbij Institute of Viticulture and Oenology. This institute controls experimental vineyards in various districts, and is important for the introduction of new varietals, clones and rootstocks.

1.3 Which grape varieties historically grow in Stellenbosch?⁹

History

The history of grapes on the Cape is somewhat hazy. From the time of Jan van Riebeeck, who never clearly stated in his diaries which grape varieties arrived into the Cape, there has been a lack of clarity about the grape varieties used (T. James¹⁰). The first grapes on the Cape were in any case the following: sémillon, palomino, chenin blanc, muscat blanc à petits grains, muscat d'Alexandrie en pontac. Some other grapes, noted for example by travellers, turned out to be mainly feral plants and not established varieties on the cape (T. James). From Cape Town, Costantia and Stellenbosch, viticulture spread slowly further into the Cape.

⁷ Tim James: Wines of the new South Africa (2013)

⁸ Tim James: Wines of the new South Africa (2013)

⁹ Tim James: Wines of the new South Africa (2013)

¹⁰ Tim James: Wines of the new South Africa (2013)

Chapter 2: The terroir

2.1 The present, 1990 to 2018

21st century¹¹

In 2009 South Africa celebrated the 350th year of local wine production. That was fifteen years after Nelson Mandela had been chosen as president of South Africa. That election and the change to the political climate ensured an international focus on South African wine. Prior to this there had been a boycott on it's export due to the apartheid regime.

Anno 2018

Once the international markets opened up for South African wines a significant growth in export followed. About 45% of the local production was now exported. Inexperience and over-enthusiasm, along with a demand for cheap poor quality wine from the Dutch and German markets amongst others, led to average quality wines being exported in the beginning. This had a less than positive effect on the South African wine brand. In the early years, there were also no 'real' iconic wines to compete with the international leaders.

Focus shift from quantity to quality

Better vineyeard management is the most important factor in the revival of South African wines. The most top producers of this moment, according to the Tim Atkins report (2016) started after the abolition of apartheid and are therefore producers with very little history. The use of better clones, techniques to fight the *leafroll* virus and better and wiser choices of vineyards are leading the way. The knowledge that good wine is made in the vineyeard and not in the wine cellar is a recent development. In addition, there is also a growing awareness of the right location for each specific grape variety.

A second crucial factor, according to Tim Atkin (MW), is the arrival of a new generation of brilliant wine making talent. Ironically the weak exchange rate of the Rand and low price of wine grapes make it relatively easy to begin in the business (T. Atkin¹²). It is possible to buy grapes and hire space to process them for a small investment. Most of the new talented winemakers do not have their own vineyards.

2.2 What does terroir mean?

The first vineyards began on hills, where there was enough sunlight exposure, where the soil was deep enough and where there was enough water for the root system. These basic elements are still relevant to modern vineyards. There is no definitive description of the concept terroir, but it might be best to describe it as: all the environmental factors of a vineyard that affect the growth of the grapevines and the production of the grapes on the vine. The concept terroir covers climate (air temperature, soil temperature and rainfall), topography (including location, elevation, exposure, slope, micro-climate, exposure to sunlight (whereby topography is important), soil composition and geology, but also nutrients in the soil and ground water, as well as human impact.

¹¹ Tim James: Wines of the new South Africa (2013)

¹² Tim Atkin: South African Report (2016)

In South Africa there has also frequently been research carried out on the various terroirs, including that of Stellenbosch. For an inventory of the different terroirs the following variable environmental factors are included: Topography, soil (condition), geology and climate. Despite the fact that 1,389 different terroirs have been identified in Stellenbosh, further research is recommended (V. Carey¹³). The research into terroir in this respect is separate to the marketing arguments and the interests of producers.

The different components of terroir will be briefly explained in the paragraphs below.



2.2.1 Climate

There are two major factors that influence climate, namely the Gulf Stream and drift ice. In South Africa, these two factors also have a major impact.

In viticulture, regional climates are categorised in the following three ways:

- 2.2.1.1 Macroclimate
- 2.2.1.2 Mesoclimate
- 2.2.1.3 Microclimate

2.2.1.1 Macroclimate

With regard to macroclimate there are a number of boundaries that can be used. Often it refers to the climate in a particular region or indeed a particular country. The macroclimate of the Western Cape (see addendum I) is strongly influenced by the meeting of the cold Atlantic Ocean and the warm Indian Ocean at Cape Agulhas. For the wine growers, the cooling winds from the Atlantic Ocean with it's cold water that is carried north by the Benguela current from

¹³ V. Carey: Viticultural terroirs in Stellenbosch, South Africa (2008)

Antarctic waters along the (south) west coast is important. (L. Daniëls¹⁴). The close proximity of the Atlantic Ocean can be felt and noticed in the whole Stellenbosch wine district and the cooling effect of False Bay has a great influence on the viticulture. The cooling effect of the sea ensures better ripening conditions due to less transpiration occurring in the vines. This ensures that the aromas and acids which have built up in the grapes will not be lost. Weather can change from year to year, but climate is relatively stable (generally measured over a 30 year period), in terms of rainfall and temperature (V. Bonnardot¹⁵).

2.2.1.2 Mesoclimate

Mesoclimate is the climate within a specific area. How that area can be defined, depends on the boundaries applied. It can be referred to as the Stellenbosch mesoclimate, but also the mesoclimate of one particular ward within the region. Wind and precipitation play a great role in the many different mesoclimates within the region, also as a result of the varied topography of the Western Cape (L. Daniëls¹⁶). The West Cape region contains many mountain ranges and more or less isolated mountains which ensure that the rainfall levels can dramatically change depending on location. The average annual rainfall measured in the Stellenbosch region varies from 549mm in the Devon Valley to 961mm on the Helshoogte (Bankhoek), with a typically Mediterranean distribution of dominant winter rainfall. (V. Carey¹⁷). The rainfall during the months December to February (from veraison to harvest) is on average only 52mm to 98mm. This results in frequent drought stress in the vineyards, which require necessary irrigation, mainly from a quality point of view (V. Carey). The variables that influence a mesoclimate, such as topography, including elevation differences, exposure and terrain differences play a central role in the environmental characteristics of the Stellenbosch WO (V. Carey).

2.2.1.3 Microclimate

Microclimate is the specific climate within a singular vineyard. Microclimate has to do with the climate within the canopy and can differ greatly within a distance of metres or centimetres. It can also change within minutes or seconds. It is influenced by the growth of the vine and by treatments in the vineyard, such as canopy control, the direction in which the rootstock has been planted, the distance between the plants, the density of planting etc. (V. Bonnardot¹⁸) (see also paragraph 2.2.4). The topographical contrast in Stellenbosch ensures great differences in the microclimates (T. Roos¹⁹).

2.2.1.4 Weather Stations²⁰

The influence of the ocean is greater closer to the coast, and the fluctuations in weather conditions in Stellenbosch are often larger than expected. There are two weather stations in the Stellenbosch district which keep track of the general weather picture. There are more weather stations in Stellenbosch, but these two feed their data into SAWIS (South African Wine Industry Information & Systems). These are:

- 1. Somerset West weather station, Vergelegen
- 2. Stellenbosch weather station, Nietvoorbij

¹⁴ Lars Daniëls: **www.wosa.nl** (2014)

¹⁵ V. Bonnardot, V. Carey en J. Strydom: Weather stations; applications for viticulture (2004)

¹⁶ Lars Daniëls: **www.wosa.nl** (2014)

¹⁷ V. Carey: Viticultural terroirs in Stellenbosch, South Africa (2008)

¹⁸ V. Bonnardot, V. Carey en J. Strydom: Weather stations; applications for viticulture (2004)

¹⁹ T. Roos: **www.mooiplaas.co.za** (2016)

²⁰ www.wosa.co.za

There are differences in the measurement between both weather stations, as a result of the differences in topography. Somerset West weather station is located at 80 metres above sea level. The dominant factors here are the prevailing wind from False Bay and the elevation differences. The total annual rainfall is 542mm, with 177mm of that falling in the summer. The evaporation level, taken over the whole season is 902mm

The Stellenbosch weather station is found at an elevation of 146 metres. The most important influences here are the open landscape to False Bay, the type of soil, the altitude differences and the sunlight exposure. The total annual rainfall is 713mm; in the summer this is 229mm. The evaporation level over the season is measured at 1,540mm.

2.2.1.5 Climate and grapevines

For grapes to fully ripen with an acceptable balance of sugar and acids, the plants need a temperate climate. In this case, temperate means neither too cold nor too warm and neither too wet nor too dry. Generally speaking these conditions can be found in both the northern and southern hemispheres between 30 and 50 degrees latitude. The average annual temperature is ideally 14 to 15 °C, with a minimum of 9 °C. With enough heat during the ripening process, the sugar content and the potential alcohol content of the fruit increases while the acidity decreases. In Stellenbosch the climate is warm but temperate with an average temperature of 16.4 °C

2.2.1.6 The Huglin Index

One of the most widely used climate indices in viticulture in that of Pierre Huglin: the Huglin Index (HI). This is a bioclimatic index, a sum of the average maximum and mimimum temperatures during the 6 months of the growing season, which gives a good indication of the climate of a wine region (L. Daniëls²¹). Because a link has been made with the climatic needs of popular grape varieties, the HI also gives an impression of the possibilities for wine planting, or which varietal can best be planted. The higher the figure, the warmer the wine region. It is interesting to consider this data from a European perspective, because it partly explains the aroma and taste differences between European and South African wines. Every part of Stellenbosch, even those close to False Bay, are warmer than Bordeaux. This largely explains why cabernet sauvignon grows well everywhere in Stellenbosch while in Bordeaux it thrives mainly on the quick warming, good draining stony soil of the Haut-Médoc (L. Daniëls) (see Addendum XV).

2.2.1.7 Global warming

For the past number of years there has been much attention given to climate change and the effect of it on the wine industry; this has been investigated in all areas of the world (Schultz²²). An analysis of the weather stations in the South African vineyards over the period 1942 to 2006 for example, show that the regions in the West Cape experienced a significant increase in temperature during the last few decades (Bonnardot en Carey²³). The average temperature increase is between 0.5 and 1.7 °C, depending on region and period (see addendum IX)

Studies about expected future climate conditions in South Africa have shown that the overall temperature in the southern West Cape will increase, with the smallest increase in the area on

²¹ Lars Daniëls: www.wosa.nl (2014)
²² J. Schultz: How may climate change effect viticulture in Europe (2000)

²³ V. Bonnardot en V. Carey: Observed climatic trends in SA wine regions (2008)

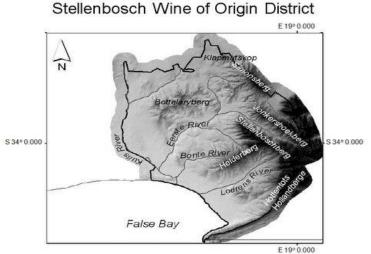
the coast (N. Vink²⁴). In general, as a result of the studies carried out over the past thirty years, it can be surmised that the conditions in the vineyards in Stellenbosch, Paarl and Franschoek will become warmer and drier with far less rainfall in the early winter (Carter²⁵).

Historically seen, the South African wine industry has been characterised by it's diversity. This is now being threatened by climate change (N. Vink²⁶⁾. Whenever a warm region for example, becomes a hot region, the diversity of wine type and style becomes limited. Luckily, however, there are (potential) possibilities to expand into temperate and cool areas (N. Vink). Climate change also has possible consequences for the WO system and the demarcation of both existing and new (sub) areas. Fortunately, the system is a dynamic one.

2.2.2 Topography

Environmental factors such as location, exposure to sun, elevation and slope are part of topography. The constant interaction between the old soils and the undulating landscape has resulted in innumerable mountain ranges, valleys and hills which deliver specific situations for special vineyards. Naturally the differences in location with variations in sunshine and elevation have an influence on temperature. In addition, the prevailing wind, mountain shadows and difference in rainfall amounts also have a large role to play in climate.

From the area under vine in Stellenbosch, 96% has a slope of less than 15%. Nearly all vineyards in Stellenbosch have been planted at under 500m above sea level, of which around 51% of the vineyards are cultivated between 100 and 200m above sea level (V. Carey²⁷). Around 45% of the vineyards in Stellenbosch are facing north west, 39% south west and the rest face east (V. Carey) (see addendum XVI in relation to the topography of Stellenbosch). The large variation in topography over short distances ensures great differences in soils in regions and between the sub regions in Stellenbosch, from shallow rocky soils on mountain tops to steep slopes and deep and greatly weathered soils on the foothills.



The most important mountains in the Stellenbosch wine region²⁸

²⁴ N. Vink: Terroir, climate change and the future of SA wine industry (2009)

²⁵ S. Carter: The projected influence of climate on the SA wine industry (2006)

²⁶ N. Vink: Terroir, climate change and the future of SA wine industry (2009)

²⁷ V. Carey: Viticultural terroirs in Stellenbosch, South Africa (2008)

²⁸ www.geocoaching.com (2017)

2.2.3 Geology

For wine quality and terroir expression the soils of vineyards are crucial and in South Africa they deserve special attention. Viticulture in the Western Cape might be relatively young, but the geology is not, thereby making it home to a number of the oldest vineyard soils in the world. Enormously powerful endogenous processes (with pressure originating inside the earth) during millions of years led in the south westerly point of Africa to impressive mountains, with steep slopes and deep valleys, rolling hills and high peaks. As a result of this, the West Cape is home to a remarkable diversity in mesoclimates and soil types. (L. Daniëls²⁹). A part of the geology is the vineyard soils, which in Stellenbosch consists mainly of decomposed granite and a certain amount of weathered shale. (V. Carey³⁰).

2.2.4 Man as part of terroir

Human interaction can influence terroir. Indeed, the manner in which the vineyard is planted totally affects the conditions which influence the growth of the vines. The grapevine is naturally a climbing plant, but man has learned how to keep it perfectly under control. Therefore, the wine grower needs to work throughout the whole year in the vineyard to keep his plants in perfect condition. The difference in exposure and elevation are the most deciding factors in the choice of varietal and root stock in each terroir in Stellenbosch (T. Roos³¹).

2.2.5 Planting density

Planting density is a qualtiy factor not to be underestimated. In warm, dry areas low plant density has historically been found as the plants there had little water to share. A high planting density leads to competition between the vines. They produce less and are forced to go deep underground. The downside of such high density planting is that it leads to difficulties with mechanisation. The number of plants per hectare can vary widely: from barely 3,000 to more than 10,000. In the past few years there have been more experiments carried out with high density planting, depending on the natural conditions such as soil fertility, the exposure and the microclimate.

2.2.6 Trellising and pruning methods

Pruning methods and trellising systems vary widely throughout Stellenbosch. Historically there were no trained vineyards, but currently in Stellenbosch all of the young vines are trained. Stellenbosch University, VinPro and a number of other well known wine growers working as consultants, each have their own vision, advice and influence whereby soil fertility, row direction, wind direction, vineyard elevation, exposure and mechanisation amongst others help to decide what the best advice is. The choice in trellising systems and pruning methods can lead to the production of different wine styles (A. Davel³²). The choice in the production of different types of wine (branded wine, bulk wine or quality wine) demands choices in vineyard control, such as pruning methods, balance in the grape (sugars, acids, phenolic ripeness) and canopy control (A. Davel). The availability of water, due to the lack of winter rains in the past number of years plays an increasingly larger role. New plantings are (almost) always irrigated, while irrigation in exisiting Stellenbosch vineyards also plays a big role, depending on the type of wine.

²⁹ L. Daniëls: **www.wosa.nl** (2014)

³⁰ V. Carey: Viticultural terroirs in Stellenbosch, South Africa (2008)

³¹ T. Roos: www.mooiplaas.co.za (2016)

³² A. Davel: Optimising productivity in vineyards.. (2015)

Consider here the differences between mass produced wine and quality wine, but also the differences between conventional, organic and biodynamic viticulture. Recent studies into South African irrigation in relation to drought and global warming have shown that the necessity to irrigate and at which point in the season is changing. (J. Araujo³³).

2.2.7 Yields

The yields from the vineyards in the wine areas of the West Cape vary greatly. The average income per hectare in Olifanstriver is 33 tons, while in the Klein Karoo this is 19t/ha and in Swartland only 9t/ha. Two of of three producers in Stellenbosch are breaking even or making a loss (D. March³⁴). Only 8% of the producers in Stellenbosch make a reasonable profit. The costs here are higher than in other regions requiring a return of 46,000 Rand per hectare in order to cover costs (D March). The average return per hectare in Stellenbosch is less than 10t/ha. It has been suggested that a minimum return of 12t/ha is required. When the return is 10t/ha, then the finished wine must be sold in the shops for 150 Rand (D. March).

³³ J. Araujo: Impact of drought on grape yields in the Western Cape, South Africa (2014)

³⁴ D. March: Profit and mostly loss in SA wine production (2016)

Chapter 3: Wine of Origin³⁵

3.1 Designation of origin

We now know how the wine sector in South Africa began and what role terroir and it's various aspects play in this industry. In the following chapter South African wine legislation and it's origins will be discussed.

Introduction

The uniqueness of the wine producing areas and South African wine producers were not legally protected for a long time. The official Wine of Origin Scheme was introduced in 1972 and thereafter the laws were enacted. This new plan would not only protect all wines based on their place of origin, but also on the basis of the cultivar used and vintage year.

History

In 1970 the Minister for Agriculture set up a commission to investigate the marketing of wine by *estates*, as this was encountering difficulties through the power of the big players in the market. The commission also had to investigate the demarcation of production areas for wine. The United Kingdom as an EEC member state and especially as the most important client for South African wine was keen for an introduction of a certification system (T. James³⁶).

The law introduced in 1973 went a lot further than that. It was a certification system that guaranteed that the legislation on the label was controlled. It was a first appellation system outside of Europe. The system – that is still under development and will grow further – is fairly rigourous, but does not demand any particular grape variety, yield per hectare or maximum plants per hectare. The Wine of Origin (WO) system would be implemented by the Wine & Spirit Board (WSB³⁷).

Wine legislation in South Africa

Whenever a wine displays 'Origin' on the label, it is subject to the legal rules which guarantees that the wine actually comes from that 'Origin'. If, for example, the term Wine of Origin (or the abbreviation WO) Robertson or Stellenbosch is used, it gives the assurance that the grapes used for that particular wine are 100% from that particular area. Historic exceptions have been made, but are not named by official bodies. A specific vintage has to include 85% of wine from that particular year and if a particular cultivar is listed then 85% of the wine must be made from that variety.

Demarcation from region to district to ward

The borders of all production areas in South Africa are legally decided. A distinction is made between regions, districts and wards. A ward can be created whenever climate, soil and ecological factors play a clear role in the defining the character of the wine. The name of the ward must represent a real geographical place name (such as a town, village, river or

³⁵ Wine of Origin: The Wine and Spirit Board www.sawis.co.za

 ³⁶ Tim James: Wines of the new South Africa (2013)
 ³⁷ www.sawis.co.za

valley). Districts must adhere to the same criteria as wards, but have a broader definition of the relevant area, on the basis of larger geographical characteristics such as mountains or rivers. A larger diversity in soil type is logically allowed (terroir can be less homogenous than in a ward). Regions are larger again. In the case of a river, for example, a region can stretch from it's source to it's mouth. The Wine of Origin system was later revised to include geographical units. South Africa currently has five of these: Western Cape (by far the most important with 90% of the total area under vine), Eastern Cape, KwaZulu-Natal and Limpopo.

3.2 Terroir in Stellenbosch

Although Stellenbosch and the area around the Eerste River Valley can be very warm, the whole district is influenced by the cool southeasterly wind that blows from False Bay. This famous southeaster, known as the 'Cape Doctor' blows during the spring and summer months. This is also the reason that Stellenbosch is included as part of the Coastal Region (WOSA³⁸).

The mountains have a major influence on the terroir and are crucial to the winter rainfall (600-800mm per annum) in Stellenbosch. They also ensure deep, well drained soils with a lot of granite (mainly Hutton, Clovelly and Tukulo) and Table Mountain sandstone (Longlands, Fernwood and Estcourt). Generally, it can be said that the total rainfall in Stellenbosch is between 600-1200mm annually, depending on the area. As the rainfall in the growing and ripening seasons is low – between 50 to 100mm on average – supplementary irrigation becomes necessary (V. Carey³⁹). In Stellenbosch, because of the large variations in topography, climate is the most important terroir factor. Of course, soil, exposure and elevation differences play a large role, but due to the climatic differences in various areas mainly due to the topographical diversity, this is the deciding factor in Stellenbosch.

The role of the winemaker

"Cape winemakers take terroir seriously since the beginning of the 21st century. Since then the best winemakers realise in which location which varieties grow best albeit on a small scale" (C. v.d. Merwe⁴⁰). Before that time, originating in the KWV period from 1918 to 1990, varieties were planted on the basis of supply and demand. The KWV gave instructions on where to plant which grape sort. That was not always in the best location. Planting was done on that basis of market demand. "The freedom, since 1994, to explore new areas, to discover new terroirs and possibilities, is a blessing" (C. Alheit⁴¹).

"At the moment there are a growing number of interesting place-specific wines on the market, which could really be designated as terroir wines, and should be appreciated on the basis of quality and where it is obvious that the makers know who they are and where they want to go" (C. v.d. Merwe). What is noticeable about this new manner of winemaking is the use of traditional methods but with all the modern technical knowledge and science, and respect for origin.

³⁸ www.wosa.co.za

³⁹ Victoria Carey: Viticultural terroirs in Stellenbosch (2008

⁴⁰ Carl van der Merwe (2016)

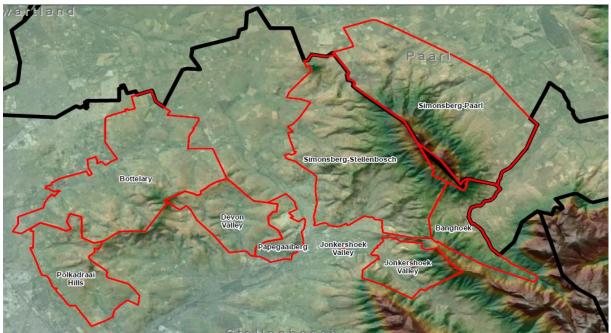
⁴¹ Chris Alheit (2016)

3.3 The classification of Stellenbosch

Stellenbosch is scenically and climatologically very diverse; mountains and the proximity to False Bay play an important role. Meso climates and soils differ greatly, whereby it is possible to make a great variety of wines. The various wards each have their own unique speciality. See also paragraph 2.2.2 about the topography of Stellenbosch.

The seven wards of Stellenbosch⁴²

Banghoek, Bottelary, Devon Valley, Jonkershoek Valley, Papegaaiberg, Polkadraai Hills and Simonsberg-Stellenbosch are the seven wards of Stellenbosch. Below is a table showing the most important parameters per ward. The wards are officially sub areas within the Stellenbosch district. The total vineyard area in the seven wards is 5,147.04 ha⁴³. Only one third of Stellenbosch is demarcated. The rest is therefore part of WO Stellenbosch.



The wards of Stellenbosch⁴⁴

⁴² www.wosa.co.za

⁴³ **www.sawis.co.za** (2016)

⁴⁴ Heinrich Schloms: Vinpro (2018)

Information about the wards in Stellenbosch:

Ward	No. of ha	Ward	Soil	Rainfall
		since		
Banghoek	239.46	Oct 05	granite	1,000 mm
Bottelary	2,080.24	Sept 96	granite	650 mm
Devon Valley	507.94	Sept 96	granite	700 mm
Jonkershoek Valley	180.15	Aug 91	shale en granite	1,000 mm
Papegaaiberg	83.40	Apr 92	granite sandy	700 mm
Polkadraai Hills	754.87	Sept 06	granite and sandy	830 mm
Simonsberg-Stellenbosch	1,300.98	Aug 80	granite	650 mm

Ward	Elevation of vineyard	Aspect	Grape variety
Banghoek	200 - 500 metre	southerly	blue and white
Bottelary	120 - 200 metre	northerly	white and blue
Devon Valley	240 - 470 metre	north-westerly and south- easterly	blue
Jonkershoek Valley	200 - 600 metre	south-westerly	blue
Papegaaiberg	110 - 160 metre		white
Polkadraai Hills	60 - 400 metre	south - south-westerly	mainly blue
Simonsberg- Stellenbosch	200 - 500 metre	south-westerly	more blue than white

Ward	Climate
Banghoek	continental, without frost
Bottelary	mediterranean, varied
Devon Valley	mediterranean, varied
Jonkershoek Valley	mediterranean, with short sun exposure
Papegaaiberg	mediterranean, relatively warm
Polkadraai Hills	mediterranean, with a lot of wind
Simonsberg-Stellenbosch	mediterranean

Stellenbosch

The borders of the Stellenbosch district are clearly defined by a number of roads and surrounding mountains. The national motorway N1 – that runs from the northern suburbs of Cape Town in the direction of Paarl – forms the northern border, while the main road from Bellville to Sir Lowry's Pass forms the western border. The eastern and southern borders run from the high sandstone mountains of Simonsberg in the east via the Jonkershoek and Stellenbosch mountains to the Hottentots-Holland Mountains in the south, including the Helderberg basin. The highest point of these mountains is between 1,200 and 1,500m. (See addendum VI).

3.4 Unofficial wards in Stellenbosch⁴⁵

"It is difficult to divide the Stellenbosch district into wards, due to the large variation in geology, terrain and soil types" (A. Oberholzer⁴⁶). "For discussions on soil composition it is best to consult the Stellenbosch wine route classification (since 1971⁴⁷), as this is based on the unique wine character of the different regions" (A. Aberholzer). "The terroir characteristics of these regions result in a better wine quality for some cultivars" (A. Aberholzer). The classification of six wards in the Stellenbosch Wine route is different to that used by Elmari Swart. For the book *The Essential Guide to South African Wines* Swart used a classification that differed from the official wards. She was helped in this by Abraham Oberholzer, who created a classification based on soil characteristics and climate differences. These unofficial wards and their parameters are shown in the table below.

The unofficial wards of Stellenbosch are: Helderberg-Annandale, Helderberg-Blaauwklippen, Helderberg-Foothills, Ida's Valley, Klapmuts-Simondium, Schapenberg/False Bay, Stellenbosch Kloof en Stellenbosch-West/Faure.

Unofficial ward	No. of ha	Ward since	Soil	rainfall
Helderberg-Annandale	unknown	N/A	granite	760 mm
Helderbeg- Blaauwklippen	unknown	N/A	granite, shale and sand	760 mm
Helderberg-Foothills	unknown	N/A	large variation	760 mm
Ida's Valley	unknown	N/A	granite	650 mm
Klapmuts-Simondium	1,377.23	N/A	granite	945 mm
Schapenberg	unknown	N/A	granite with shale	540 mm
Stellenbosch Kloof	unknown	N/A.	sandstone	650 mm
Stellenbosch-West	unknown	N/A	sandy and stony	590 mm

Information about the wards in Stellenbosch:

⁴⁵Elmari Swart: South African Wines (2009)

⁴⁶ Abraham Oberholzer: Catena; soil associations of Stellenbosch (2010)

⁴⁷ www.wineroute.co.za

Unofficial ward	Elevation of vineyard	Aspect	Grape variety
Helderberg- Annandale	150 - 300 metre	northerly	more blue than white
Helderbeg- Blaauwklippen	150 - 250 metre	westerly	more blue than white
Helderberg-Foothills	60 - 400 metre	large variation	more white than blue
Ida's Valley	200 - 300 metre	south-westerly	predominantly blue
Klapmuts- Simondium	200 - 500 metre	northerly	blue and white
Schapenberg	100 - 200 metre	large variation	more white than blue
Stellenbosch Kloof	60 - 400 metre	southerly and northerly	white and blue
Stellenbosch-West	60 - 300 metre	south-westerly and north- easterly	white and blue

Unoffical ward	Climate
Helderberg-Annandale	mediterranean
Helderberg-Blaauwklippen	mediterranean
Helderberg-Foothills	mediterranean, cooler due to proximity to False Bay
Ida's Valley	mediterranean
Klapmuts-Simondium	mediterranean
Schapenberg	mediterranean, cooler due to proximity to False Bay
Stellenbosch Kloof	mediterranean
Stellenbosch-West	mediterranean, cooler due to proximity to False Bay

3.5 Changes to the W.O. rules, a question of time

"South Africa has the oldest surface (viticultural) soils in the world. The geology is old and terroir is a 'hot-topic'. That ensures a primary focus on terroir in terms of quality, but also as a marketing tool. It would be logical to add European legislation to the WO rules, such as limiting the cultivars to particular regions or limiting the yield per hectare" (C. Greiger⁴⁸). However, opinion is really divided. According to Alastair Rimmer⁴⁹ of Kleine Zalze, for example, changing the rules is not a good idea, because South Africa has had an open model for so long.

⁴⁸ C. Greiger: www.wosa.co.za
⁴⁹ Alastair Rimmer: South African wine's U-turn on terroir (2016)

This pragmatic approach to wine production in South Africa is seen more often. At the lowest quality level (bulk wine) many wines are after all sold as Coastal Region or Western Cape. Terroir hardly plays any role in this category. Much South African wine is sold on the basis of product recognition (for example, brand name) and not on the basis of terroir or origin (M. Triffon⁵⁰).

"Education about South African terroir in general must first take place, before you can inform the consumer further" (M. Triffon). As the Cape wine industry only recently has shown an interest in terroir, there is a lot of time necessary to develop this further.

There appears to be an interest in change on the basis of literature study. There are nonetheless large diferences of opinion and perspectives. The differences arise mainly around the type of wine that is made or sold: bulk wine, branded wine or quality wine. With many types of wine, it is not terroir, but the market that plays the leading role.

In the past forty years a lot has changed on the South African wine landscape. Certainly in the last few years, much has changed in the WO system. Since the start of this research on the demarcation of Stellenbosch a number of changes have been discussed and also implemented. The most recent WO changes shall be discussed seperately below.

3.5.1 W.O. Cape Town

In June 2017, the Wine & Spirit Board introduced a new WO with the name Cape Town⁵¹. This name was chosen to make use of the name recognition of the city. The international allure in particular and the possibility of being able to better market the wines formed the basis of this decision.



The new WO Cape Town⁵²

Wines from the wards Constantia, Durbanville, Philadelphia and Hout Bay have been brought together under this joint name. In total, there are thirty wine estates involved, including a number with prestigious reputations.

⁵⁰ Madeline Triffon: South African wine's U-turn on terroir (2016)

⁵¹ Lauren Eads: **www.thedrinksbusiness.com** (2017)

⁵² www.meerendal.co.za

Rico Basson, CEO of the organisation, Vinpro, the South African wine producers' organisation, called the initiation of the WO Cape Town a great step forward for the South African wine industry.

Personal remark: From a marketing perspective, this new WO is probably a good move, but the combining of different sub areas into an overarching district has nothing to do with demarcation based on terroir. The wine estates may now use the name of the new district, Cape Town, but also that of their own ward, such as Constantia.

According to Siobhan Thompson, CEO of WOSA, this new name makes it easier to reach the international market as the reputation of Cape Town is so good and so important.

3.6 How are the wards used: blending, label, marketing

3.6.1 Blending

Whenever a producer wants to use the name Stellenbosch on the label, 100% of the grapes used must come from Stellenbosch. If all the grapes do not originate from a specific ward, then the name of the ward may not be used but the name Stellenbosch can be used provided all the grapes originate there. Wine companies use these rules to their advantage when it comes to popular brands. Whenever a wine is commercially successful and demand exceeds supply, then wine or grapes from the same region can be bought, without having to drop the name of the region. In this way, producers can increase the volume of available wine without having to fall back on a more generic appellation. Producers such as Ken Forrester, Spier and Kleine Zalze can also take advantage of the name Stellenbosch to sell their wine.

3.6.2 Label and marketing

In Europe, grape variety is dictated by the rules of the appellation. Historically, in the New World such as South Africa, everyone grew a bit of everything mainly to supply the consumer's needs and demands. New World wines are generally labelled on the basis of cultivar, as that gives the consumer a better flavour indication than whenever geographical indication nomenclature is used which conveys little. This difference in philosophy has turned the concept of terroir into a controversial term, as the public gets the idea that the New World doesn't have any terroir and therefore makes less serious wine.

In South Africa, the stating of the the origin Stellenbosch on the label adds financial value to the wine. It is after all the most well known geographical indication in the country.

Unfortunately, due to that exact reason, there are few producers in Stellenbosch who want or dare to use the name of their ward. Martin Meinert, based in Devon Valley is the only one in a long time, who states the name of the ward on the label. Since 2013, the name of the ward may also be added alongside the name Stellenbosch, in the hope that more producers will communicate the name of their ward. This is now slowly gaining momentum. It is mainly producers from Banghoek, such as Rainbow's End and Delaire Graff that are making use of this. The stating and linking of the ward name to the name Stellenbosch is a good way in which to create brand recognition for the specific wards.



http://winesweden.blogspot.nl/

The addition of the ward name to the indication of the geographical area, the Wine of origin on the label, is also seen as a good stepping stone by the Demarcation Committee. Stellenbosch has a good reputation, whereby wines are more easily sold than for example, wines from Paarl, as consumer recognition can be an important buying argument. The education of wine makers and owners about the extra inclusion of the ward name on the label is regarded by the Demarcation Committee as an opportunity. (J. Booysen 53).



Label from the Meerlust wine estate⁵⁴

⁵³ Jan Booysen (2017)
⁵⁴ www.passie.horeca.nl

Chapter 4: The present, the structure and the order of business

For the purposes of this disseration the role of the WSB will be briefly outlined. In addition, the Demarcation Committee, and not all the other councils or committees within the WSB, will be discussed

4.1 Wine & Spirit Board⁵⁵

The Wine & Spirit Board (WSB) is the South African wine authority with among other things, responsibility for wine legislation. The function of the WSB and it's branches will be explained in the following paragraphs.

Wine legislation

The control of Wine of Origin, cultivar, vintage, Estate Brandy and Integrated Production of Wine (IPW) has been assigned to the WSB. This board is appointed by the Minister of Agriculture, and is made up of a chairperson and twelve members. Of those, eight possess the relevant knowledge, competence and skills in the area of vineyard management, oenologie, distillation, regulations, alcoholic drink production, food safety and microbiology. Three members come from the Ministry of Agriculture, one is proposed by the Agricultural Research Council and one person is directly chosen by the Minister. The structure of the WSB is outlined in addendum X.

Demarcation Committee

This committee researches applications for (new) production areas (geographical units, regions, districts and wards), applications for the production of estate and single-vineyard wines, and makes recommendations on this subject to the Management Committee of the WSB.

SAWIS

SAWIS stands for the South African Wine Information System. This organisation is responsible for the daily functioning and enforcement of the WO system. SAWIS has direct contact with the participating wine companies. This involves on-site inspections, the taking of samples, reporting of irregularities, the receipt of applications, controlling of processes and the issuing of certification seals.



SAWIS Logo⁵⁶

⁵⁵ www.sawis.co.za

⁵⁶ www.sawis.co.za



Wine of Origin certificate seal⁵⁷

The official seal of the WSB, known locally as the 'bus ticket' is stuck to the neck of a bottle of wine whenever this is certified. It contains information by which it is possible to ascertain exactly where the wine originates from. The front and back labels are subject to regulations and the seal guarantees the accuracy of the declarations they contain regarding origin, cultivar and vintage.

4.2 Criteria for the demarcation of areas on the basis of origin

The demarcation of areas is carried out on the basis of established and defined criteria. The system is based on the origin of the grapes and therefore ultimately the wine. Whenever a ward is defined, it's soil, climate and ecological factors become important as these have a discernable influence on the character of the wine.

The proposed name of a region must be a real geographical placename and reflect the natural conditions. Additionally, at the heart of demarcation is that the wine originating in a specific region is distinctive in quality and character.

The criteria:

There are two factors which determine the character and emphasise the quality of the wine:

1. Natural environment, or terroir (soil, climate and location)

2. Human interaction (cultivar choice, viticulture techniques, vinification techniques) These are the criteria that play a role, whereby terroir is the most important and has the greatest influence. This is due to the fact that in some wine regions, the vines thrive better than in others due to the differences in soil, climate and location. These two criteria are crucial in the demarcation of for example, a ward by the the Demarcation Committee.

4.2.1 The role of cultivars in the W.O.⁵⁸

All of the cultivars planted in South Africa belong to the *Vitis vinifera* family, which was originally imported from Europe. Most grape varieties that are now locally cultivated were originally imported. In addition, there is a unique South African cultivar created by the crossing of two varieties, namely pinot noir and cinsault, which resulted in pinotage.

Approximately ninety cultivars have been approved for the production of wine within the WO (see addendum XIII for the most important Cape cultivars). Each variety has specific characteristics and capacity to adapt in relation to soil and climate, and a specific suitability

⁵⁷ www.wosa.nl

⁵⁸ Wine of Origin; the Wine and Spirit Board

for a certain wine style and quality. There is therefore a close correlation between the cultivar, the origin and the eventual wine. Approval for the addition of new cultivars to the existing list also falls under the responsibility of the WSB.

4.2.2 The term 'estate'

The WSB may register a piece of land or a section of a piece of land as an *estate*. Wine produced on this land can then be called estate wine. This registration can be suspended or withdrawn if necessary. The application for registration as an estate must come from the producer. The request for the registration as estate is only valid for the total estate and can never refer to only a portion of a wine business.

4.2.3 Single Vineyard Wine

The WSB can register a vineyard, planted with a single cultivar as a *single vineyard*. The wine produced from here carries the name single vineyard wine. The application is completed by the producer and the approval is issued via the Board. The registration can also be suspended or withdrawn by the Board.

The vineyard to be registered may not be larger than 6 ha. The Board must be notified in writing whenever the ownership of the vineyard changes. (See also addendum XVII for the application for a single vineyard wine).

4.3 The Helderberg ward

Of the 15,339 ha vineyards in Stellenbosch, there is currently only 5,147.04 ha demarcated as wards⁵⁹. The largest portion of all the wine produced in Stellenbosch comes from sub areas which are not (yet) officially demarcated. Demarcation can only take place on the basis of the unique terroir of a sub area. A wine producer, together with other stakeholders, can submit an application for demarcation to the WSB. This application is processed by the Demarcation Committee. At this moment in time (2017), the application for the demarcation of the ward Helderberg is currently in process (K. Forrester⁶⁰).

Application

An applicant must first ensure that there is enough enthusiasm from affected wine producers to make a ward application possible. For political reasons, most of the producers affected wish to remain anonymous. Nevertheless, it is common knowledge that the majority of producers in the Helderberg region are co-operating with the application currently in progress. In this particular instance, the applicant only involved the interested parties on his side of the Helderberg Mountain, and not those producers affected on the other side of the mountain, and because of this, they no longer wish to co-operate. A political game is underway, whereby lobbying among neighbouring wine producers has become greatly important to the ward application's chance of success. Whenever selective deals are carried out and certain affected parties are not involved, they get the feeling that they are unimportant, and the risk is run that they no longer want to participate.

In order to give impetus to this exploratory analysis and to ascertain which points weigh heaviest with regard to the demarcation of a new ward in 2017, a decision has been made to interview one of the affected parties in this case, Ken Forrester.

⁵⁹ www.sawis.co.za (2017)

⁶⁰ Ken Forrester (2017)

4.4 Helderberg: application in perspective

The Demarcation Committee received an application from a portion of the affected wine producers in the sub area Helderberg. As many interested parties were not involved in the application, the committee was extra cautious in handling it. You could argue that whenever an application is not thoroughly substantiated, that it has no right to exist.

The application was submitted in April 2016. The Demarcation Committee then made a counter-proposal as is usual in this procedure (J. Booysen⁶¹). In the first instance, the various experts (see paragraph 4.1 wine legislation) within the Demarcation Committee independently examined the application. Subsequently they made a joint counter-offer. As there was no consensus on the side of the producers, they didn't react further to the committee's offer.

Ken Forrester has worked for years at establishing the Helderberg Wine Route. He has always been committeed to wine tourism and the hospitality industry in Stellenbosch. He has many years management experience and is aware of what lobbying can deliver.

He is fully aware that the application for the Helderberg ward will not succeed at this time. Certainly, the applicant has not handled it well; he thought he possessed enough money and power to (as good as) do it alone. The advance submission of documents in relation to differences in soil composition, meso and microclimates, differences in terroir - including topographical differences from both sides of Helderberg Mountain is mandatory. The gathering of soil studies, geological information, maps, terroir differences, examples of differences in wine styles and/or wine quality has all been left out of this application according to Ken Forrester⁶².



In conversation with Ken Forrester⁶³

⁶¹ Jan Booysen (2017)
⁶² Ken Forrester (2017)

⁶³ Ken Forrester op ProWein in Düsseldorf (2017)

Chapter 5: The future, from 2018 and the research

5.1 Introduction to the research

There is little attention paid to the South African WO system in literature. In most books on South African wine, the system is poorly documented. The introduction of the system in 1973 is generally known. In addition, from the literature it is is also obvious that the system is based on geographical indication.

In prevous chapters the various levels of geographical indication (geographical unit, region, district and ward) are determined. When the various Stellenbosch wards were established was clear from the data of the Demarcation Committee.

On the basis of the information from previous chapters it is difficult to conclude if terroir has played a(n important) role in the demarcation of the Stellenbosch wards. My research can contribute to the insight and knowledge of both authorities and interested parties. What can be learnt from history, what can be improved and what are the possibilities for the future?

The research questions have been formulated to get an answer to the proposals and to gain insight into the functioning of the WO system in 2018 (see also addendum V).

5.2 Exploratory research: the questionnaire

In previous chapters, the literature study has been handled in preparation for the exploratory research. The exploratory section of the research now follows:

To get answers to my research questions, I first posed them to the Demarcation Committee of the WSB. After all, it has the responsibility for the demarcation of the various wine areas in South Africa. The opinion and perspective of the committee will be stored and compared with that of the other interested parties such as wine makers, viticulturalists, wine journalists and wine house owners (see addendum VII). The questions posed to all parties can be found in addendum V.

5.3 The vision of the Demarcation Committee⁶⁴

The Demarcation Committee of the WSB gave their opinion on the questions posed. The representatives of the Demaraction Committee who provided a collective response to the questions are: Hugo van der Merwe, Duimpie Bayly, Jan Booysen, Francois Viljoen and Dawid Saayman.

It is important that their perspective is compared to the opinion of the interested parties. If the differences in insight, knowledge of the rules etc are too large, this could lead to harsh conclusions and a clear recommendation

5.4 Demarcation Committee vs. the parties involved

In total, there were 162 wine makers, viticulturalists, wine journalists, wine company owners, teachers form Stellenbosch University, employees of SAWIS and WOSA invited to join in

⁶⁴ Het Demarcation Committee (2016)

this research. It was a conscious decision to invite people from various specialisms within the South African wine industry. In addition, it was also a conscious decision to invite parties not only from within the Stellenbosch wine district but also from outside it's borders, in order to get the broadest possible feedback. All of the respondents have a knowledge of, and/or work in the South African wine industry. 55 of them responded either fully or partially to the questionnaire.

The vision of the Demarcation Committee and the opinion of the respondents follows here. The statistics per question can be found in addendum VII. It is also clear from the addendum how many respondents reacted positively or negatively to the question posed. The author's remarks are labelled personal opinion and printed in italics. In addendum VII the most important and harshest opinions by the respondents per question can be found.

5.4.1 Does the Wine of origin (W.O.) system work? *Demarcation Committee*

According to the Demarcation Committee, the system is completely accepted by everyone in the wine industry and does the job well. The system is regularly evaluated and updated when the need arises.

The WO system guarantees the authenticity of what is stated on the label. There is also control on the winemaking process and vineyard management and there is a procedure to check the wine quality. This is achieved through strict administrative control on the pressed grapes and on additional wine making procedures up to and including the certification of the definitive product. All certified bottles of wine have a seal with a unique identification number, so that each bottle is traceable back to the vineyard where the grapes originated.

The majority of those questioned found that the system works as it was intended. The supporters find that the system works for the consumers, as it engenders trust with regard to origin. In addition the consumer can expect a particular wine style on the basis of the current demarcation. The system also works for the producers as it offers possibilities from a marketing perspective. The accuracy and tracability guaranteed by the allocation of the identification seal, which means that all claims made on the label with regard to cultivar(s), vintage and origin, is unique and make it a good system.

A third of those questioned do not find the system good enough. Among the comments are that the system is too bureaucratic, the regional characteristics are not well-defined and for some that there is no relationship to quality wine production.

5.4.2 Are there enough rules set in the system to control quality? *Demarcation Committee*

The authenticity of the grape origin stated on the label is strictly monitored by the WSB. All wines with declaration of origin, vintage or cultivar are evaluated and tested by panels of the Technical Committee of the Wine & Spririt Board.

Previously a quality label with the name 'Superior' existed, but that was scrapped as the quality could not be guaranteed during the storage/laying down of the wine. There is no quality guarantee in existence except the fact that each wine must meet a minimum quality standard to be certified at all. A qualified panel tastes and approves all wine to be certified, ascertains the quality and can reject a wine on the basis of unacceptable quality standards. In

addition, all certified wine is analytically assessed on the basis of agreed quality characteristics.

There is a unanimous response from those questioned about the fact that the system is based on the guarantee of origin while the opinions about control of quality differ somewhat. The fact that all wines are blind tasted and tested ensures good control on the basis of quality. These controls ensure that wine with technical faults cannot be certified.

Many questioned would welcome a better quality control as the current system is now only focused on the lowest quality level and the current taste panels are conservative, whereby development, creativity and wine expression are not stimulated. For example, some are of the opinion that requirements for specific cultivars to promote wine quality are necessary. Requirements with regard to training methods, irrigation, yield per hectare etc have also been named, while the transparency of the system is seen by others as a breath of fresh air. The system is based on origin. The eventual quality is decided by the producer.

5.4.3 Is the concept of terroir reflected in the W.O. system? *Demarcation Committee*

The philosophy behind the demarcation of areas is to create the best separation possible between areas based on environmental factors such as climate, soil, geology and topography, in order to give producers the chance to emphasise their terroir through the choice of cultivar, viticulture and vineyard management. The dominating influence of macro and meso climate (determined by topography) is generally known and is internationally accepted. In certain cases, the soil and geology also play a dominant role. This is due to water management and nutrients which influence the growth of the vine and therefore also the grape development and eventually the wine. A number of WO areas are already renowned because of their specific wine characteristics, while others are still in the process of defining their potentially unique characters.

Examples of this are: sauvignon blanc from Elgin, chardonnay and pinot noir from Hemel-en-Aarde valley (although these are districts). For a further demarcation to wards the following examples could be given: chenin blanc and pinotage from the Bottelary, chardonnay from Banghoek and red bordeaux blends from Simonsberg-Stellenbosch and from Helderberg.

The majority of those questioned found that terroir played a role in the demarcation of the wine areas in South Africa. Alongside terroir other factors have also played a role, especially in the early days of the introduction of the WO system. Most questioned found that in relation to wards, estate wines, and in particular to single vineyard wines that terroir played a large role.

A large portion of the parties' questioned are of the opinion that the municipal borders were given too much weight. According to many, the newer wards in the areas outside of Stellenbosch, where the concept of terroir has played a major role, are better. That Stellenbosch is one of the oldest wine areas that has been (partially) divided into specific wards for so long, is precisely the reason that new wards and/of re-drawing of boundaries, is necessary, where the role of terroir must be more important than in the past. In the past forty year's significant knowledge has been acquired in relation to specific geography, soil types and different meso and micro climates.

'Politics' is often named as an important consideration in the creation of wards in Stellenbosch, by which, in fact reference is made to the municipal boundarys which together with commercial interests were the deciding factors.

The updates to the WO system over the years have made the role of terroir expression more important, for example, by the introduction of estate and single vineyard wines (C. Stemmet⁶⁵). In new demarcations, terroir is a bigger factor than in the demarcations of twenty to thirty years ago when political and topographical borders played a greater role.

5.4.4 The system started in 1973 and changed through time, does it need to be adapted?

Demarcation Committee

In 1992, the Superior classification was discontinued. However, the demarcation rules remain unchanged and no large revisions have been made to them since. Some areas of origin have been adjusted as more information became available (particularly in relation to climate), whereby for example, large 'umbrella regions' such as the Coastal Region, were introduced. In addition, amendments are regularly proposed to the regulations by both internal and external parties. Work groups are appointed by the Board, to research these and to provide recommendations for additions and changes to the statutes. Requests for changes often have far reaching consequences and affect various aspects within the industry. These work groups consist of experts from the various disciplines in the wine industry (see paragraph 4.1 and addendum X).

With regard to an overhaul of the WO system, many agree that it must be overhauled. It is a dynamic system, whereby in the last number of years many changes have already been made. Precisely because Stellenbosch was demarcated so long ago, is the reason that reforming it becomes so appropriate. The oldest demarcations should be revised on the basis of more recent research findings with regard to soil, temperature, climate etc. However, many believe that the time should be ripe and that the consumers understanding and knowledge should not be underestimated. According to some, due in part to the introduction of estate wine and especially the introduction of single vineyard wines, there is enough possibility for terroir expression within Stellenbosch.

5.4.5 Does South Africa need more specific defining via wards in the (total) winegrowing regions?

Demarcation Committee

It is a natural process. Whenever new areas are developed, new terroirs are discovered by producers and they then request the demarcation, such as a ward, within a district or region.

The time factor is seen as important by many of those questioned. Many find that further demarcation of wine land South Africa is necessary in time, but this cannot occur too quickly. The consumer must benefit. The commercial interests of the producers will set the tempo, because the initiative must always come from them.

5.4.6 Are seven wards enough for a wine district (such) as Stellenbosch? *Demarcation Committee*

There are certainly areas within the Stellenbosch district which have the potential to become separate wards. There has been for example, the request to make Stellenbosch Kloof a ward,

⁶⁵ Carin Stemmet: **www.sawis.co.za** (2006)

but the proposed demarcation was not acceptable for all the parties concerned. For that reason it was refused.

Another new ward, Helderberg-Stellenbosch has been proposed and shall be approved if all the interested parties are in agreement with the geographical demarcation. There shall most certainly be more requests for new wards, for example on the western.foothills of the Stellenbosch Mountain and locations in the flood plains of the Lourens River.

The majority of the respondents employed in Stellenbosch believe that more wards are necessary for the region, whereby the caveat is that many find that the time is not yet ripe for this increase. They clearly see the additional value of more wards, but the consumer is not so far. It should be noted by the way, that this is only when the focus is on the production of quality wine. Incidentally, most respondents employed outside of the Stellenbosch wine district find seven wards enough for the area.

The parties involved who are against any expansion, state that among other reasons, the focus on terroir wine is already possible through the introduction of single vineyard wines. In addition, it has been noted that as long as acidification is permitted, that terroir differences between the wards in Stellenbosch are eliminated.

5.4.7 Are the wards in Stellenbosch set by the best intentions (read: terroir) and the best boundaries?

Demarcation Committee

"Within the Demarcation Committee of the WSB we strongly believe this⁶⁶!" Additionally, it appears that the producers are satisfied with their wards and the marketing advantages these provide. Emphasis should be placed on the fact that the demarcation of the wards is done in as strict and thorough a way as possible on the basis of environmental factors and not due to commercial interests or pressure.

Of those questioned, the majority found that the demarcation of Stellenbosch was carried out with the best intentions. Terroir is seen as a crucial factor in the demarcation of the Stellenbosch wards, but in addition municipal boundaries and commercial interests are listed as deciding factors. Due to the fact that Stellenbosch is one of the oldest wine districts, and that the demarcation took place in the past, the research findings and intentions of that time are seen as valid.

5.4.8 Does Stellenbosch need wards like: Ida's Valley, Helderberg, Somerset West, Blaauwklippen Valley, Stellenbosch Kloof, Faure, Paradyskloof or others? Demarcation Committee

The necessity for further demarcation within Stellenbosch must be identified and requested by the interested producers. Currently, Ida's Valley is part of the Simonsberg-Stellenbosch ward, but it could be justifiably separated. The northern slopes of the Helderberg are currently in the middle of the demarcation process. The Somerset West area around the Lourens River deserve demarcation. Blauwklippen and Paradyskloof shall in all probability be brought into the Stellenbosch-Mountain ward, if it is required. As stated earlier, the producers in Stellenbosch Kloof have submitted a request for demarcation but this did not succeed. Faure deserves demarcation due to the fact that this is so close to the sea, but it has relatively little wine production, which furthermore is threatened by urbanisation.

⁶⁶ Het Demarcation Committee (2016)

According toTim Atkin MW⁶⁷ enough research has been carried out on the soil composition to substantiate the difference between the various wards.

It is primarily the respondents from Stellenbosch who would like to see further expansion in the Stellenbosch wards. However, those questioned from outside Stellenbosch also see this expansion as necessary in time. This is due mainly to the terroir differences (climate and soil among others) which would be an advantage to all the potentially named wards, assuming that they produce another type and quality of wine. Whenever the focus is put on the production of quality wine and the most suitable cultivars, then the combination of soil and cultivar can be of added value. A large number of respondents see the possibilities but the greatest threat is also obvious, namely that if the producers cling to the commercial significance of the Stellenbosch name, then further demarcation of wards will not take place.

5.4.9 When were the different wards introduced? Do you know when each of them was introduced and why in this order?

Demarcation Committee

The Stellenbosch wards are demarcated and registered as follows:

- a. Simonsberg-Stellenbosch, August 1980
- b. Jonkershoek Valley, August 1991
- c. Papegaaiberg, April 1992
- d. Bottelary, September 1996
- e. Devon Valley, September 1996
- f. Banghoek, October 2005
- g. Polkadraai Hills, September 2006

There is no technical reason for the order of demarcation. Producers involved determined the order based on their application.

5.4.10 If boundaries like roads, rivers and railroads were more important than terroir by setting the seven wards of Stellenbosch; can we still talk and consider different terroirs of each ward/subgebied/appellation?

Demarcation Committee

Roads and railways often follow the contours of the landscape and can for that reason, play a role in the demarcation of an area. In these cases, they can be used as simple identifiable borders, without abandoning the similar natural factors and patterns which typifiy terroir. Rivers are also frequently used as a division in landscape patterns and are also used often as a natural border.

Many respondents understand that in the past, other interests as well as terroir played a part in the demarcation of Stellenbosch. Municipal boundaries and commercial interests are acknowledged by everyone. Roads and rivers often form the boundaries of a wine company, and a single estate cannot be split into two different wards. One suggestion was to review each demarcation every five or ten years to see if it was still relevant. It would be interesting to find out what the producers and the Demarcation Committee think of this.

⁶⁷ Tim Atkin MW (2016)

5.5 Respondents and numbers

In Addendum VIII it is possible to see how many respondents there are and how each question was answered. The numbers give insight into those for and against each question. In addition, important information can be found about each respondant, such as sex, age and function within the wine industry.

5.6 Summary of the findings

The research shall serve to confirm the statements posited earlier. Additionally conclusions must be drawn from the research. The most important opinions and views of the respondents can be found in addendum VII.

The truth

According to the interviewed Demarcation Committee members, their answers to the questions posed are the truth. They are shocked by the lack of knowledge regarding legislation and the goal of the WO by other respondents. This follows a meeting at the end of February 2017 to reveal the first findings of this research to them. The Demarcation Committee sees it as their responsibility to provide better education to those involved. They consider it a short-coming that insufficient or only general information can be found on the WOSA and SAWIS websites There appears to be no geographical map available with the exact outline of the wards. Better informing of all those involved is not only advisable, but should be a priority.

Personal remark: A year after the personal conversation with a number of members of the Demarcation Committee, Jan Booysen, Francois Viljoen and Lucinda Heyns, as well as Albert Strever of Stellenbosch University, it is clear that the information available on the WOSA and SAWIS websites has been improved. A map outlining the Stellenbosch wards cannot be found there, but has been sent to me personally by the Demarcation Committee. This has been created by Heinrich Schloms at the request of Jan Booysen. See addendum VI where it must be noted that Jonkershoek Valley has been listed twice, which of course is not correct. Where the name Jonkershoek Valley is not outlined in red, the name of Stellenbosch should appear, as this is where the town of Stellenbosch can be found.

There will always be differences in awareness. These can trigger discussion and lead to changes and improvements. Is this lack of knowledge the result of too little information by the authorities or simply too little interest in the regulations by the affected parties? As can be seen from the answers/view put forward by the Demarcation Committee and the answers/opinions of the interested parties the system is a dynamic one. On the one hand it is bureaucratic and therefore difficult to adjust to changes in the market, and on the other hand there has been continuous change pushed through in the past fifteen years to further the industry.

Changes and amendments

Many changes were not immediately met with enthusiasm, but later have proven to be substantiated. They are now often not only accepted, but also seen as an improvement. From the opinons it appears that the demarcation of the most recent districts and wards is based on the right reasons. Many respondents agree that it is time to review the oldest demarcations as they were set up based on both political and commercial reasons. J. Booysen⁶⁸: "The fairly recent demarcation of the Hemel-en-Aarde Valley was not welcomed by everyone at first. Now however, it appears that as the style and quality of wine from different wards can be distinctive there is a greater sense of satisfaction".

Demarcation

The difficulty with this according to Jan Booysen (2017) of the Demarcation Committee, is that whenever the requirement arises for new or increased demarcation in an area such as Stellenbosch that it needs to occur in the whole area. In other words, it must be done so that no part of Stellenbosch remains undemarcated. Wines from these regions would then remain labelled as WO Stellenbosch. The label, WO Stellenbosch currently works very well from a marketing point of view. It is after all a strong brand and the best known of the South African wines of origin. Whenever more, better and further demarcation would take place in the Stellenbosch wine region it is therefore the case that there should be no places remaining that are not demarcated, as these would then remain as WO Stellenbosch. The Demarcation Committee clearly has a vision that demarcation can only take place based on the request of those involved and not from the government. It also believes that in the total demarcation of Stellenbosch that no gaps should be created (J. Booysen⁶⁹).

What is the relationship between terroir and the ward classification in the South African wine region of Stellenbosch?

All those involved agree that there are clear terroir differences between the diverse sub regions in Stellenbosch. Opinions are divided about the question as to whether Stellenbosch is correctly demarcated at all. In addition, the necessary respondents find that the demarcation of the wards has not always taken place for the right reasons and that terroir certainly has not always played a central role. There is clearly a relationship between terroir and the Stellenbosch wards and there are clearly differences between one ward and another, but there is a lot of doubt about the accuracy and completeness of the current demarcation.

Based on the research results it should be possible to confirm the posited statements.

Statement 1:

The W.O. system has been introduced in 1973 and still fulfils

For the most part the system is sufficient and most of those involved are satisfied with it. The system is based on origin and in that capacity, it meets requirements. It is a living system which is being constantly updated. A further, complete review of the system would be welcome by many, but it is understood that it needs to happen carefully. The repurcussions of a total reform of the WO system must be identified. The appointment of a work group by the Demarcation Committee can provide a solution to this. Research must be carried out as to who would be affected by a total reform of the system. Alongside the producers, changes would also involve costs for governing bodies such as WOSA and SAWIS. The system as it now functions, namely that the initiative is with the producers, means that a total reform will not happen. The passive role of the Demarcation Committee must be changed. The friendly distance between the Demarcation Committee and the producers is being held in place by the fact that the producers are funding the bodies involved. The producers pay for the role of SAWIS in the control of the system and pay for their wines to be promoted through WOSA. This is based on amount produced, so the more a company produces, the more they pay. Additionally, there are wealthier producers who increase their own contribution. The

⁶⁸ Jan Booysen (2017)

⁶⁹ Jan Booysen (2017)

understanding is generally good and the vast majority are satisfied with the current system and how it is functioning. However, with larger reforms, alongside municipal boundaries, politics, commercial interests and relationships between producers, the current financing of the system also plays a role.

Statement 2:

The best possible system is based on origin

A system that is based on origin is a good, safe and trustworthy system for the producer and the consumer. The implementation by the authorities is largely carried out as expected. However, the exceptions that have been made in the past, are a thorn in the eye of those concerned.

These exceptions – which benefit a number of large wine companies on the basis of historical deals – belong in the past. Here also commercial interests, common understandings and cash flows play a role. Given the respect for each other between the members of the Demarcation Committee and the producers, there is certainly no question of corruption. Nonetheless, past deals that benefit the large players in the market are outdated and should be reversed. The identification of these deals and their public disclosure would be good. Perhaps a South African wine journalist could carry out an investigation into this?

Furthermore, most respondents are not in favour of restrictions with regard to yields per ha. or predetermined cultivars. The current South African system based on origin is working satisfactorily. The freedom within the current system with regard to yield per ha., cultivar choice, vines per ha., etc are a blessing for some. There are however, also enough of those involved who understand that terroir reflection is partly dependent on the chosen cultivar. To really put certain wards on the map, growers are also dependent on the cultivar used. In Swartland a number of important and forward thinking producers have formed the Swartland Independent. They have agreed with each other as to which cultivar they can use to stimulate the production of quality wine (see https://swartlandindependent.co.za/values/). This type of co-operation by producers could also take place elsewhere. Government limits and restrictions are not appreciated by the majority and the controls on origin are adequate.

Statement 3:

Terroir must always be central to demarcation.

This statement was uninimously backed by the opinions of those questioned. The respondents find however, that in the case of Stellenbosch, terroir did not originally play a central role in the demarcation. Many believe then that the demarcation of Stellenbosch should and must be better. G. Mocke⁷⁰: "To some extent, perhaps geographically and climatically, but the soil differences are great, even within certain vineyards". Aside from the fact that there are many affected parties, there are also a lot of important external factors: all terroir factors, environmental factors (such as roads and railways), municipal boundaries, political factors and organisational factors (for example when a wine company has a vineyeard in two or more wards and/or districts). J. Reyneke⁷¹: "More terroir specific is one of the possibilities, as there are large differences between the different origin demarcations".

Many place the caveat that customer confusion must be avoided. The statement of Jan Booysen⁷² from the Demarcation Committee is intriguing: "By the complete demarcation of

⁷⁰ Gottfried Mocke (2016)

⁷¹ Johan Reyneke (2016)

⁷² Jan Booysen (2017)

Stellenbosch, no gaps should be allowed, as undemarcated sub regions could in that case continue to offer their wine as WO Stellenbosch and thereby gain (marketing) advantage over demarcated but unknown wards." After all, the goal should be that whenever a ward is demarcated that this name appears on the label. Demarcation on the basis of terroir should lead to differences in wine style and wine quality between different wards. These differences in quality and wine style should with the passage of time, become known and recognised as terroir differences between ward A and ward B. Whenever the name of the ward is not used on the label, then further demarcation is pointless.

Statement 4:

Stellenbosch needs more wards

Many believe that Stellenbosch deserves and needs more wards in the future. A further demarcation is required, according to both the Demarcation Committee and the respondents. It is important to understand that the tempo in which the wards are introduced cannot be too high, to avoid confusion by consumers. Consumer education costs a lot of time. The concept of terroir and differences in terroir between sub regions has also cost a lot of time and the knowledge of that is now much greater than forty years ago.

The arguments and interests of producers have played a (too) large role in the demarcation of the seven wards in Stellenbosch. The environmental factors were forced to play a secondary role. The most important example is the ward Papagaaiberg, which consists of only vineyards belonging to one large producer, who for political reasons managed to outwit his greatest competitor by enforcing this demarcation. Despite the fact that politics and commercial interests still play a role, the thoroughness, diligence and justification of the application is now more important than in the past. Situations such as that of the initiation of the Papagaaiberg ward in April 1992 cannot happen now.

The money flow

The South African system has been set up that all producers jointly pay for the promotion, control and regulation. The promotion via WOSA, the control by SAWIS and the legislation imposed by the WSB are all paid for by the producers, based on a fixed amount per bottle of wine produced. Additionally, there are important and mainly larger producers who voluntarily pay more to finance the system. The (self) financing of these activities can lead to a conflict of interest and can be used as leverage.

The co-operation between the different orgainsations and producers is good. The culture is open-minded and there is evidence of genuine co-operation. Most producers know the members of the Demarcation Committee and both the committee and it's members are positively spoken about, except for those who did not get their requested demarcation.



Label showing addition of the ward name to the name Stellenbosch ⁷³

⁷³ www.wineofthemonth.co.za

Chapter 6: Current situation, recommendations and conclusion

6.1 Suggestions and recommendations

The recommendations in light of the answers given by the Demarcation Committee and the other parties involved are explained below.

Better information and education

For further development and improvement of the current WO system, it could be argued that above all better education is required. The information about the current WO system, how it functions and why it exists can largely be found on the WOSA website. For further investigation the user is referred to the SAWIS website, although that is for the most part only accessible for registered users.

The Demarcation Committee was surprised by the lack of knowledge regarding the WO system and the use and aim of it among all those involved. The first suggeston is therefore an improvement to the information available for all parties concerned by means of:

- * Education via the educational system (Stellenbosch University and Elsenburg Agricultural Training Institute).
- * Active information sources via e-mail and the SAWIS website.
- * The sending of the *Wine of Origin Booklet*⁷⁴ to the producers.

Total reform of W.O. Stellenbosch

In 1973 the WO system was created on the basis of the knowledge then available. Scientific studies have in the intervening time shown that with reference to soil, geography and climate, Stellenbosch has been incorrectly demarcated in some areas. The best renowned and most important quality wine region of South Africa deserves reform. The area of Stellenbosch with vineyards around the location Somerset West close to False Bay, is for example difficult to compare climatically to the rest of Stellenbosch. Many are loudly asking if it doesn't deserve it's own demarcation outside of Stellenbosch. Another example is the current demarcation of Klapmuts-Simondium. That area is in many ways comparable to the other side of the Simonsberg, the Stellenbosch the advice must be to abandon Papagaaiberg. That was introduced for the wrong reasons and does not deserve this recognition.

Of course, a total reform of the Stellenbosch wine district is very drastic. Whenever parts of the wine district are removed from the name Stellenbosch, it will lead inevitably to a lot of discussion and resistance. Certainly, the marketing importance of the name Stellenbosch is significant. Despite the difficult decisions that must be made, a reform is the only way to reach a more substantive and meaningful designation of origin.

An eventual further demarcation of Stellenbosch with for example, new wards such as Stellenbosch-West and Schapenberg is not logical as many involved find that the basic demarcation of the Stellenbosch district is already wrong. Therefore it is relevant to pose this question to all parties concerned through an officially recognised work group. In addition, it is recommended that indiviuals are appointed to the work group who will not directly gain by the changes, in order to overcome conflicts of interest.

⁷⁴ http://www.sawis.co.za/cert/download/wineoforiginbooklet201604.pdf (2016)

Formulation of a new work group

Despite the fact that the Demarcation Committee normally does not play an active role in the further demarcation of a district, it appears to be necessary in the case of Stellenbosch. Whenever the vision of the committee is that by further demarcation in Stellenbosch, no undemarcated areas can remain, it becomes necessary to appoint a work group. That must inventarise what the requirements for further demarcation are in Stellenbosch among the interested parties. In the case of Stellenbosch Kloof and the Helderberg Mountain, we have already seen how difficult it is to reach a concensus among the parties affected. A passive role by the Demarcation Committee will never deliver a total reform of the WO in Stellenbosch. The initiative is with the producers, but as long as there are too many uncertainties and the current system allows the use of the most important and strongest South African designation of origin, then the chance is very small that the initiative will be seized.

The answer from Thomas Webb⁷⁵ (2016) to the question of whether seven wards is enough for Stellenbosch is important to keep at the back of your mind:

"Seven is enough for now. If more wards are created, then there would also be more uncertainty created, because more companies would end up straddling two wards. Producers would then have to choose the ward most suited to them, not per se where they belong. For example, is Thelema situated in the Banghoekward or in the Simonsberg-Stellenbosch ward? Both could be used". Gary Jordan is another example of someone not waiting to see his estate split between Polkadraai Hills and Stellenbosch Kloof whenever Stellenbosch is further demarcated. The shortcomings of the system are painfully obvious by these two examples.

A work group made up of interested parties from the various sub regions of Stellenbosch should make the inventory described above. What is important to know is what the needs of further demarcation are among the producers – whereby everyone should realise that every step, choice and regulation is for the long term. It takes years before a ward can be differentiated on the basis of terroir and origin specific wines. The positioning of Stellenbosch as a wine region on the basis of quality wine can in the long term be strengthened by the reform of Stellenbosch or through the addition of new wards.

It is up to the Demarcation Committee and producers to act.

Many producers are happy with the freedom within the current WO system. However, the restrictions introduced by the Swartland producers are also advisable for the Stellenbosch producers. Without any restriction regarding yield per ha., irrigation, pruning methods and pre-determined cultivars, the current WO system remains largely a marketing tool. It is precisely to emphasise the differences between the wards based on their terroir aspects that choices must be made by the producers in discussion with the authorities. Restrictions imposed by regulations within the WO system is a possibility, but doesn't have to be the only solution whenever other proposals are made by producers.

Certainly with the introduction of the WO Cape Town in 2017 a major competitor for Stellenbosch has emerged. The moment is precisely right to take the next step. In quality terms, Stellenbosch as a wine region is ready to take on the fight. My advice to the producers is to jointly make proposals within their own ward, to come up with a better formulated designation of origin definition, just as in Swartland. New, extra definitions relating to for example, yield per hectare, pruning methods and irrigation specifications could lead to better and more terroir defined wines. One choice could be for example, to agree with the Bottelary

⁷⁵ Thomas Webb (2016)

that certain cultivars allow the declaration of the name 'Bottelary' on the label and others do not. Think here of chenin blanc and pinotage which provide perfect quality examples from this ward, while sauvignon blanc from this area would not be directly eligible.

Promotion of ward names and terroir wine.

Since 2013 producers can put the name of their wards alongside the district on their labels. A good example of this is Rainbow's End in Banghoek, which has Banghoek-Stellenbosch on it's label (see page 45), to provide better information to the consumer about the origin of the wine. This connection between ward name and the name of the district is a clear and good way of providing clarification to the consumer. The most important areas of the Stellenbosch wine district are the Helderberg and Simonsberg mountains. The Helderberg is a very important wine area without a ward demarcation and because of that reason, cannot declare it on the label. In contrast, Simonsberg-Stellenbosch is a ward name and already has the means to make this connection in it's name.

The Demarcation Committee is in agreement that this connection between Stellenbosch and the specific ward names could be important in the future for an even better and clearer communication about origin to the consumer. Perhaps it is a good assignment for the authorities to stimulate this. Strangely enough, this knowledge is not shared by all the parties involved. Nevertheless putting individual wards on the map can lead to an increase in value, provided it is built on a meaningful, scientific basis.

6.2 Personal interpretation and conclusion

The time is becoming ripe for the complete reform of the WO system. Since 1973, a lot has changed with the system, but with the passage of time a lot of knowledge has also been gained about climate, soil, geology, topography, cultivars and viticulture. This knowledge however, has only partially been used in the establishment of the seven wards in WO Stellenbosch. The high standing of the Stellenbosch wine region within the South African wine industry and the focus on quality wine means that higher standards for rules of origin must be implemented to be meaningful. In a time when the wine industry is under pressure – in part due to increased international competition, the decreased value of the Rand and higher costs of water and labour – it is precisely in the interests of Stellenbosch wine producers to search for opportunities for extra value creation for consumers. The addition of own ward names and the district name, such as Rainbows End is doing with Banghoek-Stellenbosch, is an excellent way to ensure that the name of the ward becomes more well known.

Basically, a further and better demarcation must occur in Stellenbosch. That takes time. The Demarcation Committee is fully aware of this and have let it be known that the initiative is with the producers involved. It has become obvious with the establishment of new wards that the Demarcation Committee regards terroir as critical. However the members of the committee must also consider other interests. If the desire is not broadly supported, is insufficiently researched and/or cannot be scientifically supported, then the Demarcation Committee can also not come up with a solid counter proposal.

W.O. Cape Town

The formation of a new Cape Town district⁷⁶, so that the brand name Cape Town can be used in the marketing of wine in the international wine market can be explained.

⁷⁶ www.wosa.nl (2017)

Some wine houses within the ward will promote their wine and business under the Cape Town name in order to attract tourists. Many wine tourists now depart from Cape Town mainly heading directly to Stellenbosch. It is evident that by the formation of WO Cape Town that marketing motives played a large role. Soil and meso climate should however, always be the (most important) basis for demarcation in order to maintain credibility in the system. In order for producers to continue to attach value to WO Stellenbosch, demarcation on the basis of scientifically proven terroir aspects is therefore so important.

A necessary interim step

As change takes time, the interim step of linking the ward name to the name of Stellenbosch should be actively promoted. The concerns and consequences of reform or addition of new wards in Stellenbosch must be itemised. Why is it not possible for the Demarcation Committee to play a more active role? Research should be carried out as to whether the Demarcation Committees current role and passive position is supported by the 200 wine producers in Stellenbosch. The common concerns should be itemised and 45 years after the initiation of the WO, a situation befitting this day and age on the basis of current scientific knowledge should be created.

Restrictions necessary after 45 years

One of the original aims of the WO programme was to accurately document which vineyards were able to produce regionally typical wines. The transparency and freedom of the system ensured experimentation and development for 45 years. That is good but the time is now ripe for the next step. Stellenbosch is the appropriate wine region to take the lead in this. There is for example a lot of accumulated knowledge about the linking of a cultivar to a location for quality wine, both through viticulture as well as organoleptic research. No one would claim that the quest is finished, but it is a start (A. Lloyd⁷⁷). To be able to suggest terroir differences between different areas, agreements are required regarding irrigation, pruning methods, yield per hectare and permitted cultivars. If the role of the Demarcation Committee remains passive, then the producers must take the lead. The Swartland Independents are already leading the way on this.

On the basis of this research, the recommended advice to the Demarcation Committee is to carefully inventorise the requirements for change and the improvements to the WO Stellenbosch demarcation. Answers must be given to the question of whether Stellenbosch has been correctly demarcated as a wine district, if the current wards are demarcated according to terroir characteristics and as to whether more wards are required. In the imposition of restrictions, interim steps are also possible. In the long term all of this can ensure a greater profile for WO Stellenbosch and it's underlying wards with more potential differences in it's areas of origin to deliver characteristic quality wines to consumers.

⁷⁷ Angela Lloyd: https://outofthepress.wordpress.com (2017)



Logo of the Wines of South Africa (WOSA)⁷⁸

⁷⁸ www.wosa.co.za

7. Glossary

Appellation = French quality control on agricultural products, including wine

Apartheid regime = Apartheid was the official system of race segregation that was in use in South Africa and in present day Namibia between 1948 and 1990.

Bulk wine = wine that is ready to drink, but is not yet bottled.

Cloning = artificial method of reproduction

Leafroll = Leafroll virus, a virus very prevalent in South Africa

Canopy = Collective name for the section of the vine growing above ground, which is formed by the trunk, canes, shoots and leaves

Oenology = The science of winemaking

Rootstock = Plants can be vegetatively propagated by grafting. Hereby a section of one plant is stuck fast to a part of another plant

Phylloxera (Vastatrix) = grape louse, that destroyed vineyards in the 19th century

Vitis vinifera = The European strain of the genus Vitis, used for the production of wine

Ward = demarcated geographical unit in the South African Wine System

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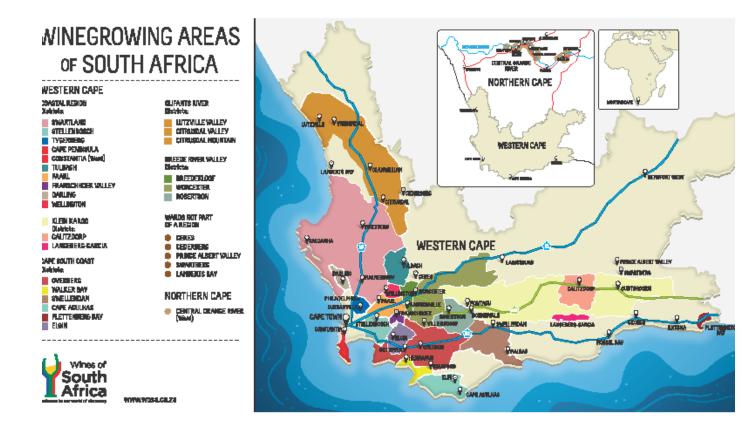
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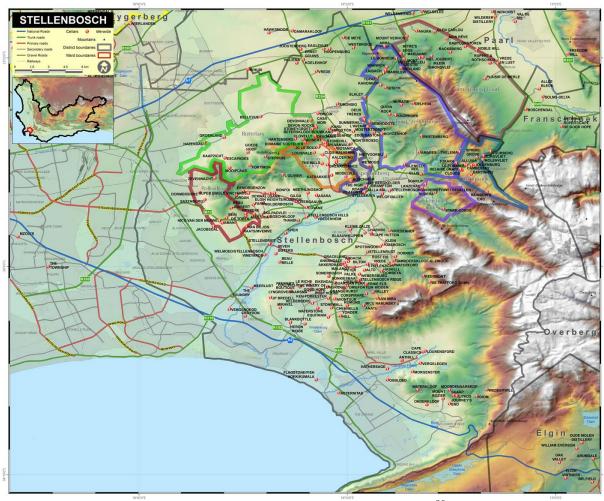
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Addendums: Addendum I: Map of the Western Cape⁷⁹



⁷⁹ www.wosa.co.za



Addendum II: Map of Stellenbosch

Map of Stellenbosch with the seven wards⁸⁰

⁸⁰ www.wosa.co.za

Addendum III: Interviewed and cited individuals

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Zyl, van Philip (editor Platter Guide)

Addendum IV: List of wine estates visited in Stellenbosch:

Stellenbosch/Helderberg:

De Trafford (2011 and 2016) Keermont (2016) Rust en Vrede (2011, 2013, 2016 and 2017) Vriesenhof (2016) Paradyskloof (2016) Grangehurst (2013 and 2016) Longridge (2016) Haskell/Dombeya (2013) Ken Forrester (2011)

Stellenbosch/Devon Valley

Meinert Wines (2016) Louisvale (2016)

Stellenbosch/Polkadraai Hills

De Toren (2011, 2013 and 2016) Reyneke (2013 and 2016) Spier (2011) Raats (2011) Zevenwacht (2013) Mulderbosch (2011)

Stellenbosch/Schapenberg

Waterkloof (2013, 2016 and 2017) Vergelegen (2006)

Stellenbosch/Banghoek

Thelema (2016) Delaire Graff (2011, 2013, 2016 and 2017) Neil Ellis (2016) Tokara (2017)

Stellenbosch/Simonsberg

Kanonkop (2013 and 2016) Warwick (2011) Rustenberg (2011)

Stellenbosch/Stellenbosch Kloof

Jordan (2011, 2013 and 2016) De Morgenzon (2011 and 2016) Super Single Vineyards/Pella (2013 and 2016) The Great SA Wine Company/Quinta Essencia (2016)

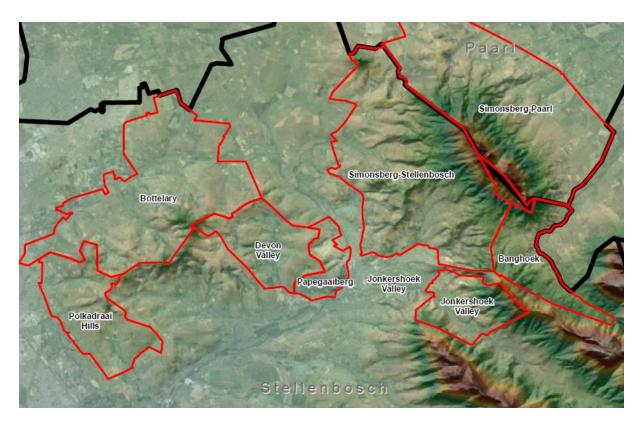
Stellenbosch/Bottelary Hills

Hartenberg (2011 and 2013) Teddy Hall (2011 and 2013) Simonsig (2006, 2013) Villiera (2013) Kanu (2011)

Addendum V: The research questions

The original questionnaire in English below formulated for this Magister Vini dissertation was sent to all the parties concerned in South Africa.

- **Q** Does the Wine of origin (WO) system work?
- **Q** Are there enough rules set in the system to control quality?
- **Q** Is the concept of terroir reflected in the WO system?
- **Q** The system started in 1973 and changed through time, does it need to be adapted?
- **Q** Does South Africa need more specific defining via wards in the (total) winegrowing regions?
- **Q** Are seven wards enough for a wine district (such) as Stellenbosch?
- **Q** Are the wards in Stellenbosch set by the best intentions (read: terroir) and the best boundaries?
- **Q** Does Stellenbosch need wards like: Ida's Valley, Helderberg, Somerset West, Blaauwklippen Valley, Stellenbosch Kloof, Faure, Paradyskloof or others?
- **Q** When were the different wards introduced? Do you know when each of them was introduced and why in this order?
- **Q** If boundaries like roads, rivers and railroads were more important than terroir by setting the seven wards of Stellenbosch; can we still talk and consider different terroirs of each ward/sub-area/appellation?



Addendum VI: The wards of Stellenbosch⁸¹

⁸¹ Heinrich Schloms: Vinpro (2018)

Addendum VII: Answers and statistics per question

The answers have been elaborated and grouped per argument.

5.4.1 Does the Wine of origin (WO) system work?

Yes, the current WO system works well for demarcation and control

C. Brewer⁸²: "Consumers naturally want to know where something comes from. It is a strictly controlled system and impossible to cheat which protects the producer – if grapes come from an origin that is known to be superior where it is more expensive to farm, you can charge accordingly. The consumer also is guaranteed that if something is certified from a certain origin it will have a certain style".

Yes, the system works, but there is certainly room for improvement

P. Boutinot⁸³: "Maybe from a marketing perspective. They seem to lump stylistic outliers in with the closest main appellation. We are an example as our wines bear no resemblance to Stellenbosch, as we are situated in Somerset West".

A. Lloyd⁸⁴: "The WO is a legal system, so from that point of view it works. There are, however, some historical exceptions as to which WO a particular wine might take. Some wineries in a particular WO are able to bring in grapes from another but still certify them under their own WO. This is a ridiculous situation, but it still stands. I can't tell you which they are, as SAWIS refuses to divulge this information".

G. Newton Johnson⁸⁵: "Largely it does. Some denominations are perhaps a bit outdated, set out when the system started, and perhaps need to be reviewed. The industry today has much more understanding of their vineyards and terroir context than 30-40 years ago. Winemaking has changed from cellar-focussed to vineyard-focussed. Apartheid isolated the older generations of SA winemakers, today winemakers have built wide producer networks around the world, are more exposed to world class fine wine and the markets. Consequently, the South African style has developed and splintered amongst the various appellations".

No, the system doesn't work

J. Seccombe⁸⁶: "It is a large bureaucracy and as such tends to hinder producers rather than enable them to produce better quality. My feeling is that it is a large system which has lost sight of it's purpose in providing quality wines that are typical of the regions in which they are produced".

J. Lazarus⁸⁷: "It probably works best in France where growers are restricted to plant specific grapes in specific areas. I don't think it serves much purpose in South Africa".

38 respondents answered the question on whether the WO system worked. 71.1% of them (27 respondents) find that the system works adequately. Only 2 respondents (5.3%) find that the system doesn't work and the rest of the respondents, 9 in total (23.6%), find that the system only partially functions.

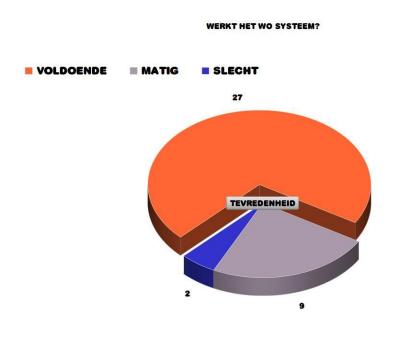
⁸² Cathy Bruwer-Grier (2016)

⁸³ Paul Boutinot (2016)
⁸⁴ Angela Lloyd (2016)

⁸⁵ Gordon Newton Johnson (2016)

⁸⁶ John Seccombe (2016)

⁸⁷ Josef Lazarus (2016)



5.4.2 Are there enough rules set in the system to control quality? Yes, there are enough rules to control quality

J. Schaal⁸⁸: "The fact that all the wines are certified with blind tastings makes it even better than the French AOC system".

C. v.d. Merwe⁸⁹: "IPW (Integrated Production of Wine) is an industry leader, not strictly legislated, but a great system and widely adopted in the industry".

C. Brewer⁹⁰: "One can declare from a single vineyard to a Geographical area. The smaller the area, the more the rules. All vineyards from the time they are picked are recorded – Wine Inspectors follow all of this on a system kept by each wine producer".

Yes, there is a basic quality control, but a better control on quality is preferable

C. van Zyl⁹¹: "The WSB claims – because of the sensory evaluations it does before granting certification – that the system works as a guarantee of quality. This I believe is true in that a wine showing faults will not be certified. At the same time, we all know that being fault-free is only one of many determinants of 'quality wine'. It is the system's primary focus on accuracy in labeling and the fact that it does not place any additional regulations such as permitted varieties, trellising methods, irrigation and crop yields that can create anomalies". A. Lloyd⁹²: "Any wine with a WO certification has to pass a tasting by the SAWIS panel; the requirements are fairly basic and if producers come up with new styles, like skin fermented whites or sun wines, they've had to push for these to be legally recognised".

⁸⁸ Julien Schaal (2016)

⁸⁹ Carl van der Merwe (2016)

⁹⁰ Cathy Bruwer-Grier (2016)

⁹¹ Cathy van Zyl MW (2016)

⁹² Angela Lloyd (2016)

G. Jordan⁹³: "Analysis determines the basis for the lowest quality – one cannot certify a wine with a VA higher than a certain maximum for example. There is also an organoleptic tasting which would exclude faulty wines such as those with oxidation for example. One doesn't want to be too restrictive, as some organoleptic characteristics are subjective, and innovation would be stifled".

No, insufficient rules for qualtiy control

J. Seccombe⁹⁴: "The system administers a great many rules, but is hard to say how they control quality. Certainly at the lowest quality level, they ensure that the wine is clean and drinkable, but beyond that I think that the rules do not serve to produce better quality". J. Lazarus⁹⁵: "Producers should be restricted to growing grapes that are most likely to produce quality wine in their particular region".

P. Boutinot⁹⁶: "As long as the wines are modern and technical they pass, but like elsewhere it is a guarantee of origin, not quality".

G. Newton Johnson⁹⁷: "No system is perfect and the WO system has always had a stringent tasting protocol to control basic quality going to the market, though it clearly failed at one point in the mid 90's when cheap, bad wines were exported en masse and resulted in a negative stigma for South African wine. I feel there should be more regulatory developments made to promote appellation specific and upmarket wines and not just basic quality, eg. more specialised tasting panels for various appellations, single vineyards (single vineyards are not even qualified by soil-type), etc. The inverse effect of some of the current panels are also that they have been too conservative and technical in their assessments and have obstructed creativity and diverging wine expression. It's not easy to find the right balance."

T. Webb⁹⁸: "There are rules regarding quality control that are regulated by SAWIS (S A Wine Industry Information & Systems). Within the WO system there are no quality control systems that I know of. But I don't think WO systems anywhere in the new world have quality control. Yes, WO quality control could help improve the image of the WO, but it is very hard to force someone to make a certain style, purely because they fall within a certain WO."

Below are two interesting examples by Cathy van Zyl MW which clearly shows the limitations of the system:

Example of the system by Cathy van Zyl MW⁹⁹

"For example, a producer in Stellenbosch farms two chenin vineyards – one a hillside site with good drainage, high density, great exposure and low yields and the other a valley floor vineyard with high yields and some humidity which results in rot in some vintages. He picks both during 2016, ferments them separately (maybe ages one in barrels for a few months and the other in stainless steel but a little liquid tannin and/or powder). He bottles them separately and submits them for certification. The forms he completes will only differ by application number – the rest of the information will be the same: cultivar – chenin blanc, vintage – 2017,

 ⁹³ Gary Jordan (2016)
 ⁹⁴ John Seccombe (2016)

⁹⁵ Josef Lazarus (2016)

⁹⁶ Paul Boutinot (2016)

⁹⁷ Gordon Newton Johnson (2016)

⁹⁸ Thomas Webb (2016)

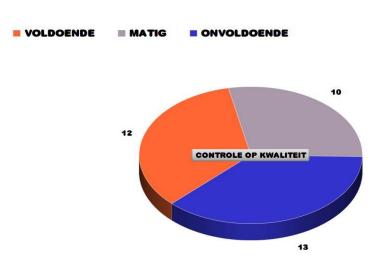
⁹⁹ Cathy van Zyl MW (2016)

wine of origin – Stellenbosch. The producer may elect to differentiate them when he labels them by perhaps explaining the production process on the label, or calling one 'Reserve' or 'Limited Release'. Or he may not."

Second example of the system by Cathy van Zyl MW¹⁰⁰

"A few years ago, a situation similar to what I have hypothesised caused a little flurry. A chenin from a particular property was awarded the top prize at a local competition. One of the judges, after discovering what the wine was, bought several cases from the producer but, on opening the wine, felt that it certainly wasn't of the same quality of the wine he and his fellow judges had awarded (the one that had been awarded was wooded, the wines he had bought weren't). He made enquiries and learnt that the wine that had been submitted to the competition and was awarded so highly was a small batch and, when it sold out, the producer simply labelled another batch – with it's different vineyard source, different picking date, different technical analysis and different winemaking – under the same label. He hadn't intentionally set out to deceive the public, but had, despite the fact that he had complied 100% with the Wine of Origin certification process."

35 respondents answered this question. 13 of them (37.1%) find that there are no or not enough rules within the WO system to control and guarantee quality. The system clearly gives no guarantee with regard to origin, cultivar(s) used and vintage. The control on quality is limited. 12 respondents (34.3%) find that there are enough rules regarding the control and guarantee of quality, especially given the organoleptic test of the tasting panel. 28.6% of the respondents (10 people) find that the quality control partially meets requirements within the WO system, but sees it mainly as a control system on origin.





¹⁰⁰ Cathy van Zyl MW (2016)

5.4.3 Is the concept of terroir reflected in the WO system?

Yes, terroir reflection plays a clear role, but definitely not everywhere.

J. Seccombe¹⁰¹: "There are some areas in which terroir is well-reflected in the system, the Hemel-en-Aarde Valley being one of them. The three distinct regions within the Hemel-en-Aarde show marked climatic and soil differences, and these differences in terroir are beginning to be seen in the high quality wines being produced there. Then there are many areas that are way too broad in their scope to reflect the landscape that they cover – Stellenbosch being a good example, as there are a huge number of different terroirs within the appellation".

Yes, especially by wards and single vineyard wines

C. van Zyl¹⁰²: "When it comes to the five regions, no, I don't believe so. I'm slightly more confident when it comes to the districts (not all districts are equal in size, and some or more homogenous than others) but wards and smaller units of production, yes, definitely – here is where the concept of terroir is reflected."

J. Grier¹⁰³: "The concept of terroir is partially reflected, mainly in the single vineyard concept and recently demarcated wards".

G. Jordan¹⁰⁴: "Yes, in it's macro sense, Robertson is warmer than Constantia for example, but it is only when one looks at the concept of estates or single vineyard wines that you have a real sense of place or terroir."

No, interpretation of terroir requires more research

J. Malan¹⁰⁵: "Yes I think so because over time many smaller wards and sub regions have been demarcated, due to their specific geography, soil types, climate etc. My personal opinion is that we are not ready yet to make too many rules about terroir. And our vineyard areas are very diverse regarding soil types which can sometimes vary a great deal over a very small area and even in the space of one vineyard. So the word 'terroir' is thrown around too easily, because many sites have only been planted with one variety for a short space of time. More research and experience is needed to get a better understanding".

R. Strydom¹⁰⁶: "There are definite differences in areas like Helderberg vs. Simonsberg, but if this as driven and understood as for example the differences between Pauillac vs. Margaux (in Bordeaux) I think we need more work done on this".

No, terroir plays a limited role or none at all

J. Schaal¹⁰⁷: "In my opinion, it is more about micro climate than really soil driven".
C. Mullineux¹⁰⁸: "There are large portions where terroir has a strong influence, but in some areas a political or topographical boundary was selected that is not related to terroir".
P. Boutinot¹⁰⁹: "Depending on the area. Constantia seems to be stylistically consistent. Elgin and Hemel-en-Aarde also. The main problem for me is that they take Stellenbosch right down to the coast".

¹⁰¹ John Seccombe (2016)

¹⁰² Cathy van Zyl MW (2016)

¹⁰³ Jeff Grier (2016)

¹⁰⁴ Gary Jordan (2016)

¹⁰⁵ Johan Malan (2016)

¹⁰⁶ Rianie Strydom (2016)

¹⁰⁷ Julien Schaal (2016)

¹⁰⁸ Chris Mullineux (2016)

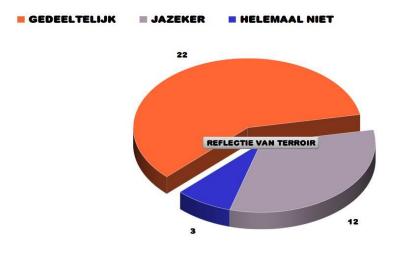
¹⁰⁹ Paul Boutinot (2016)

G. Newton Johnson¹¹⁰: "Partly. The newer appellations that have been demarcated have been through a much better thought process. From my personal experience, I think the 3 Hemelen-Aarde wards were well demarcated and the continue to progress".

T. Webb¹¹¹: "Terroir is influenced by geographical factors (mountains, rivers etc), and WO systems usually use these factors to determine the boundaries. But 'terroir' is unique to each site, so the WO system doesn't have a major role."

There are serious doubts about whether the concept of terroir is well reflected in the current WO system. Of the 37 respondents 22 (59.5%) find that terroir plays only a partial role in the demarcation. Within this group it is unanimously agreed that terroir was taken into consideration with new demarcations, but that was not the case in older divisions. 12 respondents (32.4%) find that the concept terroir played a role and 3 respondents find that it certainly did not (8.2%).





5.4.4 The system started in 1973 and changed through time, does it need to be adapted?

Yes, drastic changes are necessary.

G. Brand¹¹²: "Yes, there are so many new regions and pockets in regions that are so vastly different from the region that I think it can be adapted".

J. Seccombe¹¹³: "I think it is need of much change, but I think this will be very difficult in view of the sheer number of interests at play".

¹¹⁰ Gordon Newton Johnson (2016)

¹¹¹ Thomas Webb (2016)

¹¹² Gavin Brand (2016)

¹¹³ John Seccombe (2016)

Question of time

J. Seccombe¹¹⁴: "I think it is up to smaller associations of growers within specific regions to drive quality and the grape varieties that express terroir in their areas, and so make the case for more distinctive appellations. In many cases we have not yet matched the right grape varieties to the right areas, so we can't yet begin to put terroir under the microscope. When we start to get the viticulture and the wine styles right, the terroir will begin to express itself more clearly".

C. van Zyl¹¹⁵: "As much as I have criticised the system above, it isn't broken and is constantly evolving in that more and more wards, and single vineyards, are being added.

In addition, while it does take some lobbying, the criteria against which quality is gauged are changed – witness the latest amendments to include extended skin contact whites, alternative reds, sun wines and the like. And I don't think it needs to be adapted to govern varieties, trellis systems and the like – we've all seen how well they worked in countries like France; nor adapted to incorporate some kind of quality hierarchy – we all know that the quality of the Clos Vougeot we buy has more to do with the producer than the vineyard. Perhaps it does need tweaking in terms of revisiting old demarcations and evaluating them in terms of what we now know about the soil, temperatures etc versus what we did in 1973".

J. Reyneke¹¹⁶: "Definitely. A lot has changed since the end of Apartheid in 1994. KWV lost it's grip on the industry and many producers who used to deliver their grapes to the local cooperative are now making their own wines. A lot of new insights and better understanding as a result."

A. Koch¹¹⁷: "Does it matter where the quality comes from or are we still saying the best grapes are from Stellenbosch. I think the reason for having it should be revisited: yes".

Continuous, but slow process

T. Myburgh¹¹⁸: "I think the system is evolving as "smaller" wards become established. These wards are better reflections of terroir units."

P. Carstens¹¹⁹: "This is a live system and constantly adapting to practical and market related demands without the dilution of the goal for the system."

S. Beaumont¹²⁰: "Constantly – the orange wine movement is testament to that. And I think it has opened itself up for change. But with any buracratic system it will always take time to make the shift. This is a slow moving beast".

J. Grier¹²¹: "The system has served Stellenbosch well but as prices go up and quality becomes more and more differentiated by price, the system will have to be adapted. High prices also reflect scarcity and tightly demarcated terroirs can introduce additional scarcity". G. Newton Johnson¹²²: "As I said earlier, more emphasis on upmarket and appellation specific wines".

¹¹⁴ John Seccombe (2016)

¹¹⁵ Cathy van Zyl MW (2016)

¹¹⁶ Johan Reyneke (2016)

¹¹⁷ Albie Koch (2016)

¹¹⁸ Tyrrel Myburgh (2016) ¹¹⁹ Pieter L Carstens (2016)

¹²⁰ Sebastian Beaumont (2016)

¹²¹ Jeff Grier (2016)

¹²² Gordon Newton Johnson (2016)

No, changes are not required

T. Webb¹²³: "From a marketing point of view I don't really see a need for an adaption. South Africa is still relatively unknown in the wine world and the interest in SA wines rarely filters down to the micro level, as seen in the international regions such as Burgundy, where small sites, close by each other are seen, and understood, to be unique. So until the world understands that the Jonkershoek valley is different to the southern Banhoek valley (for example), there isn't a need to adapt the system."

G. Jordan¹²⁴: "It has been over the years, with sub-wards and single vineyard designations drilling down deeper into a tighter definition of the system. There was never a single vineyard designation until I organised a Cape Winemakers Guild Seminar entitled 'Single vineyard wines and the expression of terroir'. That helped to change the current thinking as before then an estate was the smallest entity possible."

Of the 37 respondents 17 (45.9%) find that the system needs to reformed and adjusted, as so much has changed since 1973. 17 respondents (45.9%) find that the system is constantly changing and adjusting and that a complete overhaul is not necessary. Only 3 respondents (8.1%) find that the system does not need to be changed.



¹²³ Thomas Webb (2016)

¹²⁴ Gary Jordan (2016)

5.4.5 Does South Africa need more specific defining via wards in the (total) winegrowing regions?

Yes, the creation of more wards is necessary

G. Brand¹²⁵: "Most consumers and people in the industry understand and know the regions, by creating more wards in regions we will be able to pinpoint specific interesting terroirs within regions".

J. Schaal¹²⁶: "The more the better. The best opportunity to reflect the different terroirs".

C. van Zyl¹²⁷: "South Africa and Stellenbosch need more wards. But, in the broad scheme of things where more than 80% of wine is sold through retailers and the purchase decision in that environment is down to less than 45 seconds, is Wine of Origin of Banghoek more appealing than Wine of Origin Stellenbosch or Wine of Origin South Africa? Place is so vitally important to producers, their site is their castle. But consumers have other concerns that they rank more highly – for many, it's price; for others, it's variety; for some it may be organic or Fairtrade."

Yes, depending on certain factors

J. Seccombe¹²⁸: "Specific wards need to make the case through wines from grape varieties that express something about the area, and highlight the uniqueness of the terroir. Ultimately any appellation system has to benefit the consumer in helping them to choose the wine style they like. If the area is not producing distinctive wines then there is no point in creating more specific wards".

C. Fourie¹²⁹: "Getting the brand South Africa story out there with a well-defined system like the WO is important. As that gets stronger, the smaller stories such as the ward will become more important".

D. Trafford¹³⁰: "Possibly. The SA wineland landscape is extremely complex. Much more Burgundy than Bordeaux in that sense. If I look at our end of the Blaauwklippen Valley, comprising Keermont and ourselves, it could be divided into 6 crus to really make sense of the terroir. So I feel a proper system than properly reflects terroir, would be so complex, farmers and consumers would run a mile. So a compromise is inevitable. More and more in the modern world it is the individual growers who need to reflect their terroir and communicate it to the consumers rather than rely on a bureaucratic system".

No, not yet

P. Nortje¹³¹: "Too many wards and districts can be very confusing for consumers. This becomes a greater problem when exporting wine. The average consumer might struggle to find Cape Town on a world map, let alone Stellenbosch or any wards within the Stellenbosch area. At Simonsig we do not state the ward (Greater Simonsberg) on our labels as we feel "Stellenbosch" is sufficient".

G. Jordan¹³²: "The general international consumer may have heard about South Africa. He or she may even have heard about Stellenbosch or Paarl, but have they heard about (or care

¹²⁵ Gavin Brand (2016)

¹²⁶ Julien Schaal (2016)

¹²⁷ Cathy van Zyl MW (2016)

¹²⁸ John Seccombe (2016)

¹²⁹ Corlea Fourie (2016)

¹³⁰ David Trafford (2016)

¹³¹ Pierre Nortje (2016)

¹³² Gary Jordan (2016)

about) a small sub-ward in the Hemel and Aarde Valley? Probably not. It is a good idea though to further define the wards more specifically to define the differences within a sub-region, but for international marketing reasons, it is hard enough in the USA for example to explain to the public that South Africa is a separate country in Africa!". J. Malan¹³³: "Our main effort and focus should be on establishing South African Wine on the world market, because it needs a lot more exposure in generic terms. The focus on a region like Stellenbosch is also crucial for the wineries and growers in the WO Stellenbosch region as the quality reputation will lead to better sales, higher prices and this will strengthen the economic situation of the region where yields are low and quality high, but the producers struggle financially because of that. The wines do not get a sufficient premium for it's quality yet. When the marketing message is fragmented into the wards and subregions it leads to dilution of the message of Stellenbosch and it may cause confusion for the average consumer who may not be too clued up in the finer details of the Stellenbosch region".

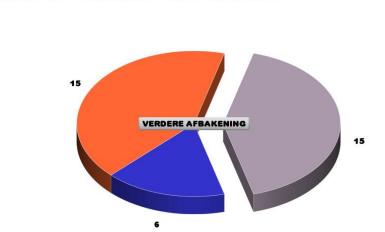
Of the 36 respondents 15 (41.7%) find that South Africa needs a more specific demarcation in the form of new districts and wards. 15 respondents (41.7%) find that a more specific demarcation is necessary but only in certain conditions. The most important is that the consumer, as well as the producers must be ready for this. Only 6 respondents (16.7%) find that further demarcation is unnecessary.

HEEFT ZUID-AFRIKA BEHOEFTE AAN MEER SPECIFIEKERE AFBAKENING VIA WARDS?

HELEMAAL NIET

JAZEKER

JA. MAAR LATER



¹³³ Johan Malan (2016)

5.4.6 Are seven wards enough for a wine district (such) as Stellenbosch? No, seven wards for Stellenbosch is not sufficient

J. Seccombe¹³⁴: "Wards only have value if the wines they produce are reflective of the terroir. The given wards do reflect the different producing areas of Stellenbosch well, and there certainly be a few more divisions. I think the Helderberg and Somerset West would be two obvious distinctions".

G. Newton Johnson¹³⁵: "There should be more going south from the town, all the way in to Somerset West. Comparing Keermont, Rust en Vrede, and Waterkloof wines, I think there is an argument for more".

Yes, more than enough

G. Poval¹³⁶: "The wine I make is sold in the US 85% and in that market only a handful of sommeliers have an idea of the regions here. My farm is in Devon Valley Stellenbosch however I don't believe anyone in the US would understand that Devon Valley is in Stellenbosch so I use Stellenbosch as WO. Maybe as South African wines become valued more, it will become more important but at the moment I don't think I have any interest in using micro WO designations".

P. Boutinot¹³⁷: "They now have wards in Stellenbosch most of which I defy anyone to differentiate organoleptically, because of the use of all tartaric acid".

Yes, enough, because of the creation of single vineyard wine

J. Grier¹³⁸: "I think seven wards are sufficient because anyone can tighten up a claim to a special terroir by declaring a single vineyard".

C. Brewer¹³⁹: "To market more would be a challenge. Within those wards one can still produce single vineyard wines if you want a real sense of place".

Of the 31 respondents in total to this question there are 10 (32.2%) who find the current demarcation too limited and would like to see more wards in Stellenbosch. 12 (38.7%) respondents however, find seven wards more than enough for Stellenbosch. A third portion (nine people) find expansion only necessary in the future, when the quality has improved and the wine styles become clearer, so that this can be better communicated to the consumer. These 30% find that the time is not yet ripe and that creation of more wards at this moment is too confusing for the consumer.

This is one of the questions where it is also interesting to see how the involved parties from Stellenbosch itself responded. Some have a company in a specific ward and use that name on their label, others don't (yet) and even more have the desire for a more specific demarcation

20 respondents (64.5%) are working in Stellenbosch, and they responded completely differently to the producers from other regions. 35% of them find that more wards are necessary and the same percentage find that more wards in the future for Stellenbosch is a foregone conclusion. Six respondents (30%) find the current seven wards more than enough.

¹³⁴ John Seccombe (2016)

¹³⁵ Gordon Newton Johnson (2016)

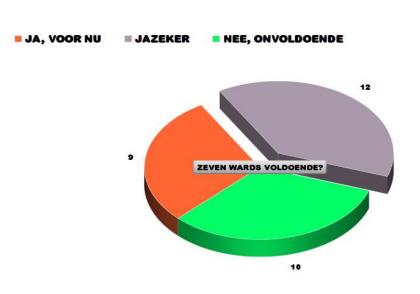
¹³⁶ Ginny Poval (2016)

¹³⁷ Paul Boutinot (2016)

¹³⁸ Jeff Grier (2016)

¹³⁹ Cathy Brewer-Grier (2016)

From the respondents from other regions, 27.3% find more wards necessary in Stellenbosch but 18.2% want to wait with this until the consumer is ready for it. No less than 54.5% of the respondents from other regions find that more wards for Stellenbosch is too much of a good thing.



ZIJN ZEVEN SPECIFIEKE WARDS VOLDOENDE VOOR STELLENBOSCH?

5.4.7 Are the wards in Stellenbosch set by the best intentions (read: terroir) and the best boundaries?

Yes, terroir had enough influence in the demarcation in Stellenbosch

C. v.d. Merwe¹⁴⁰: "That is always the intention. Simonsberg is a broad ward with a host of slopes and microclimates. For now it is good enough to define Simonsberg and as the industry matures, I am sure narrower boundaries will be sought".

A. Starey¹⁴¹: "I believe there is a thorough review of terroir when decisions are made". T. Atkin¹⁴²: "Stellenbosch clearly has different, identifiable terroirs that are reflected in it's wine styles".

C. Mullineux¹⁴³: "I think the wards are 90% set by terroir and 10% by more easy things like municipal or other boundaries".

T. Myburgh¹⁴⁴: "It's impossible to define the wards perfectly. Existing vineyards and farms cross borders that are easy to define, and often the borders are difficult to define anyway".

¹⁴⁰ Carl van der Merwe (2016)

¹⁴¹ Alex Starey (2016)

¹⁴² Tim Atkin MW (2016)

¹⁴³ Chris Mullineux (2016)

¹⁴⁴ Tyrrel Myburgh (2016)

No, terroir did not have enough influence in the demarcation in Stellenbosch

G. Brand¹⁴⁵: "Especially where farms like Joostenberg starts to fall in the Paarl region, yet it is so close and similar to Stellenbosch. I guess the N1 highway formed the boundary between Stellenbosch and Paarl in this area".

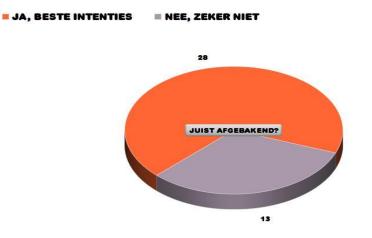
J. Malan¹⁴⁶: "I do not always agree with the boundaries as there are examples where a big road forms the bounday and not natural features like a river in the valley floor or a mountain. I also believe that there is a lot more research information and data about climate and temperature available due to the huge advance in technology that these boundaries should warrant another look".

P. Boutinot¹⁴⁷: "No, terroir wasn't leading in the demarcation of Stellenbosch".
M. Meinert¹⁴⁸: "Best intentions maybe, but maybe not always the best criteria. This is a complex and sometimes political issue".

G. Newton Johnson¹⁴⁹: "They are the most historical ones and perhaps not the best reflections of terroir. The wines are changing and so too must the boundaries".

From the 31 respondents to this question, 58.1% find that the demarcation of the Stellenbosch wards was done with the best intentions. 41.9% (13 people) think very differently about this and find that the role of terroir was too small in the current demarcation. 20 of the respondents come from Stellenbosch (64.5%). Of this group 65% (13 people) find that the intentions were good.

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ZIJN DE WARDS IN STELLENBOSCH JUIST AFGEBAKEND EN IS TERROIT HIERBIJ VOLDOENDE BELANGRIJK GEWEEST?
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¹⁴⁵ Gavin Brand (2016)

¹⁴⁶ Johan Malan (2016)

¹⁴⁷ Paul Boutinot (2016)

¹⁴⁸ Martin Meinert (2016)

¹⁴⁹ Gordon Newton Johnson (2016)

5.4.8 Does Stellenbosch need wards like: Ida's Valley, Helderberg, Somerset West, Blaauwklippen Valley, Stellenbosch Kloof, Faure, Paradyskloof or others? Yes, there is a need for these sort of wards in Stellenbosch

G. Brand¹⁵⁰: "As a quality region they need to be able to differentiate between for example cool climate sauvignon blanc from a prime site in the Helderberg, Faure or Somerset West and a very generic wine made from the same variety from a warmer area in Stellenbosch". J. Seccombe¹⁵¹: "It would be easy to make the cases for Somerset West (climatically very different), Faure and Helderberg. It is tempting to make all of these subdivisions, but if the divisions are not made with the purpose of producing higher quality wines, then there is no point."

R. Strydom¹⁵²: "That will definitely help in defining the quality aspect within Stellenbosch and the wards. The soils are different in these areas and therefore should make wines of different standards".

K. Zulch¹⁵³: "Fully agree, using Stellenbosch Kloof as example: The wind could be howling in Stellenbosch central and surrounding areas, but Stellenbosch Kloof will have no wind. This shows you that Stellenbosch Kloof experiences it's own climate etc., i.e., it's own terroir therefore it should perhaps have it's own WO".

Cultivars and marketing

D. Trafford¹⁵⁴: "One of the problems with Stellenbosch is that so many varieties can work well and being close to Cape Town with strong cellar door sales, most wineries focus on too many varieties and styles. The Swartland by contrast can only produce good wine from a handful of varieties available in South Africa, which has helped them define their wines. I think we're starting to focus on things that really do well in Stellenbosch and that in turn will also help define more finely tuned wards in future. I think cabernet sauvignon, Syrah and Chenin Blanc are the key varieties as well as pinotage. There are many other varieties that can also play important supporting roles, like cabernet franc and merlot, and more "unusual" varieties like tempranillo, sangiovese and roussanne that may contribute more in future. I would say that the signature Stellenbosch wine would be a cabernet sauvignon based blend whether it contains syrah (like our Elevation 393) or pinotage or straight Bordeaux blend or 100% Cabernet. This is probably the criteria that should define the ward system".

T. Atkin¹⁵⁵: "I think the following names should be mentioned more on labels: Simonsberg, Helderberg, Firgrove, Jonkershoek, Faure, Blaauwklippen Road, Somerset West, Polkadraai, Stellenbosch Kloof, Devon Valley and Bottelary Hills. The problem with breaking Stellenbosch down into terroirs or wards is that it might detract from what is arguably South Africa's strongest appellation".

C. Brewer¹⁵⁶: "For marketing purposes it's good as you can group wines together from a similar climatic area. Marketing the whole of Stellenbosch in one room is tough".

¹⁵⁰ Gavin Brand (2016)

¹⁵¹ John Seccombe (2016)

¹⁵² Rianie Strydom (2016)

¹⁵³ Kyle Zulch (2016)

¹⁵⁴ David Trafford (2016)

¹⁵⁵ Tim Atkin MV (2016)

¹⁵⁶ Cathy Brewer-Grier (2016)

G. Newton Johnson¹⁵⁷: "All very good proposals. I think the various areas need to break out of their homogenous 'Stellenbosch' mould and for some terroir-minded producers to differentiate themselves".

Climates

J. Malan¹⁵⁸: "I do believe it is important to distinguish the different climates in the respective areas. It adds to the interest of the varying wine styles and characters found in Stellenbosch. Unlike Napa Valley for instance which is a flat valley floor and has a lot of homogeneity Stellenbosch has a very undulating landscape and the proximity of Atlantic Ocean also plays a huge role. It may take another generation or two but starting now is important as these kind of demarcations take a very long time to establish. And then there are all the different varieties we are allowed to plant, which means a ward may be highly rated for more than one grape variety. It may take a hundred years to fine tune that to only one variety in a specific ward".

Politics

A. Lloyd¹⁵⁹: "Politics definitely plays a role when new demarcations are made. Helderberg is a major example – do you include Spier and/or Vergenoegd as well as those wineries on the slopes and how far along (towards Vriesenhof) should it extend? Wineries such as Vergelegen and Morgenster for example shouldn't be in Stellenbosch at all, but of course, being associated with this best known of South African regions is something other wineries don't want to lose".

No, Stellenbosch does not need to be further demarcated.

A. Koch¹⁶⁰: "I do not think so, some people do not even know where Stellenbosch is, let alone the ward. You can only have it if you are going to use it and then you have to educate people on it also".

31 respondents answered the question of whether Stellenbosch needed named appellations. 74.2% (23 respondents) find this necessary, due to the proven differences in terroir and climate. Of the respondents working in Stellenbosch itself, 81% are in favour of named wards (17 of the 21 respondents).

Which sub regions were specifically named as candidates for demarcation as ward and how often?

Helderberg	7
Somerset West	7
Faure	6
Stellenbosch Kloof	5
Blaauwklippen Road	3
Ida's Valley	2
Paradyskloof	2
Firgrove	1

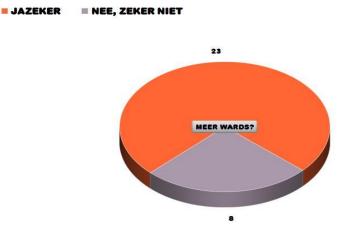
¹⁵⁷ Gordon Newton Johnson (2016)

¹⁵⁸ Johan Malan (2016)

¹⁵⁹ Angela Lloyd (2016)

¹⁶⁰ Albie Koch (2016)

HEEFT STELLENBOSCH BEHOEFTE AAN WARDS ALS?



5.4.9 When were the different wards introduced? Do you know when each of them was introduced and why in this order?

No, don't know in which order the wards were introduced

G. Newton Johnson¹⁶¹: "It was only in the 80's where there was real momentum for estate wines. It was during that period that people like Tim Hamilton-Russell had massive struggles with the KWV even to apply to produce wines in the Hemel-en-Aarde. The wine industry then was very much centred around Stellenbosch and many appellations today were not yet established".

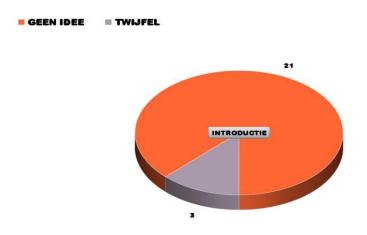
G. Jordan¹⁶²: "Over various times, and in many cases it would have been a group of producers wanting to identify their unique USP. Those who were more organised would have been first in the queue".

There is little to no information available about when the different Stellenbosch wards were introduced. The respondents had limited knowledge about this topic. Most respondents indicated that this information must be available on the SAWIS website. This is certainly not the situation. Even members of the Demarcation Committee pointed me to this website for this non-available information.

Only 24 people answered this question of which 21 (87.5%) had no idea of when the different wards of Stellenbosch were introduced. 3 respondents (12.5%) have only a very limited knowledge of the creation of the different wards.

 ¹⁶¹ Gordon Newton Johnson (2016)
 ¹⁶² Gary Jordan (2016)

WANNEER ZIJN DE VERSCHILLENDE WARDS GEÏNTRODUCEERD?



5.4.10 If boundaries like roads, rivers and railroads were more important than terroir by setting the seven wards of Stellenbosch; can we still talk and consider different terroirs of each ward/sub-area/appellation

Yes, there are differences in terroir

C. van Zyl¹⁶³: "Most certainly, Banghoek and Jonkershoek particularly are unique".

Yes, there are differences in terroir, but it could be better

J. Seccombe¹⁶⁴: "I think the boundary of Paarl and Stellenbosch being the N1 highway is a case in point. There is certainly not much difference in terroir one side to the next. Still, I think there are better demarcations, and any appellation system would certainly need to look at geographical features as being prime boundary between distinct areas. I think there is much of the old South Africa in the current system, and it would benefit from a major overhaul with more focus on terroir (and then we need to look primarily at geographical features, soil, elevation, rainfall, etc. to divide areas".

D. Trafford¹⁶⁵: "It is by no means an exact science, even in Burgundy, so there will always be a degree of compromise and sometimes it makes sense to use a road as a boundary. The R44 between Stellenbosch and Somerset West divides the Helderberg slopes from the flatlands pretty well for example".

A. Starey¹⁶⁶: "Rivers can well be the point where two soil types meet. They flow between two high points which can have different terroir factors. The other thing that can be important is that one can't really split a farm with a ward boundary. The farm should either be inside the ward or out".

C. Mullineux¹⁶⁷: "In some cases a river or mountain top do demarcate the boundary of a terroir, but things like a road or railroad do not really identify terroir. I think the wards all have different terroirs, but by using roads, railwaylines, etc. as boundaries the accuracy in terms of just terroir is diminished".

¹⁶³ Cathy van Zyl MW (2016)

¹⁶⁴ John Seccombe (2016)

¹⁶⁵ David Trafford (2016)

¹⁶⁶ Alex Starey (2016)

¹⁶⁷ Chris Mullineux (2016)

M. Barlow¹⁶⁸: "You will never get things 100%, the wards should be reviewed periodically say every 5 to 10 years to asses their relevance. Landmarks often are the easiest to use as terrior is not always precisely defined in terms of it's start and end point, terroirs tend to blend into each other and therefore a firm definition has to be taken even if it not able to be precise". T. Myburgh¹⁶⁹: "There might be cases where for practical purposes this might have happened, but this doesn't make the whole thing irrelevant".

J. Malan¹⁷⁰: "I think a lot of information and studies did go into the establishment of the borders but for reasons mentioned above they should be constantly updated and reviewed to base it on scientific facts. Some of these techniques and infra red imaging etc was not available during the early years. It is a work in progress and huge progress has been made in the 44 years of it's existence. If you look holistically at Simonsberg and Helderberg there are substantial differences and the boundaries may include or exclude certain pockets, but that does not mean it is totally meaningless".

No, not terroir but on the basis of soil and meso-climate

K. Zulch¹⁷¹: "I ask myself this all the time! I believe the South African wine industry sees terroir on a greater scale: Macro scale, which I don't like. Instead we should be segmenting it further and identifying terroir on a meso or micro scale!"

G. Newton Johnson¹⁷²: "Soil and mesoclimates should be paramount. I think it would be an opportunity for Stellenbosch to reinvent itself and differentiate the mass produced wines from the terroir driven fine wines".

K. Forrester¹⁷³: "Without any doubt the current boundaries are marked by sociological and political influences. We are busy with the demarcation of Helderberg and the boundary will be the R44. Which shows the shortcomings of the system".

G. Jordan¹⁷⁴: "In my case they took a municipal boundary (I have half my farm under the control of the Stellenbosch municipality and the other half under the control of the Cape Town municipality!) One has to be practical, and shouldn't split vineyards into different wards – it would then be a nightmare to certify the wines".

M. Fridjhon¹⁷⁵: "I believe that in the early days of the scheme political consideration took precedent over matters to do with geology/climate/terroir. Lately the demarcation board appears to have been more scientific in it's approach. I believe that this latter approach will apply going forward".

There were 33 respondents for this question, of which 51.5% (17 people) find that terroir partly or largely was a key issue while almost the same percentage (485%) find that terroir was not a key issue in the current demarcation. Nearly all the respondents qualify their comments. Many find, at the very least that it could be (even) better.

¹⁶⁸ Murray Barlow (2016)

¹⁶⁹ Tyrrel Myburgh (2016)

¹⁷⁰ Johan Malan (2016)

¹⁷¹ Kyle Zulch (2016)

¹⁷² Gordon Newton Johnson (2016)

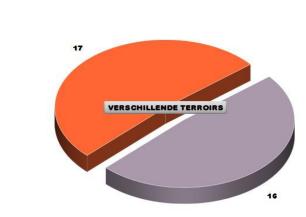
¹⁷³ Ken Forrester (2016)

¹⁷⁴ Gary Jordan (2016)

¹⁷⁵ Michael Fridjhon (2016)

L DAT DE AFBAKENING D.M.V....., KUN JE DAN WEL SPREKEN VAN VERSCHILLENDE TERROIRS BIJ DE VERSCHILLENDE WAR

GEDEELTELIJK WEL 📃 NEE, HELEMAAL NIET



Addendum VIII: Respondents and statistics

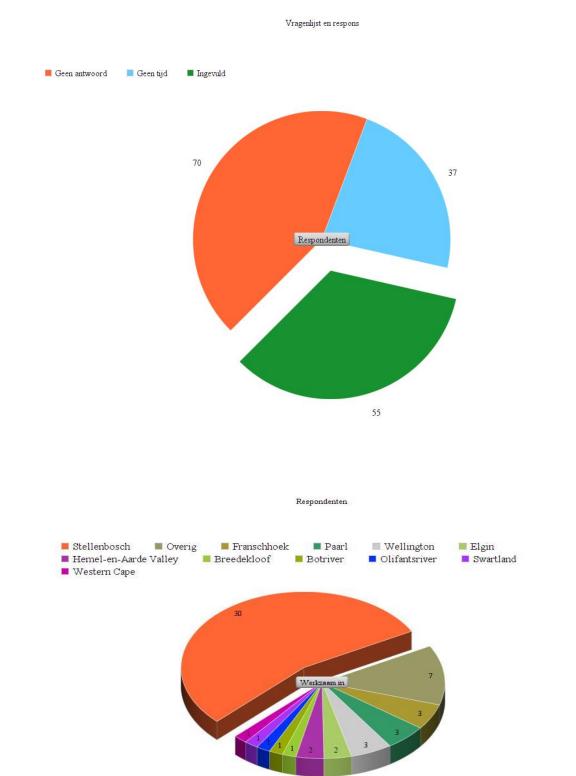
The questionnaire was sent to 162 people. There was a conscious decision made to choose people from various parts of the South African wine industry. In addition, it was a deliberate choice to not only to question those from Stellenbosch, but also from other parts of the Western Cape, in order to get the broadest view possible.

If the number of wine makers, owners, wine growers, civil servants and wine journalists are added together, the total is 55 people who have (partially) completed the questionnaire. The respondents originated from:

a.	Stellenbosch	30	people	54.5%
b.	Franschhoek	3	people	5.5%
c.	Paarl	3	people	5.5%
d.	Wellington	3	people	5.5%
e.	Hemel-en-Aarde	2	people	3.4%
f.	Elgin	2	people	3.4%
g.	Bot River	1	person	1.8%
h.	Olifantsriver	1	person	1.8%
i.	Western Cape	1	person	1.8%
j.	Swartland	1	person	1.8%
k.	Worcester	1	person	1.8%
1.	Other	7	people	12.7%

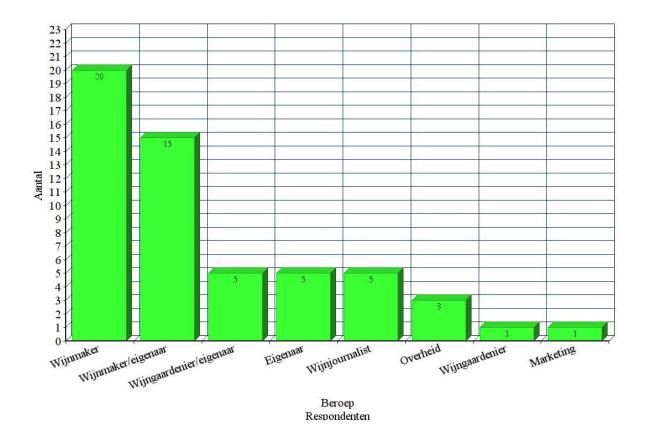
Among the respondents to the questionnaire there are a lot who did not answer all the questions. Sometimes due to lack of knowledge about a specific question and sometimes due to other (political) considerations. A few questionnaires were jointly completed by a number of people, but are individually counted as it is not possible as discover who answered which question. Some questions were answered after a group discussion. No less than 37 people stated they could/would not complete the questionnaire due to a lack of time or because of a lack of knowledge of the subject.

Completed by:	55	people	(34.0%)
Not completed:	37	people	(22.8%)
No answer:	70	people	(43.2%)
Total:	162	people	(100%)



From which wine region did the respondents originate?

Werkzaam in de wijnbouw



Repondents reported by profession



Sex and age of the respondents

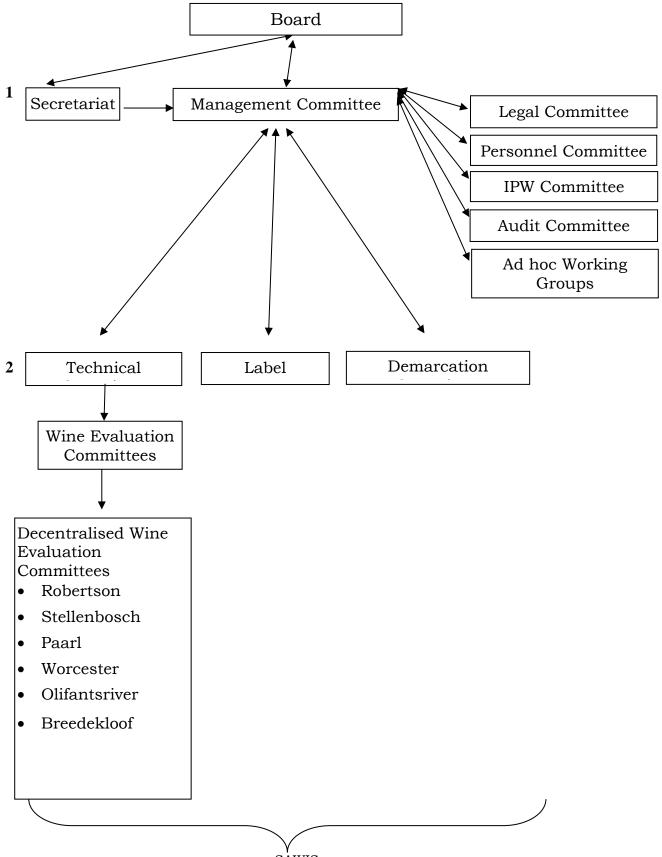
Wine district	Increase in average max. temperature (°C)	Increase in average min. temperature (°C)	Increase in growing days Sept-March	Period of measurement
Stellenbosch	+ 1.7	+ 0.7	+ 150	40 years
Paarl	+ 1.1	+ 0.5	+ 200	36 years
Worcester	+ 1.0	+ 1.1	+ 150	40 years
Olifants River	+ 1.1	+ 0.8	+ 240	34 years
Robertson	+ 0.5	+ 1.1	+ 150	30 years
Constantia	+ 1.0	+ 1.0	+ 180	32 years
Overberg	+ 1.6	+ 1.1	+ 180	30 years
Walker Bay	+ 0.8	+ 0.5	+ 100	13 years

Addendum IX: Temperature differences in the Western Cape, 1967–2006

Bron: Bonnardot en Carey (2008)¹⁷⁶

¹⁷⁶ Bonnardot en Carey: Observed climatic trends in South African wine regions and potential implications for viticulture (2008)

Addendum X: Structure of the Wine & Spirit Board



SAWIS (SA Wine Industry Information & Systems)

Addendum XI: South African wine industry statistics

Statistics covering the year 2015, published in June 2016 by the South African Wine Industry Information & Systems (SAWIS¹⁷⁷):

Production and sales

Wine production per annum:	986.4 million litre (was 959 million litre in 2014)
National sales per annum:	424.8 million litre (was 395 million litre in 2014)
Export sales per annum:	420 million litre (was 423 million litre in 2014)

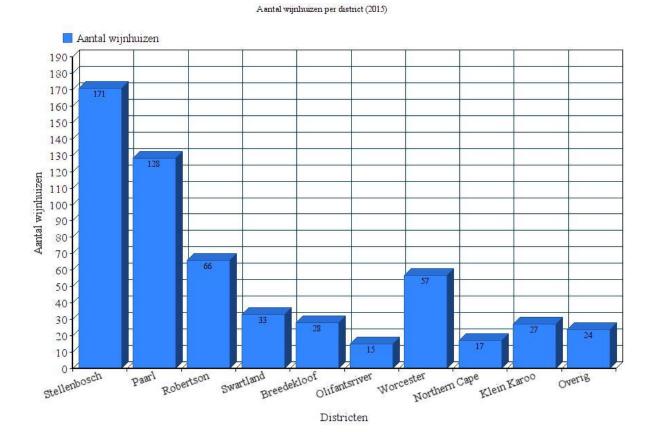
Industry structure

Farms growing wine for wine making:	3,232
Wine estates:	566
Wholesales:	104
Cooperative wine producers:	48
Independent wine estates:	494
Farms registered for the production of estate wines:	210

Vineyards and cellars

Total planted vineyards:	95,775 ha (2017 ¹⁷⁸) - 98.597 ha (2015)
Total number vines:	292 million vines
Stellenbosch:	15,339 ha/ 171 wine estates
Paarl:	15,279 ha/ 128 wine estates
Robertson:	13,227 ha/ 66 wine estates
Swartland:	12,939 ha/ 33 wine estates
Breedekloof:	12,839 ha/ 28 wine estates
Olifants River:	10,018 ha/15 wine estates
Worcester:	6,618 ha/ 57 wine estates
Northern Cape	4,360 ha/ 17 wine estates
Klein Karoo	2,443 ha/ 27 wine estates

 ¹⁷⁷ www.sawis.co.za (2016)
 ¹⁷⁸ www.sawis.co.za (2017)



Addendum XII: Number of wine estates per district¹⁷⁹

¹⁷⁹ www.sawis.co.za (2016)

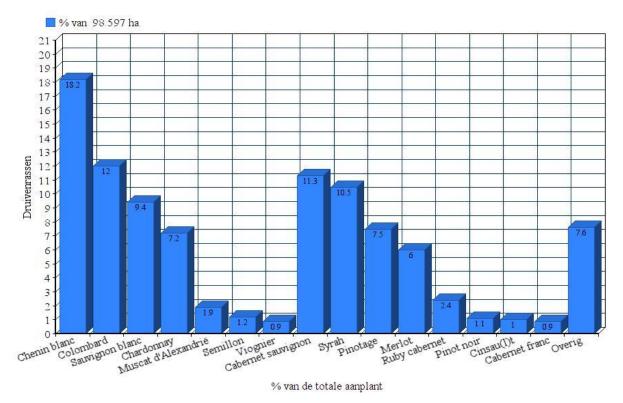
Addendum XIII: Planting of cultivars¹⁸⁰

White cultivars	
Total planting white cultivars:	54.6%
Chenin blanc:	18.2 %
Colombar(d):	12.0%
Sauvignon blanc:	9.4%
Chardonnay:	7.2%
Muscat d'Alexandrie:	1.9%
Semillon:	1.2%
Viognier:	0.9%
Muscat de Frontignan:	0.8%

Blue cultivars

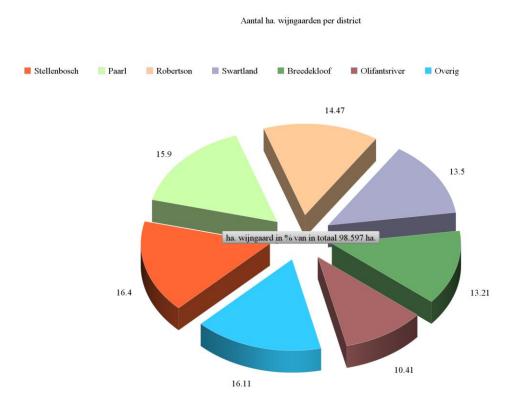
Total planting blue cultivars:	45.4%
Cabernet sauvignon:	11.3%
Syrah/shiraz:	10.5%
Pinotage:	7.5%
Merlot:	6.0%
Ruby cabernet:	2.4%
Cinsau(l)t:	1.9%
Pinot noir:	1.1%
Cabernet franc:	0.9%

Aanplant van druivenrassen

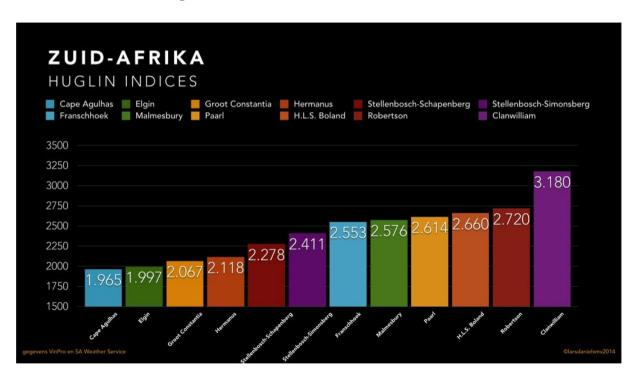


¹⁸⁰ www.sawis.co.za (2016)

Addendum XIV: Number of ha vineyards in production per wine region In % of total of 95.775 ha (2017)¹⁸¹

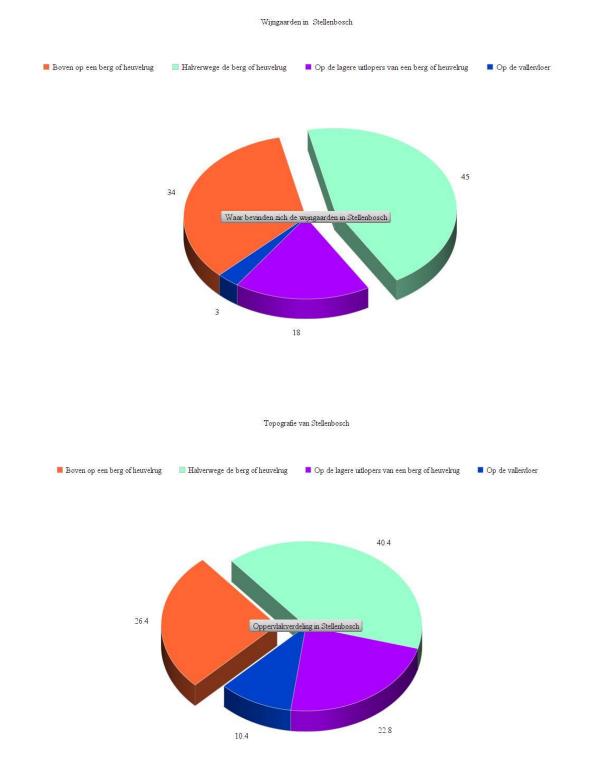


¹⁸¹ www.sawis.co.za (2017)



Addendum XV: Huglin index South Africa¹⁸²

¹⁸² www.wosa.co.za (2014)



Addendum XVI: Topography of Stellenbosch¹⁸³

¹⁸³ V. Carey: Viticultural terroirs in Stellenbosch (2008)

Addendum XVII: Application for registration of a unit for the production of a single vineyard wine¹⁸⁴

WINE AND SPIRIT BOARD BG 3

APPLICATION FOR REGISTRATION OF A UNIT FOR THE PRODUCTION OF A SINGLE VINEYARD WINE

Submit a separate application for each unit.

1. NAME AND POSTAL ADDRESS OF APPLICANT

TEL: FAX: E-MAIL:

2. UNIT (Maximum 6 ha)

Block name, if any	Block No	Variety	Number of vines	Area Ha	SAWIS Farm No
		Te	otal hectare		

3. SKETCH PLAN

- Furnish SAWIS (<u>BG3@sawis.co.za</u>) with an electronic (compatible with a Geographical Information System database) sketch plan or orthophoto of the farm concerned on which all vineyard blocks are indicated and identified.
- If this is not possible, attach a sketch plan on which the required information is indicated.

4. **PRODUCTION**

• Production data of each unit for the past 3 years must be attached.

I, the undersigned, declare that the information given above is true and correct.

Date		Applicant
Approved	FOR OFFICE USE	Rejected
Date		Signature

INQUIRIES AND APPLICATIONS:

Tel: (021)807 5704, Fax: 086 559 0276, E-mail: BG3@sawis.co.za

¹⁸⁴ www.sawis.co.za