



## FruitLook February 2016: A Sustainable Future

Dear Mr. Doe,

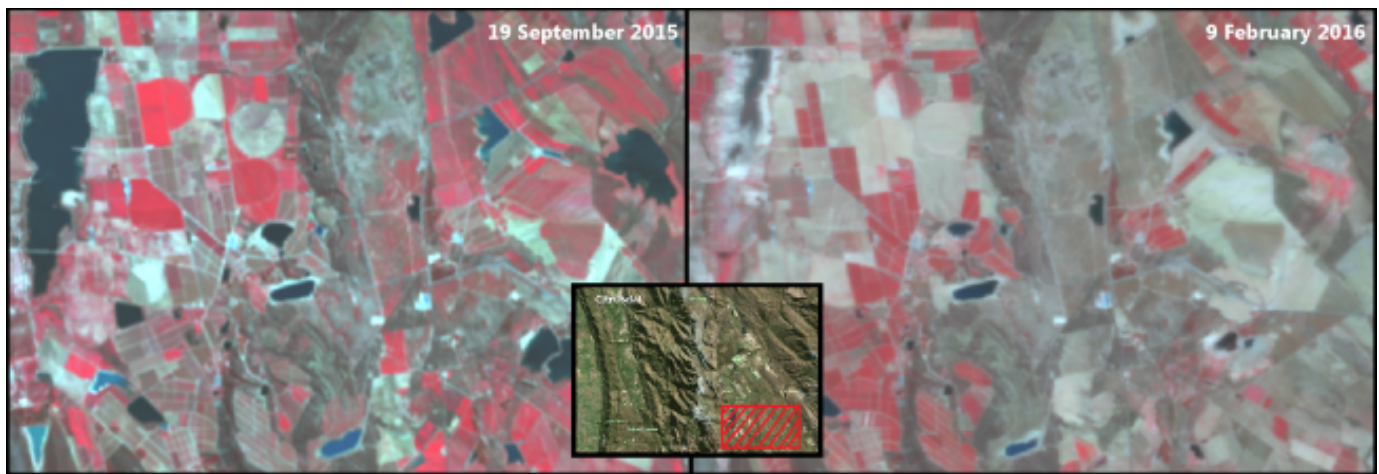
Want to learn more about FruitLook? We have some places left for the next open FruitLook training on Thursday 3 March at Elsenburg. Register now via [info@fruitlook.co.za](mailto:info@fruitlook.co.za)!

For most crops harvest is in full progress and this season's hard-earned returns are gained. A season that was characterized in many areas by water related issues due to a dry winter followed by a summer full of heat waves and fires. This is also reflected in the yields: the Western Cape Department of Agriculture estimates droughts have caused a 10% drop in agricultural production in 2015/16. The impact on next year's harvest might even be bigger as not all farmers have sufficient water for post-harvest irrigation.

Hence, it is more relevant than ever to pursue and invest in efficient agricultural water use and sustainable agriculture. Sustainability is also the topic of this month's newsletter. We provide a short background on climate change and what that has to do with FruitLook. Also, we explain how we are working on making FruitLook itself sustainable as a service.

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**What has FruitLook to do with climate change?** No water means no production: this is highlighted via the image below which shows changes in dam size and vegetation over this past dry season. The area depicted lies just north of Op-Die-Berg, south-east of Citrusdal. The image consists of two false-color pictures: the left one is recorded by the satellite at the start of summer, the right one recently in February. Vegetation, including cropped fields, is colored red. Water bodies are dark blue. It makes clearly visible how evaporation and agricultural water use impact water bodies during the summer. In September dams are relatively full and many water bodies are visible. Mid-February however some dams are empty and water bodies have shrunk: the large lake in the upper-left of the image is almost completely dry. For irrigated farming it is essential these dams are refilled during the winter. Simultaneously, it underlines the importance of efficient water use during the summer.



The 2015/16 season is marked by the effects of reduced water supplies: droughts have caused an immediate impact on the returns gained from agriculture. And it may well serve as a warning for things to come. Climate models predict a gradual to rapid change in climatic conditions and an increased likelihood of extreme weather conditions like hail, flooding and prolonged droughts. Wine and fruit production is vulnerable to this warming of the climate and additional stress from droughts on the already limited water supplies. In combination with significant non-climatic pressures, like increasing competition for water from the urban and industrial sector, climate change forms a potent threat to sustainable growth of the sector. Hence, within this changing environment, agriculture needs to find ways to farm more efficiently and precisely.

This is where FruitLook comes in. FruitLook is a tool designed to improve the efficient use of water: to produce more crop per drop. In last season's questionnaire more than half of the respondents indicated increases in water use efficiency by 10 to 30% due to FruitLook. And there is much more to gain. A recent analysis by agricultural economists of the Department of Agriculture shows the average farmer can earn an additional R7,036 (wine grapes) to R25,630 (deciduous fruits) to R33,858 (table grapes) per hectare. This is based on an increase in yields with 10% and a decrease in inputs (water, fuel, fertilizer and chemicals) of 10%. Generating more income is another important step to increase the resilience of the industry to climate change. We at FruitLook look forward to assist and cooperate with you on making this next step in sustainability.

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**What is next for FruitLook?** In recent years FruitLook provided free support to the wine and fruit industry via funding from the Western Cape Department of Agriculture. We are very grateful for their continued support. The rising number of website visits, user accounts and block orders means FruitLook has made a successful introduction. However, to make FruitLook sustainable it is vital to gain broader, more inclusive support from all role players in the wine and fruit sectors. We are currently engaging with government, industry bodies and a broad spectrum of end users to achieve this. In addition we examine various approaches to make FruitLook a commercially viable product. All of this won't lead to an instant change; obviously many things need to be resolved. Via the newsletters we will keep you up-to-date on what is happening in this regard.

FruitLook has many contributors on this path. Since the start of the service in January 2012 Dutch company eLEAF and South African researcher/consultant Dr Caren Jarman have been part of the project team. eLEAF has been responsible for data production, website development and support while Caren's main focus lies on data validation, application research, training and industry outreach. Since 2013 Ruben Goudriaan has been responsible for eLEAF's tasks in FruitLook. Since the start of this season, Dr Nigel Cook is involved to extend FruitLook's footprint and visibility in the fruit sector. For data application research we cooperate with various researchers and consultants, such as Nelius Kapp, Dr Albert Strever from the Department of Viticulture and Prof Adriaan van Niekerk from the Department of Geography and Environmental Studies of Stellenbosch University.

We believe in a sustainable FruitLook platform beneficial to the entire fruit and wine production sector. Your support is essential to make this happen. Especially in the form of feedback: How do you currently benefit? How can we improve the website? What are your other data needs? To get you started: we will soon announce a competition for the best ways to use FruitLook. Keep an eye out for this!

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If you have additional suggestions for FruitLook, feedback, questions etc., feel free to contact us via [info@fruitlook.co.za](mailto:info@fruitlook.co.za). We hope to welcome you again soon on FruitLook!

The FruitLook Team



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