



Ministry of Foreign Affairs

# Sustainable Business Scan Minas Gerais, Brazil

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International.*

## SUSTAINABLE BUSINESS SCAN

*Minas Gerais, Brazil*

*Agriculture: coffee, fresh fruits and avocados*

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## INTRODUCTION

This report is the result of desk studies and field visits conducted by MVO Nederland, the Royal Embassy of the Netherlands in Brasilia and the Netherlands Business Support Office in Belo Horizonte. The goal of this report is threefold: 1) to study the area where compliance and risk mitigation meet sustainable business and sourcing opportunities: Corporate Social Responsibility; 2) to trigger Dutch companies in the agricultural sector to build on partnerships in Brazil; and 3) to make the companies' value chains more sustainable and futureproof.

Brazil belongs to the world's largest producers and exporters for commodities such as soy, meat, sugar, maize, milk, coffee and orange juice. It currently produces enough to feed 1.2 billion people worldwide. Furthermore, Brazil is a large producer of agro-energy. An estimated 30% of the country's energy consumption is sourced from agriculture, including ethanol, biodiesel and biogas (RVO, 2018). 32 million people – more than 33% of the total working population – are directly or indirectly employed in the agricultural sector. In the past years, even during the economic recession agriculture has shown steady growth. It contributes approximately 24% to the national GDP (RVO, 2018).

The trade agenda of Minister Kaag of Foreign Trade and Development Cooperation prioritises Brazil as one of the nine most important markets for the Netherlands. The total import volume from Brazil to the Netherlands in 2017 was 4.06 billion euros, while the total export reached a volume of 2.47 billion euros. The trade relationship between the Netherlands and Brazil is strong: in 2018, Brazil exported for over €11 billion of goods to the Netherlands, making

it the fourth largest destination for Brazilian exports. Dutch exports to Brazil were significantly lower, worth €1,4 billion, but the Netherlands has consistently been one of the five largest foreign investors in Brazil.

Agricultural products form an important part of the bilateral trade. The Netherlands is one of the largest importers in the world of Brazilian soy, cellulose, orange juice, among many other products. In 2018, the value of Brazilian agricultural exports to the Netherlands was US\$4.5 billion.

Agriculture is also a priority sector for the Dutch diplomatic network in Brazil, consisting of the Embassy in Brasilia, two Consulate-Generals in São Paulo and Rio de Janeiro, and two Netherlands Business Support Offices (NBSO) in Belo Horizonte and Porto Alegre. The network seeks new opportunities for Dutch companies to start doing business in Brazil or to extend their current activities, by matching Brazilians needs with Dutch knowledge, technology or products.

Stimulating Brazilian exports to the Netherlands is obviously not a priority, especially given the commercial imbalance. However, being one of the main importers of Brazilian agricultural goods also comes with a responsibility. This research conducted by MVO Nederland, the Embassy and the NBSO in Belo Horizonte sprouted from the wish by the Embassy to explore the opportunities for doing more sustainable and responsible business in the agricultural sector.

The preliminary work done for this report consists of desk studies and interviews with companies in the Netherlands and Brazil to come to a sector definition, and gain insights in the practical experience with sustainability themes such as labour issues, certification and environmental strains caused by production.

This led to the definition of three products that are the subject of this report – coffee, fruit (lime in particular) and Hass avocado – and a geographical limitation to the state of Minas Gerais.

Dutch coffee companies interviewed in preparation of and after the mission:

- The Coffee Quest
- Douque
- Simon Levelt
- Single Estate

Dutch agro-companies interviewed in preparation of and after the mission:

- The Greenery
- Eosta
- Yex
- Total Exotics
- Special Fruit
- Bakker Barendrecht
- Peterson and Control Union
- Agrofair
- Soil and More Impacts

# UNDERSTANDING CSR

General overview of CSR and CSR in the Brazilian context

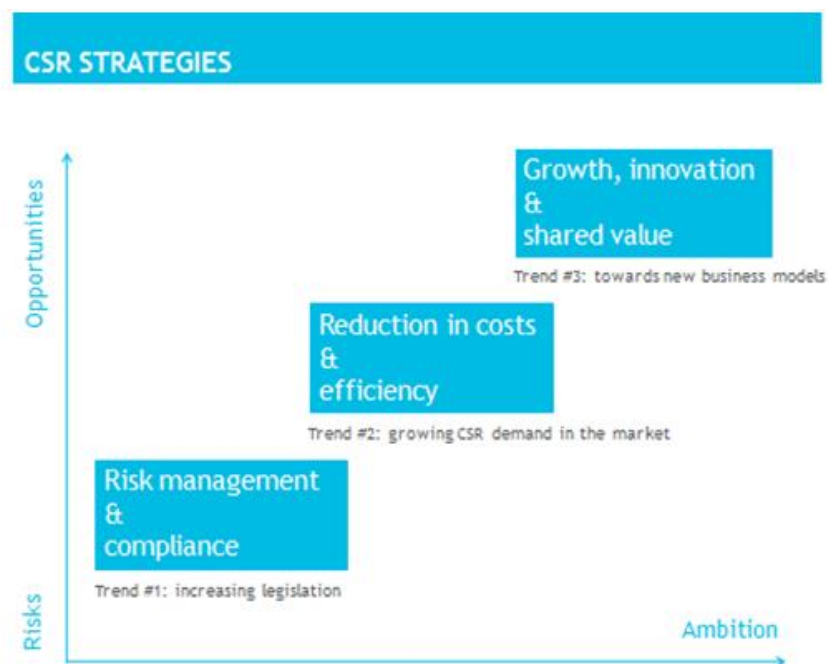


Figure 1: The continuum of possible CSR strategies, source: MVO Nederland

Corporate Social Responsibility (CSR) refers to the *strategic focus of core business activities on long-term value creation in the three dimensions of People, Planet and Profit, combined with the willingness to get into dialogue with society and stakeholders*<sup>1</sup>. By having a CSR strategy in place, a company or organisation is well prepared for the future and acts in line with current guidelines on responsible business.

Transparency and involvement of stakeholders are crucial elements in developing a CSR strategy. By involving business partners, clients, suppliers, but also employees, the neighbouring community and other relevant stakeholders in this process, a company can prepare itself for (future) societal challenges as well. CSR goes beyond corporate philanthropy and charity and also goes beyond complying with laws and regulations.

There is not one single approach to CSR. Themes and issues differ per country, sector and enterprise. CSR is a process and therefore never “finished”. Ambitions should be adapted over time, as the business context and the societal context are continuously subject to change, for example with regards to climate change and the impacts on local circumstances.

## ***Normative framework***

The OECD Guidelines<sup>2</sup> are often seen as the ‘normative framework’ for international CSR. These guidelines are the result of consultations with the business community, labour unions and civil society organisations. The government of the Netherlands expects Dutch companies investing and

<sup>1</sup> SER, Dutch Social Economic Council

<sup>2</sup> In Dutch: [www.oesorichtlijnen.nl](http://www.oesorichtlijnen.nl)

operating abroad to act in accordance with the OECD Guidelines for Multinational Enterprises.

OECD member countries subscribe to the OECD Guidelines and host a National Contact Point (NCP). The NCP has two tasks: inform the business community about the OECD Guidelines, and to handle cases of possible violations of the guidelines. Cases of companies allegedly violating the OECD Guidelines can be brought in at the NCP, which serves as a non-judicial grievance mechanism. Even though Brazil is not a member of the OECD, it has adhered to the OECD Guidelines and it therefore has an NCP in Brasilia.

### ***Universal human rights***

Fundamental human rights related to business are described in the UN Guiding Principles on Business and Human Rights (UNGPs), accorded in 2011 by the UN Human Rights Council. Professor John Ruggie has developed the “Protect, Respect and Remedy” framework, resting on three pillars:

- the state duty to protect against human rights abuses by third parties, including business
- the corporate responsibility to respect human rights;
- greater access by victims to effective remedy, both judicial and non-judicial.

### ***Labour rights***

Labour rights are often integrated in national laws, but compliance and enforcement can be lacking. All labour rights are stipulated in the conventions of the International Labour Organisation (ILO).

### ***Environmental legislation***

Environmental protection laws and regulations are normally ratified on a national level (not on a global level). The Paris Agreement might eventually lead to global international binding measures for reduction of global greenhouse emissions.

### ***Strategies for CSR***

Some CSR strategies (figure 1) are more ambitious than others, and some focus more on transformational opportunities (do good), than on avoiding risk (do no harm). It is not said that one is better than the other; the appropriateness of the

strategy depends on the context and goals of individual companies or entire sectors.

## **CSR IN BRAZIL**

Brazil offers opportunities for Dutch enterprises to enlarge their markets or to source new products. Nevertheless, as in all business activities, there are potential environmental and societal challenges that call for a good CSR strategy by companies. This links to the commitment of the Dutch government to align its trade policy to the OECD Guidelines and the UN Guiding Principles on Business & Human Rights. We will provide a short overview of general CSR risks relevant for Brazil. This is predominantly based on the CSR Risk Check. In the following sub-chapters, specific risks per sector are elaborated upon.

## **Social challenges**

### **Corruption**

In Brazil, personal relations and status are very important in business culture. Therefore, there is a fine line between relation management and corruption, especially at governmental level. Since the law can also be very detailed and complex, the interpretation of federal legislation can vary from one state or municipality to another, as can the way in which it is enforced. Combatting corruption has been key priority for the current and previous governments, especially ever since the enormous Lavo Jato case exposed many politicians and business leaders being involved in corruption schemes.

### **Land rights**

Over twenty per cent of the population in Brazil, mostly in rural areas, live below the poverty line and there is a high social inequality partially due to uneven distribution of land. Several hundred thousand people continue to have no access to (fertile) land, while a far smaller number of landowners control extremely large areas. The lack of a good functioning land registration and a mapped cadaster for land tenure has also given rise to (violent) conflicts, especially in the Amazon. Many parts here are untitled public or poorly titled private land, but do often have people using the land (for housing and commercial aspects).

### **Labour conditions**

Labour conditions are not always respected in the agricultural sector in Brazil. Moreover, the Brazilian labour laws are very complex<sup>6</sup>, making it more difficult to comply with labour standards. Violations of labour rights are often at the core of cases brought to the Brazilian NCP.

## Environmental challenges

Just as is the case with labour, Brazil has extensive and complex legislation to protect the environment. Procedures for environmental licenses are exigent and can take a long time. This legal protection, however, has not always shown to be very effective in practice. Enforcement, control and implementation of the environmental laws have become increasingly difficult, as the budget for the responsible authorities has been significantly reduced in the past years. The authorities lack capacity and resources to effectively control legislation, and employees often face threats. Areas the size of the Netherlands are sometimes controlled by only one or a few officers. The lack of infrastructure in the Amazon also increases the complexity of proper control and enforcement.

### Biodiversity and deforestation

Deforestation has been a problem in Brazil for many years. After an impressive reduction of deforestation rates in the early 2000s, deforestation has slowly been increasing again in the last few years. Although European markets have a growing demand for deforestation free commodities, it remains to be seen if deforestation can be halted. Deforestation is not only a problem in the Amazon: also the Cerrado, the most biodiverse savannah in the world, has seen increasing deforestation due to agricultural activities. Deforestation is a threat to biodiversity. The Cerrado is one of the three major biomes in Minas Gerais (the others are Mata Atlantica and Caatinga).

After several years of discussion and debate, the federal government enacted a new **Forest Code in October 2012**. It represented a difficult compromise between the varied interests of the many stakeholders, although the Forest Code is now generally accepted among farmers. Landowners are obliged to keep

a percentage of their land with native vegetation. Depending on the region concerned, 80%, 35% or 20% must remain forested.

In addition, certain critical areas and features are protected. The main instruments used to support the code are the Rural Environmental Cadastre (CAR) and the Environmental Regularisation Programme (PRA). All agricultural landowners, of which there are over five million, must register their property with the CAR, a task that has not yet been fully completed. This mammoth undertaking is being administered at state level, so the progress differs among states. The information will be used to determine the current forestation status. If a landowner cannot comply with the required percentage of native vegetation, he or she will need to draft a plan within the PRA to restore nature.

On paper the Forest Code is quite elaborate and targets to restore nature. However, it has proven to be difficult to implement in practice. Despite progress, the CAR is still not complete, and many municipalities haven't even started with the PRA yet. The lack of resources and capacity also makes it difficult to enforce the Forest Code.

### Water use and availability

Brazil is a land of contrasts: it holds the largest freshwater reserves in the Amazon basin, but also has drought-stricken areas and floods in the southern parts. Also, climate change is bringing rising temperatures and changes to rainfall patterns, making droughts and extreme weather events more likely. The unprecedented drought that hit Minas Gerais in 2014 led to a loss in production of around 30%.<sup>3</sup> Another reason for these droughts lies in the strong increase of irrigated agriculture and the change of ecological structures around river basins.<sup>4</sup>

### Soil and groundwater quality

In general, Brazilian soils can be evaluated according to their respective biomes. In the Amazon, soils are lixiviated and prone to erosion, with the exception of the floodplains along the Amazon river, which are quite fertile. In the Cerrado

<sup>3</sup> ISEAL alliance (2017). *Minas Gerais and UTZ: Partnership for sustainable coffee production*, 1.

<sup>4</sup> Science Advances, Four billion people facing severe water scarcity, 2016; The World Bank, Brazil may be the owner of 20% of the world's water supply but it is still very thirsty, 2016; EBC Agência Brasil, Over 850 Brazil cities face major water shortage issues, 2017.



and Mata Atlântica biomes, soils are much better, but water may be a (seasonal) problem. Due to the largely tropical climate, plant cover regeneration is much faster than in temperate areas and the amount of sequestered CO<sub>2</sub> is also higher, making it worthwhile to invest in climate smart agriculture. Because of the significant export of agricultural commodities from Brazil, there is a net export of phosphates and other minerals to importing countries, which may pollute local groundwater.

### Pesticides and fertilisers

Glyphosate and other products that are banned in the EU are still permitted in Brazil. Attention must therefore be given to maximum residual levels. Although the residual levels of pesticides on fruits and vegetables in Brazil are generally lower than in the Netherlands (Source: FAO, 2019), field application is not always done correctly and could lead to harmful consequences for employees, farm animals and nature.

## MINAS GERAIS

Minas Gerais is located in southeastern Brazil and is the second most populous region of the country. It is the third region in terms of gross domestic product (GDP), and the fourth largest region by area in the country. The state's gross domestic product (GDP) represented 8% of the wealth generated by Brazil in 2016. The state's capital and largest city is Belo Horizonte. The state has both the largest roadway system and the second largest railway system in the country, besides an international airport and five dry ports to facilitate customs (RVO, 2019). The state's most important sectors are mining, agribusiness and the automotive industry (RVO, 2019).



### State of Minas Gerais

Population: 21 million  
 Economy: BRL 554.634 Million (2016)  
 Size: 586.528 km<sup>2</sup> (> France)  
 Capital: Belo Horizonte

State ranks #2 in Brazil in terms of industrial production and exports.  
 Agribusiness in Minas Gerais generated BRL 190 billion in terms of GDP and represents 14% of total Brazilian Agribusiness GDP  
 Besides Agribusiness, Minas Gerais is the largest mineral producing state accounting for 43% of total Brazilian mineral exports (2017)

Minas Gerais has the second largest population among Brazil's 26 states: there are 21 million inhabitants living in 853 cities. The Belo Horizonte Metropolitan Area is home to 5.5 million people. Minas Gerais occupies an area larger than countries like France, Sweden, Spain and Japan: 587,000 km<sup>2</sup>, equivalent to 7% of Brazil's territory.

The state's gross domestic product (GDP) of BRL 554.643 million represented 8% of the wealth generated by Brazil in 2016. With its modern and diversified economy, Minas Gerais offers a wide range of advantages for those who wish to do business in the state. Consistent appeal that goes beyond geographic location to include the state's infrastructure availability, skilled labour, generous natural resources and lines of financing for a wide variety of ventures, among others.

In the agricultural sector, coffee is the most important export product (over US\$3 billion of exports), followed by soy and meat. Minas Gerais also exports cellulose and fruits and nuts. Regarding the products analyzed in this study, in 2018 exports from Minas Gerais to the Netherlands totalled US\$49.3 million for coffee, US\$1.1 million for fruits and nuts, and US\$166.900 for avocados.

## DEFINED SECTORS FOR THIS STUDY

In this study, the agricultural sector forms the outline of the exploration of sustainable challenges and opportunities. It aims at triggering involvement of the Dutch private sector – with a focus on small and medium sized companies – in existing value chains as well as in new opportunities for sustainable business development.

Based on preliminary research by the NBSO and Embassy in Brazil as well as a number of interviews by CSR Netherlands with companies in the Netherlands, three products groups were identified for the exploration: Coffee, fruits – banana and lime in particular – and Hass avocado.

# COFFEE

Observations from desk study, interviews and field visits



A large part of the mission program was dedicated to visiting coffee farms and sector organisations. In this section you will find a short overview of our observations, a general overview of the challenges the sector faces and some specific themes that deserve attention and that provide opportunities for innovation and business development for Brazilian coffee growers and their international partners.

When considering sourcing countries for high quality coffee, Brazil is a rising star. Recent trends show that medium sized and big estates are increasingly shifting to high quality coffee. Brazilian specialty naturals add a specific profile to roasters' range of coffees. Although low coffee prices make it difficult to invest in new farm practices – and farmers in general are more traditional and not prone to change – there are young farmers and entrepreneurs that are showing vision and initiative to work towards a more sustainable sector.

**Friso Spoor (The Coffee Quest):** *“Among the plantation owners we see large middle-class farmers who have been able to send their children to universities in, for example, Rio de Janeiro, São Paulo and Belo Horizonte. Just like other coffee countries, there is a large emigration from the coffee areas to the big cities, yet we see a lot of this younger generation coming back to the rural areas. They often come back with good ideas to increase production through efficiency, quality improvement, sustainable production and a more global sense of trading their coffee directly in consumer countries.”*



### On farm sizes

According to the Global Coffee Platform, there are an estimated 290.000 coffee growers in Brazil, of which 210.000 growers cultivate Arabica (70%). 190.000 of these Arabica-cultivators are smallholders with a production area smaller than 10 ha.<sup>5</sup> Due to the larger production volumes of the other farm types – through mechanical production and larger farm sizes, among others – the total share of non-mechanical smallholder coffee production in Brazil is relatively small. Nevertheless, virtually all smallholders that produce their coffee in a non-mechanical way are located in Minas Gerais (129.000).<sup>6</sup>

It is that group of producers that is of interest to European coffee companies looking for high quality and sustainably produced coffee. And it is this group of producers that are often considering different approaches to tackling the biggest social and environmental challenges of our times. A number of these challenges were mentioned during interviews and became apparent during field visits in Minas Gerais.

### INTERVIEWS AND FIELD VISITS

Overall it must be said that the Brazilian coffee sector is seen as the most professional and developed worldwide, and Minas Gerais is the biggest single producer of coffee in the world. There is a large contrast with other production countries. Therefore it is considered a fact that Minas Gerais (and Brazil in general) has a strong impact on the market price of coffee, mainly through their share in the total supply. Brazilian coffee also has an outspoken taste profile, for which exists a large demand. Together with the low production costs, this makes Brazilian coffee a popular ingredient for most of the coffee blends in the world.

<sup>5</sup> Global Coffee Platform, *A Quick Scan on Improving the Economic Viability of Coffee Farming* (2018).

### EFFECT OF CLIMATE CHANGE

Due to climate change, a number of effects are visible in the production of coffee. For example, new pests and fungi are taking a toll on production and post-harvest losses. This results in the possible use of even more agrochemicals.



*Mechanical coffee picking*

Additionally, it has become more difficult to predict the moment of harvest due to unpredictable rains. Since rainfall now occurs over different periods of time, one coffee tree can have overripe berries, ripe berries, underripe berries and flowers at the same time. Mechanical harvesting techniques make it virtually impossible to selectively pick the ripened cherries of the coffee tree. This creates either a big post-harvest loss or a diminished quality due to ripe and unripe beans being mixed.

We found a great contrast in response to climate change with different archetypes of companies. These different responses are exemplary for the coffee sector in Minas Gerais. Large scale, more traditional companies look to new

<sup>6</sup> Ibid.

cloned varieties as an answer to changing climate. The use of new and more agrochemicals for new pests and fungi (related to changing temperatures and humidity) is deemed inevitable, whereas experimenting with “climate control” through shade trees and mixed farming is barely considered an option.

**Sr José Edgard Pinto Paiva, (Presidente Fundacao Pro Café):** *“Shade trees? It has been tried in the seventies and did not work. I do not believe that it is a realistic answer to the challenge of climate change”*

On the other side, some small producers are taking all options seriously. These smaller producers often have a focus on higher quality and sometimes even specialty coffee. Quite a few are making a shift from conventional to organic production. They see the limitations of the use of new varieties and chemicals. Experimenting with shade trees and mixed cropping is therefore a necessity to them. It is not clear how widespread this development is, and if there is a process in place in which individual companies profit from the experience of others.

This can be further explored in the follow-up of this study as a first step towards the creation of a more innovative production environment in the area.

**Miriam Aguiar (Organic Plus Coffee):** *“I believe the mixed farming model, in small or medium scale, is twice more resilient: first, in face of climate changes and, secondly, by allowing producers to offer quality food to the local community Soil Alive, Food Alive, Healthy People”<sup>8</sup>*

## SOIL DEGRADATION

Closely related to climate change is soil degradation. It is more and more common knowledge that intensive use of chemical fertilisers in agricultural production in general and coffee in particular, is a race to the bottom regarding soil. It inevitably results in soil degradation and an even larger dependence on chemical fertiliser.

<sup>7</sup> Quote from discussion during fieldvisit

For smaller farmers it is especially difficult to break out of this circle. In most cases the only technical assistance they have access to comes from the fertiliser manufacturer visiting the farm. It is conceivable that their goal will not be to minimise the use of their own product. Some producers are already making this shift.

**Eduardo Bonella (Nepomucena TBC):** *“We have shifted largely towards compost as a replacement of fertiliser. It has led to saving up to 25% on fertiliser. We plan to increase the percentage of compost over the coming years”*

The examples of the use of compost and different kinds of ground-covering crops for the fixation of nitrogen – as an alternative or partial replacement for chemicals – are evident and should be supported. Knowledge and experience should be disseminated at a higher rate to speed up a positive impact on soils and the environment.

This can be further supported as a next step towards production innovation and regional sustainable development. Dutch knowledge and innovative technology organisations can fulfil an accelerating role in this process, such as Soil and More Impacts, Plant Health Cure, Louis Bolk institute and Wageningen University.

**Niels Dijkman (Soil and More Impacts):** *“Together with farmers we aim to increase productivity per hectare through better soil management and more efficient use of natural resources. Targeted soil management reduces risk of erosion, increases water availability, and builds-up soil quality. Measures to ensure soil resilience will reduce risks on production loss, resulting in economic stability for securing land tenure for family farming”*

<sup>8</sup> Quote from discussion during fieldvisit as part of the factfinding mission

## A DIFFERENT RESPONSE TO ALL-TIME LOW PRICES

The most urgent issue coffee producers worldwide are facing is the low price of green coffee. This is not different for producers in Brazil. Even though the cost of production of coffee in Brazil – due to large scale and high level of mechanisation – is way lower than in other producing countries, the current

Coomap is one of the cooperatives in the south of Minas that stands out in regard to social and environmental policy. It is a Fairtrade cooperative that makes the shift to growing more organic coffee, and includes more than 600 farmers of whom over 80% possess less than 20 hectare. The biggest challenges for this coop are:

1. Succession of farmers by their children
2. Low price and lack of access to finance
3. Climate change

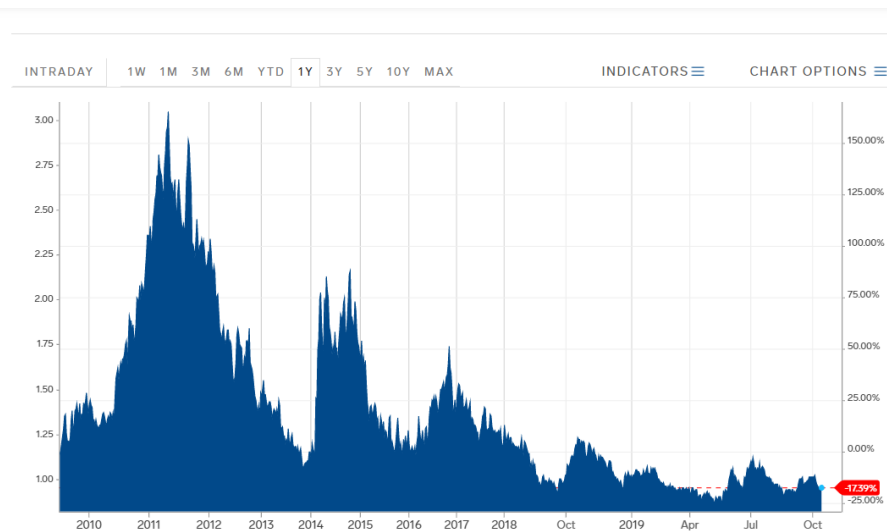
Renato Jose de Melo, general manager of Coomap: *“We are committed to de-commoditising coffee from Brazil to add value as a response to unsustainable prices determined on the New York Stock Exchange. We do that by certifying Fair trade. A part of the premiums for Fairtrade coffee are used for the shift to organic production”*



price of 94 dollar cents per pound (October 2019) is not enough to cover even the most efficient producers' cost price.

As mentioned, the majority of producers in Brazil are small producers that do not have the efficiency of the larger farms in the north of Minas Gerais. Steeper hills and the lack of capital to invest in machinery make these producers dependent on manual picking. Other than in a lot of producing countries, the cost of labour in Brazil is high, making the current situation on the world market a big problem for these small producers. Their answer to low prices is to move to high quality coffee and diversification.

The reaction by large scale producers is captured perfectly in the Bloomberg article “As coffee gets cheaper, Brazil finds a way to grow more for less”<sup>9</sup>: By intensifying production, using more chemical fertilizer and planting coffee trees more densely, the low price can be compensated for by volume.



*The price of coffee. Source: <https://markets.businessinsider.com/commodities/coffee-price>*

<sup>9</sup> <https://www.bloomberg.com/news/fea>

<https://www.bloomberg.com/news/fea> tures/2019-06-08/as-coffee-gets-cheaper-brazil-finds-ways-to-grow-more-for-less



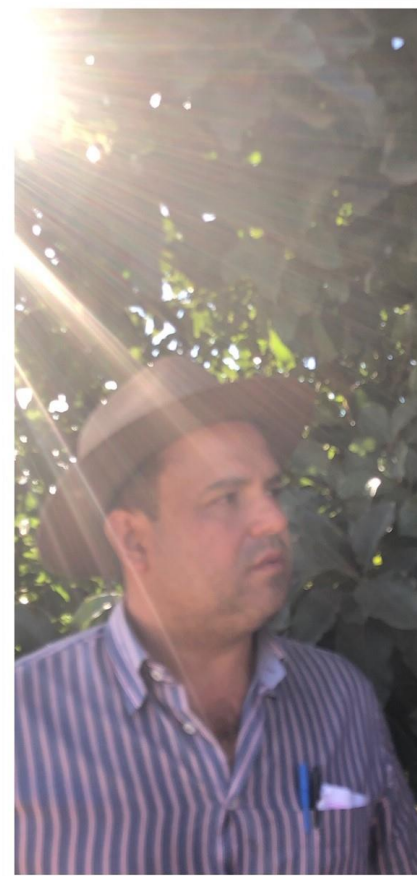
## SHIFT TO AVOCADO

All across “the coffee belt” farmers are seeking ways to diversify their income or move away from coffee production entirely. One of the crops that is frequently seen crowding out the coffee is avocado. It grows under similar circumstances as arabica coffee. In many cases, local varieties have been cultivated for years already. The commercial shift to Hass avocado for export is now kicking off and replacing coffee trees in many countries, such as Colombia.

In Brazil, however, the production of Hass avocado is not yet very well developed. Nevertheless, this can change quickly and considering the scale of production of coffee in Minas, the shift to Hass can potentially be of similar scale. The avocado sector will be discussed in more detail in the next chapter.

Eduardo Bonella of Nepomucena TBC, the biggest producer of avocado of Brazil is originally a coffee farmer, now making the shift to avocado. This is mostly motivated by the low prices for coffee of recent years. The shift to avocado or a mix of the different crops has other advantages. Due to different seasonality, it is possible to work with permanent employees instead of seasonal workers.

*“We have more than 400 people on the payroll that can work on the farm year round working on coffee, avocado’s and dragon fruit and other crops”*



## ADDITIONAL CHALLENGES IN THE COFFEE SECTOR

In this section, challenges in the coffee sector will be elaborated upon, based on the CSR Risk Check, external sources and stakeholder interviews, and to a lesser extent on our observations during field visits and meetings with sector organisations and the government. Nevertheless, this section provides some issues that – from a due diligence perspective – need to be taken into consideration and addressed when building a partnership with Brazilian coffee producers.

### Forced labour

Forced labour remains an issue in the Brazilian coffee sector, with a relatively high number of recorded cases. In 2018, the authorities found over 200 employees in coffee estates in conditions similar to slavery, the worst figure in 15 years. Apart from forced labour, the Brazilian interpretation of ‘conditions similar to slavery’ also includes debilitating workdays, degrading conditions and debt bondage.<sup>10</sup> From interviews with land owners and coffee farmers comes an image of rules and regulations – such as the thickness of mattresses, the distance to the closest restroom and number of lights – that, in their opinion cause a distorted picture. Nonetheless, given the number of cases, forced labour is an issue that should be taken into account.

To help end slavery, Brazil uses a “Dirty List”: a registration of all companies where employees were found working in conditions similar to slavery. In 2013, 15 coffee estates were still on the list, almost all of which fulfilled two or more conditions of slavery. The list of 2018 included four coffee farms in Minas Gerais.<sup>11</sup>

<sup>10</sup> <https://reporterbrasil.org.br/wp-content/uploads/2017/05/Farmworker-Protections-and-Labor-Conditions-in-Brazil%E2%80%99s-Coffee-Sector.pdf>

<sup>11</sup> <https://reporterbrasil.org.br/2018/12/registre-de-casos-de-trabalho-escravo-em-fazendas-de-cafe/>

<sup>12</sup> <https://reporterbrasil.org.br/wp-content/uploads/2017/05/Farmworker-Protections-and-Labor-Conditions-in-Brazil%E2%80%99s-Coffee-Sector.pdf>

There seem to be more labour irregularities, including forced labour, in mid-sized and upland coffee estates, according to research by Repórter Brasil. Mid-sized companies are too big to rely on family labour but also too small to invest in machinery to replace labour. And estates located upland simply cannot mechanise due to the hilly terrains. As the use of labour is higher in mid-sized and upland coffee farms, this also increases the risk of labour irregularities.<sup>12</sup>

### Labour conditions

The coffee sector often works with seasonal workers during harvest time. The seasonal workers, especially from employment agencies, get lower salaries and have longer working times compared with regular workers.

A recent investigation by Danwatch revealed that 40% of agricultural workers in Minas Gerais, many of whom work on coffee plantations, are paid less than the minimum wage, and around half work without a contract.<sup>13</sup> Workers are often paid based on their productivity. If the conditions are right, the company pays well and the worker is productive, he or she could earn a lot – but if harvesting becomes difficult (due to rain, for example), it could mean that workers end up earning less than the minimum salary. Informality is seen as the main problem for labour irregularities and first stage of labour exploitation. Apart from payments below the minimum wage and informality, other labour irregularities in the coffee sector include insufficient health and safety procedures and equipment (e.g. using pesticides without proper protection).

Even estates with international certifications have these labour irregularities, according to a study by Repórter Brasil, carried out with support from the Embassy in 2016. The report indicates that the lack of enforcement and the low fines make it difficult to improve labour conditions.<sup>14</sup> Labour laws were reformed in 2017, but according to Repórter Brasil<sup>15</sup> it has only become more

<sup>13</sup> <https://old.danwatch.dk/wp-content/uploads/2016/03/Danwatch-Bitter-Coffee-MARCH-2016.pdf>

<sup>14</sup> [https://reporterbrasil.org.br/wp-content/uploads/2016/12/Cafe%CC%81\\_ING\\_Web.pdf](https://reporterbrasil.org.br/wp-content/uploads/2016/12/Cafe%CC%81_ING_Web.pdf)

<sup>15</sup> In a phone call on 30 July 2019



difficult. There are fewer inspections, labour unions have become weaker and the ministry of labour has merged with several other ministries. Low international coffee prices increase the risk of labour irregularities – including the risk of child labour<sup>16</sup> - as farmers would need to reduce production costs.

### **Biodiversity and deforestation**

Coffee cultivation contributed to deforestation in Minas Gerais, because of the good climate conditions, low costs of land and labour, government support and the growing international market for coffee.<sup>17</sup>

### **Water use and availability**

The average water footprint of green coffee is 15.897 liters per kilogram (Green, blue and grey water).<sup>18</sup> This is the volume of surface, rain and drinking water that is used for a kilogram of coffee.

### **Pesticides and fertilizers**

Coffee is one of the most pesticide-intensive crops in the world. This intensive use causes soil and groundwater contamination, and coffee pulp pollutes the soil and water.<sup>19</sup> These pesticides can cause health risks but are nevertheless often applied by workers without proper protection.

<sup>16</sup> [https://www.standardsimpacts.org/sites/default/files/ISEAL\\_FactSheet\\_Brazil.pdf](https://www.standardsimpacts.org/sites/default/files/ISEAL_FactSheet_Brazil.pdf)

<sup>17</sup> NRDC, Coffee, Conservation, and Commerce in the Western Hemisphere, 2015.

<sup>18</sup> Water Footprint, Product gallery, 2017.

## FRUITS AND AVOCADO

Observations from desk study, interviews and field visits



Besides its coffee production, Minas Gerais is or can be of great interest to private sector parties from Europe for its production of tropical fruits and the potential to be a big player for Hass avocado production. In this section opportunities and challenges for sustainable sector and business development will be discussed.

None of the interviewed companies are currently sourcing from Minas Gerais. The most common sourcing region is Petrolina, in the state of Pernambuco. The most important products are avocado, mango, papaya, figs and limes.

All companies mentioned the overload of different certifications for sustainability standards. On the other hand, enterprises experience that the knowledge of local producers of certification practices is quite developed, especially compared to other countries. According to various traders, opportunities for sustainability lie in long term partnership building aimed at joint capacity building, among others.

The local climate presents an important challenge for organic production. Due to high temperatures and relatively high levels of precipitation, many commodities need phytosanitary treatment after harvesting. This differs per ecosystem and region. Furthermore, it is challenging to find fully certified products. This is partly due to lack of EU market information available for local growers to match their production method.

Another frequently mentioned challenge is the sometimes confusing legislation. For example, one company stated: *'The level of professionalism and dedication of local growers is comparable to other developed countries. This is not a problem. The challenge starts when governments become involved: regulations and bureaucracy.'*

Another challenge is export regulations. A citrus importer mentioned that the Brazilian government demands all producers of citrus fruits (oranges, limes, etc.) to indicate that products are treated with phytosanitary chemicals in order to be allowed for export, even if *organic* growers have not used these chemicals. This provision makes it extremely difficult for farms to export organic products.

To summarise, for the sourcing of (certified) products, companies experience challenges due to (1) overload of certification standards, (2) climate, (3) lack of EU market information for growers and (4) government regulations.

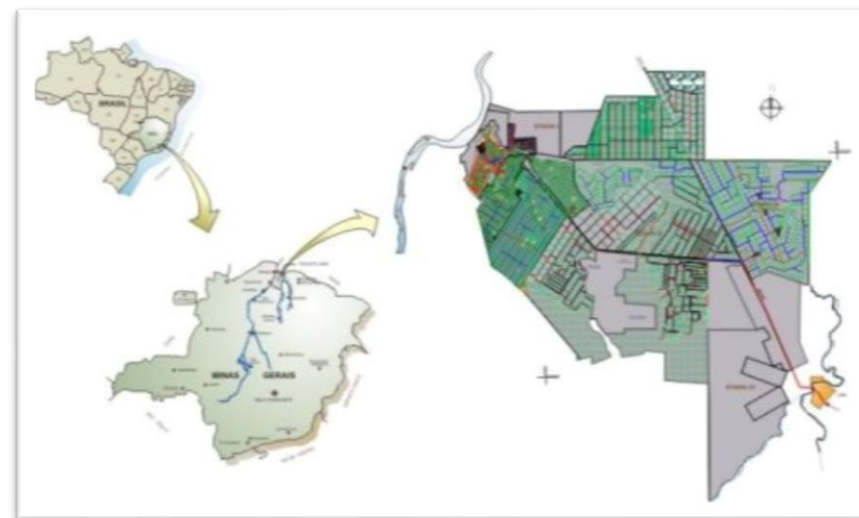
**Companies were asked for the most important criteria when assessing new sourcing regions. These can be summarised as follows:**

- Logistics: distance to closest ports
- Type of company: state-supported or independent
- Farm practices: familiarity with standards of production and post-harvest practices
- Sourcing windows. E.g. in avocado, the preferred windows are September – December and March – April
- Experience with certification schemes

**JAIBA AS A SUSTAINABLE SOURCING OPTION**

The Jaiba Irrigation Perimeter – the Jaiba Project – has become the largest irrigation perimeter in Latin America. In 1965 an area of about 230,000 ha was identified for agricultural use. The construction of canals and water pumping

stations began in 1974, financed by the World bank, but occupation only began in the 1980s, with the settlement of the first families. The expropriated area of 100,000 hectares was to become the largest irrigation perimeter in Latin America. Since then, the Jaiba Project has become a fruit production hub, it is among the largest in the country in the supply of bananas, and it is number one in the production of vegetable seeds.



*Location of the Jaiba Project - Source: [www.projetojaiba.com.br/index.php/mapas](http://www.projetojaiba.com.br/index.php/mapas)*

The project is still in development, and has a total forecast for cultivation of 34,700 ha (around the size of the Netherlands). A project of such magnitude is a deforestation driver, as it promotes the expansion of the agroindustry and service sectors, and also increases population density. The counties of Jaiba and Matias Cardoso, where the Jaiba Project is implemented, showed a population

increase of 23% and 16%, respectively, markedly above the average number observed for the whole northern region of Minas Gerais (5.83%).<sup>20</sup>



*Air camera shot of Jaiba agricultural lands*

The area was developed in two phases. In the first phase, 1800 lots of five hectares of agricultural land were made available for small scale farmers as an incentive for poverty reduction. Until now, it is still a challenge to finalise property papers for these farmers. This results in widespread problems for farmers regarding access to finance for which property documentation is required. The second phase of the project consists of larger farm plots of up to 150 hectares. This group of farmers is responsible for almost all of the export volumes, although smaller producers are increasingly focussed on export as

well. In order to become export ready, they can receive assistance from export organisations such as [Sebrae](#).

The northern region of Minas Gerais puts effort into positioning itself as a serious sourcing option. The marketing approach that is chosen refers to sustainability in some way, but sustainability is not the central issue that is being focussed on in communication and marketing. The current area is roughly the size of the Flevopolder in the Netherlands. The local government aims to expand the productive agglomerate towards an area as big as the size of the Netherlands, relying on 500 km of canals to irrigate the area. The water used comes from the São Francisco River.

The producers in the Jaiba area indicated that there is yet another challenge when it comes to competing for export. This lies in the fact that the already long road to the port of Santos or Rio de Janeiro is now in some parts a toll road increasing the costs of transport compared to produce from alternative areas.

#### ACCESS TO MARKET AND GLOBAL GAP

A development identified during the field visit is the cooperation between large and small farmers to gain market access. In one example, a large producer of lime – Claudio Dijkstra, of Dutch descent – is teaming up with a group of small producers, in the process of becoming Fairtrade certified. According to Dijkstra (and confirmed by Dutch traders), it is a requirement for export to be Global Gap certified.

The Brazilian Global GAP offers a possibility for group certification. The first option is to apply for a Global GAP group certification. This requires an Internal Management System (IMS), in combination with (self-) assessments carried out by the individual growers.

<sup>20</sup> Mariana G., V Dupin et al. (2018). Land use policies and deforestation in Brazilian tropical dry forests between 2000 en 2015. *Environmental Research Letters*, 13, p. 9.



Alternatively, growers can apply for an FSA-certification. This entails the certification linked to the SAI Platform, and is accepted by most of the larger food & beverage companies. The SAI Platform work with self-assessments and an ICS-model as well, but requires a smaller data sample size for verification. Organisations that can assist in this process are Peterson and Control Union. The process for obtaining the Global GAP is regarded by many smallholders as either too expensive or too complicated. This presents a challenge for smallholders in Brazil, as there are no certification schemes allowing small farmers to apply for Global GAP as a group to make the process easier. There are three main difficulties:

#### 1. *The system of day workers*

Government regulations dictate that day workers should register and sign a contract with employers (exact policies differ between estates). However, this also means that income taxation and mandatory insurance premiums will be levied, which may lead to a situation in which both employers and employees prefer to stay out of this system. For both, this saves administration and money. However, Global GAP also requires employers to provide contracts for their day workers.

#### 2. *Environmental requirements*

Another example of a threshold for Global Gap are environmental provisions. For example, local legislation and Global GAP require isolated storage facilities with secondary containments for the storage and management of agrochemicals. These facilities should be installed at least 60 meters outside a family residence. Although this seems like a very positive provision from an environmental point of view, in practice this impedes smallholders to implement Global GAP. Often, lots are not large enough, or the installation of such confinement facilities is far too expensive for smallholders. Another example is the requirement to take periodically water and waste samples to test for contamination. Again, in theory this is a logical and necessary step, but in practice this is often too much of a financial burden for smallholders.

#### 3. *Administration*

The use of agrochemicals need to be administrated; but many smallholders read and write poorly or lack knowledge. This also makes it difficult for many to set up an Internal Management system (IMS). Sometimes buyers do help with setting up an IMS, although this is often not coordinated; the financial investment is therefore often the most difficult part in practice.



*Water pump station Jaiba*

Another challenge is the contract administration. For example, day workers often work for several producers during a week. If a day worker needs to sign a contract with all those different producers, this will generate a significant administrative burden.

### **WATER USE AND IRRIGATION SYSTEMS**

An important issue in considering the relative sustainability of producing fruit and vegetables in Jaiba Project are the benefits and disbenefits of the use of groundwater – as is done in areas without extensive irrigation – and surface

**Average water footprint of various product groups in l/kg<sup>21</sup>**

Mango	1800
Banana	790
Avocado	1981
Lime	642
Coffee (green)	15897

water. In all cases water use is a negative footprint for production and water savings should be part of the common practice. Various of the product groups in this market study have a considerable water footprint.

The depletion of groundwater through pumping up water out of aquifers offers different challenges and the effect is less visible than low river water levels. Furthermore, only farmers able to drill extremely deep can reach deeper confined aquifers. The replenishing process of aquifers (especially the confined aquifers deeper under the grounds) takes a long time, so depletion of these sources has a negative effect in the long run. Other risks mentioned by local producers are salination and over use of brackish groundwater, which both affect crop quality.

Due to weather conditions and intensive water use, the irrigation system of Jaiba was closed down for one day a week during periods in 2018. This indicates that the water is not available unlimitedly and producers should be stimulated to save water. Examples of such measures are site drip irrigation and increasing the absorption capacity of soil. Measures to save water in any case are – from a sustainability point of view – essential.

In order to promote Jaiba as a sustainable option for sourcing fruits and vegetables, it needs to be further explored how the region wants to sustainably develop in terms of irrigation and water management systems. For example, a

more in-depth study into the local benefits and disbenefits of either surface water or ground water irrigation systems is recommended. This presents a good opportunity for Dutch technology and knowledge partners.

## ORGANIC FRUIT PRODUCTION AND ITS LIMITATIONS

There are two ways to get organic certification in Brazil: *Certificação por Auditoria* (OAC) through the *Sistema Participativo de Garantia e Controle Social*. This method is best compared with organic certification requirements in the Netherlands. The second one is more of the “do-it-among-ourselves” certification.

*Sistema Participativo de Garantia* is characterised by collective responsibility of the organisation and members. The organisation can consist of producers, consumers, and technicians (agronomists, SEABRA, SEASA, among others). For this system to work, the organisation must have an *Organismo Participativo de Avaliação da Conformidade* (OPAC). This is a legal body that is responsible for evaluating if the production follows the guidelines and norms of organic production.<sup>22</sup> However, Soil and More impact, a Dutch based specialist in (conversion to) organic production, stated in an interview:

**Lara Vallejo (Soil and More Impacts):** “*The limitations of this system are that it was designed to sustain “agricultura familiar”, so generally not for business or exports, but rather for producers with access to local markets.*”

This would explain why the organic production that was encountered in fruit as well as in coffee was only destined for local markets (for now).

### *Cross pollination between conventional and organic*

One trend was evident during the field visits. A number of practices from organic production were used in conventional production for some very practical reasons. Compost, for instance, as an alternative for chemical fertiliser might cause a slight decrease in production volumes, but it provides a significant cost reduction and improves the health and stamina of the crop in the long run, making banana trees and other crops more climate resilient and

<sup>21</sup> Accumulation of green, blue and grey water use. Water Footprint, Product gallery, 2017.

<sup>22</sup> For more information, consult <http://planetaorganico.com.br/site/index.php/sistemas-participativos/>.

more resistant to plagues and diseases. The latter may in turn lead to more cost reduction of pest control.

The use of coverage under commercial crops was another visible practice that has its origin in organic farming but has proven to be beneficial to conventional farming as well. By covering the soil with organic matter (leaves, plant residues) the soil is less likely to dry out, therefore less susceptible to effects of climate change. By planting ground covering nitrogen fixing plants this provides a natural addition of nitrogen to the soil.



*Brasnica Banana farm*

## POTENTIAL MARKET PRODUCT: PRATA BANANA

Sr Dailton Dos Santos Ferreira of Brasnica Frutas Tropicais Ltda has given insights in a number of the subjects discussed in this chapter. The farm produces organic bananas on 110 hectares out of the 2700 hectares it owns (the remainder is used for conventional produce). The company – the biggest

banana producer of Brazil – produces organic for the local market and is able to do so because of the ratio between organic and conventional. The investment in organic and temporary decrease in revenues while finding a market for produce is easily covered by revenues from conventional sales. Furthermore, the company collaborates with the local university of Lavras and a Spanish company to further develop Green Keeper – a product to prolong the shelf life of fruits, used during transport in sea freight – so that other varieties of banana can be sold to the European market.<sup>23</sup>

This could open the market for Prata banana. This is a tastier, more nutritious banana than the traditional Cavendish. If this future supply is met by demand by European buyers, it could be a step in diversifying banana production. However, this is not a guaranteed solution for the risk of fungi and other plagues (such as TR4 or ‘Panama disease’ and Black Sigatoka) that are threatening the current banana supply.<sup>24</sup> At this moment it is unclear whether Prata is more resistant to these types of diseases than Cavendish.<sup>25</sup> Furthermore, Agrofair remarked that the ripening process of Prata banana’s occurs in a very short time period, which makes it difficult for transport towards Europe (which explains the eagerness of Brasnica to invest in the use of Green Keeper).

**Sr Dailton Dos Santos Ferreira (Brasnica Frutas Tropicais Ltda):**  
*“We have learned from our relatively small organic production that banana trees are more resilient and the costs for fertiliser go down when using compost. Knowledge about soil management – other than chemical fertiliser – is not shared broadly in the sector”*

Organic production of either Cavendish or Prata in humid tropical climates remains therefore challenging. For example, to battle Black Sigatoka (which especially thrives in humid tropical climates)<sup>26</sup>, growers are forced to use large amounts of pesticides. This makes organic production difficult, since there are very few pesticides approved as organic. Furthermore, there is no efficient remedy to battle Panama Disease. The switch to Prata remains above all an opportunity for market diversification, but not for battling current plagues.

<sup>23</sup> Greenkeeper intercepts Ethylene, the hormone responsible for the maturation process.

<sup>24</sup> Especially TR4 presents a current threat to the sector in Latin America, see: <https://nos.nl/artikel/2294081-geveesde-bananenziekte-nu-ook-in-zuid-amerika-valt-de-banaan-nog-te-redden.html>.

<sup>25</sup> The WUR has a specialised research department on both diseases.

<sup>26</sup> Black Sigatoka does not appear in less humid climates, such as in the north of Peru.

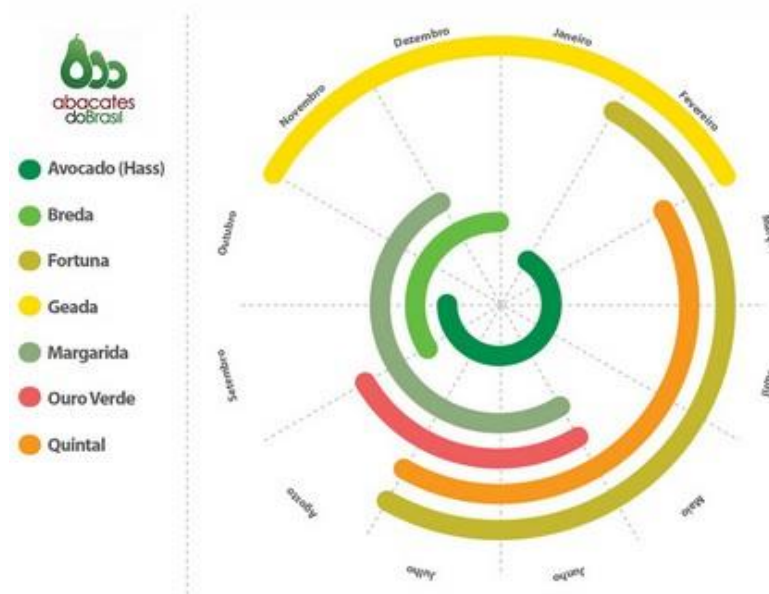


## HASS AVOCADO

Avocado production in Brazil is growing but focusses mainly on the domestic market. However, export oriented production is becoming a larger part of the total production. According to FAO statistics, Brazil is the sixth largest avocado producer in the world. Brazil produces seven varieties of avocado, of which for now only Hass is suitable for export to Europe in large quantities as other types are more fragile, have a different texture and are considered less tasty. The total export volume is relatively small, whereas the growing rates are impressive: 4.900 metric tons in 2016, 7000 metric tons in 2017 and over 13.000 tons in 2018.

### Company visit: Epomucena TBC

Epomucena TBC is a farm located in the region between Belo Horizonte and Sao Paolo. It is one of the biggest producers of avocado in Brazil and proves that the shift to Hass is taking shape (TBC was traditionally a coffee-only producer). The shift from coffee to avocado is a development that is seen in a lot of coffee production regions, mainly caused by low coffee prices. This producer is also an example of slow integration of sustainable practices such as use of compost and mixed farming. It is a sign of a potential shift away from the – sole – focus on chemical fertilisers, monocropping and agrochemicals. To indicate the scale of this shift: Nepomucena TBC produces 23 tons of Hass per hectare on a total of 70 hectares in 2019, and aims for 170 hectares in 2020 and 270 hectares in 2021.



Source Abacates do Brasil

Dutch importers do not yet consider Brazil as an alternative for importing Hass, partly because of unfamiliarity with the option. Furthermore, the current limited product volumes make importers hesitant to invest in long-term partnerships with producers. Notwithstanding, the production and export numbers show potential for the future.

### *Challenges in avocado production*

With the exponential growth rates come a number of challenges typical for avocado production. The Brazilian sector can be compared to the current rapid growth of Hass production in Colombia. As mentioned before, the implementation of certification schemes is difficult in Brazil, especially for smaller growers. Fruit trader the Greenery explained that very few Hass avocado growers in Brazil have the required social certification (such as SMETA, BSCI or Rainforest Alliance). The Greenery and several other



European traders committed themselves to the IDH Covenant, which obliges them to cover 100% of their import with a social certification in order to sell their product to retailers. This makes social certification even more important for Brazilian trade.

**Other challenges that the Brazilian sector might face in the future:<sup>27</sup>**

- Challenges in water management;
- Rapid expansion of avocado production in formerly uncultivated or unsuitable lands;
- Lack of control and enforcement of regulations by environmental authorities;
- Need for training and education on certification, training and e.g. soil and water management;
- Lack of initiative of producers to invest in CSR;
- Lack of public financing tools

Furthermore, the product quality of Brazilian avocado is not always according to international demand. This can have a number of reasons. Most importantly, the sector for export of Hass avocado is in an infant industry state. This brings along challenges for both quantity and quality. For example, Special Fruit mentioned that they prefer Colombian Hass over Brazilian Hass, even though Colombian Hass is not always of the highest quality in itself either.



*Different types of Brazilian avocado*

**ADDITIONAL CSR CHALLENGES IN THE FRUIT SECTOR**

CSR challenges in the fruit sector are in many ways similar to the challenges in the coffee sector, due to the same nature of the work activities and often the organisational structure. In this section, the biggest CSR challenges in the fruits and avocado sector will be elaborated upon, based on the CSR Risk Check, stakeholder interviews and field visits.

**Societal challenges**

**Forced labour**

Debt bondage is a problem in the agricultural sector, including in the fruit production. Some employers charge their employees for transportation, food and other expenses, creating dependency through debt. This leads to labour exploitation, and in some cases even to forced labour. A study in 2009 estimated

<sup>27</sup> During an avocado trade mission to Colombia (2018), various of these challenges became clear through multi stakeholder workshops with traders, knowledge centers, growers and local organisations. The Colombian sector shows many similarities to the Brazilian sector dynamics. Further research into future challenges is highly recommended.

that 2.1% of the workers in the fruit industry were subject to forced labour.<sup>28</sup> There have been cases of debt bondage in the citrus production, which also takes place in Minas Gerais, often through ‘*liders*’ (labour contractors). These *liders* recruit the workers, usually from poorer areas or from other countries, and monitor them constantly.<sup>29</sup>

### Labour conditions

Informality is – just like in the coffee sector – a problem in the fruit sector. In 2013, almost 60% of the agricultural workers did not have a formal contract, according to a survey. This number was higher in the north and the northeast of Brazil.<sup>30</sup> The pressure on workers is strong, especially when there is a *lider* involved. But without a formal contract, the worker has a weak position. Furthermore, the labour reforms of 2018 have weakened the labour unions, adding to a more fragile position of the informal worker. Farms in the fruit sector have been fined for excessive working hours for their employees and for not providing correct safety measures. The use of pesticides also poses risks to the health of the workers.<sup>31</sup> In the **banana** sector, contracts are mostly flexible and temporary which affects the local communities that need the security of a permanent contract.

### Wage and remuneration

The most important challenge for the worker in the fruit sector is to have a consistent salary. As workers are paid based on their productivity and as the work is often seasonal, workers don’t have a stable monthly income. The flexibilisation of labour regulation has also allowed for more flexible hours and seasonal work, adding to uncertainty around salaries. Wages in the **banana** sector do often not provide a subsistence income for farmers. This is among

others due to high costs of agricultural machinery, fertilizers, packing and transport, which in turn lead to lower wages in compensation.<sup>32</sup>

### Environmental challenges

#### Biodiversity and deforestation

The decrease in biodiversity is already impacting for example the citrus production, for example, which depends on pollination by insects. However, these insects and the other parts of their ecosystem are impacted by the widespread use of fertilisers.

#### Pesticides and fertilisers

For the sectors that were visited during the mission, bananas are one of the most pesticide intensive crops, since they are very sensitive to fungi, like Black Sigatoka. However, due to the wide-spread use, the fungus becomes resistant to these pesticides.<sup>33</sup>

#### Water use and availability

Various Dutch trading companies mentioned water use as one of the major issues, especially related to decreasing groundwater levels and recent accidents in the mining sector polluting river water used for irrigation.

<sup>28</sup> [https://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---declaration/documents/publication/wcms\\_111297.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_111297.pdf)

<sup>29</sup> Global2000, Squeeze out: The truth behind the orange juice business, 2016  
SOMO, Sap met een bittere bijmaak, 2017

<sup>30</sup> <https://canalrural.uol.com.br/noticias/quase-dos-assalariados-rurais-nao-tem-carteira-assinada-diz-pesquisa-contag-7716/>

<sup>31</sup> SOMO, Sap met een bittere bijmaak, 2017.

<sup>32</sup> Fairtrade, *Britain’s Bruising Banana Wars* (2014) 8.

<sup>33</sup> Wageningen UR, ‘Mechanisme ontdekt waarmee Black Sigatoka-schimmel in banaan minder gevoelig wordt voor gewasbescherming’, 2017.

# CONCLUSIONS & RECOMMENDATIONS

Potential next steps and follow-up of the exploratory mission

## GENERAL RECOMMENDATIONS

### **Incorporate CSR as an integral component of business activities**

Although the OECD approach of CSR is very focussed on due diligence in the supply (or value) chain, the practice in many countries – including Brazil – shows that CSR is often still viewed as charity or philanthropy. When asked about their CSR strategy, many companies refer to donations of money or time to local projects, for example. These practices indicate that companies see CSR as *what* you do with your profit (charity) – and not *how* you make your profit (due diligence).

Companies should base their CSR strategy on the OECD guidelines and incorporate CSR as an integral part of their business activities. The Brazilian government should support and stimulate this. In addition, the Dutch diplomatic network can include CSR even more in their business development, by researching CSR practices and opportunities, connecting key stakeholders and engaging with Brazilian counterparts.

## MATCH-MAKING AND FURTHER RESEARCH - MINAS

### **Stimulate de-commoditisation**

The Dutch private sector can support the further development and empowerment of relatively small farmers. In doing so, these farmers have the opportunity to diversify, specialise and increase quality over quantity. Here are some options to do this and stimulate sustainable practices on the go.

### **Close the gap between conventional farming and organic farming**

As shown in the example of Brasnica there are reasons why conventional production and organic production should interact and make use of each other's strengths. This should not be different for *coffee* production.

**Friso Spoor (The Coffee Quest):** *“There is a growing demand for organic coffee from Brazil. We are always looking for new partners, producing high quality organic naturals with that specific Brazil profile”*

Promoting and further developing organic coffee production in Brazil would be positive for a number of reasons. It provides producers with a way to diversify and de-commoditise their product:

- 1) It provides added value and opens **new markets** providing that demand and supply are matched. Considering the ever low world market price for coffee, this is a strong motivation.
- 2) **The shift from chemical fertilisers to compost** as well as the shift from agrochemical pest control to organic alternatives as part of so called integrated farm management – connecting diversification on

farm, crop rotation, use of fertilisers and pest control – can create major benefits for the farmer, including saving on production costs.<sup>34</sup>

- 3) **Climate resilience.** By working with a comprehensive soil approach, more soil life, more coverage and different plants holding more water and nitrogen in the soil, coffee plants become less vulnerable to drought and dramatic shifts in temperature.

### True pricing

A potential follow-up angle for connecting coffee companies as well as fruit importers with sustainable production in Minas Gerais is the trend of true pricing.

The coffee sector was introduced to the concept of making the true cost of coffee production visible through collaboration with producers and buyers and making use of tools that are being developed. The true cost of coffee production in Brazil will show what is the negative social and environmental impact expressed in a price component. This information can help producers to work on sustainable production efforts as well as to explain to partners that the price of their coffee is in no way based on the real costs of production including living income, let alone on the possibility to invest in sustainable production methods to bring down the negative impact and true costs of production.

It is in our view highly recommended to explore how Brazilian producers can get started with true cost calculations for small and medium scale production together with their Dutch partners. This can prove to be a vital element of communicating about more diverse coffee, sustainable production, the benefits of small and medium scale production and a call for higher prices for green coffee.

### Explore the opportunities for mixed farming or agroforestry

Apart from nature reservation, the Forest Code of 2012 provides a good opportunity to develop the business case of agroforestry. The Forest Code allows (to a certain extent) for the commercial use of the obligatory 20, 30 or 80% of legal reserve, if native vegetation remains intact. In other words, it is

possible to produce within this area, as long as the requirements of nature conservation are met. Agroforestry can help to achieve this.

### *Coffee is a shade crop by nature*

Originally found in forests of central Ethiopia, Arabica is naturally a shade crop, with trees growing up to 5 metres. This coffee from the Kaffa region is still grown as it was centuries ago, and this offers some sustainability advantages. However, in the case of Ethiopia, the insufficient quality and availability of this coffee make it an inferior option for buyers. It is worth investigating what examples exist in Brazil of companies experimenting with growing coffee within the legal reserves, and what the potential business case for this coffee is. It is furthermore worth exploring which coffee companies are interested to act on the demand side of this potentially highly sustainable coffee.

### Support women in coffee

Supporting female entrepreneurship and female empowerment is a component of Dutch foreign trade policy. The Brazilian coffee sector offers the Dutch government and private sector opportunities to work more with female producers. For example, the Brazilian chapter of the International Women's Coffee Alliance (IWCA) is quite strong and can be a useful contact for match-making, research and cooperation. They have a special label for their members, indicating that the coffee is produced by women, which could be interesting for Dutch buyers looking to bring more differentiated coffee to the market. The Dutch government can assist with linking producers and buyers, and spot opportunities for cooperation on female entrepreneurship (e.g. workshops).

### Next steps

The economic network in Brazil will organise a joint mission of coffee buyers, Dutch soil specialists and biological pest control companies jointly with a CSR specialist, to visit quality coffee producers of two specialty coffee areas of Minas Gerais: Sul de Minas and Matas de Minas. The joint effort would consist of helping farmers improve the sustainability of the specialty coffees produced in

<sup>34</sup> Eco system services to biological control of pests:

<https://nev.nl/pages/publicaties/proceedings/nummers/17/103-111.pdf>

these areas, combined with a cluster of end buyers and roasters of the coffees. Tools such as local workshops co-organised with the sustainable and fair trade cooperations, a benchmark organic coffee plantation or the local chapters of the BSCA can help to improve sustainability of coffee, and lead to an increased demand through the presence of the end buyer.

## **MATCH-MAKING AND FURTHER RESEARCH - JAIBA**

### **Research irrigation and water management opportunities**

In order to promote Jaiba as a sustainable option for sourcing fruits and vegetables, it needs to be further explored how the region wants to sustainably develop in terms of irrigation and water management systems. For example, a more in-depth study into the local benefits and disbenefits of either surface water or ground water irrigation systems is recommended. This presents a good opportunity for Dutch technology and knowledge partners.

### **Explore the opportunities for the Prata banana**

In order to investigate further the potential for Prata banana for European markets, it is important to dig deeper into the advantages and disadvantages of (organic) Prata banana. We cannot not give substantial evidence whether Prata is more resistant to the most threatening banana diseases than Cavendish. The WUR has a specialised research department on both diseases.

### **Link Brazilian avocado producers and Dutch buyers**

The Brazilian Hass avocado sector shows many similarities to the Colombian sector in terms of growth rates and local environment. Considering this, there lie some major opportunities, but also challenges ahead. A good next step would be to organise a multi-stakeholder workshop to capture the various visions of traders, growers, governments, civil society groups and knowledge centres on the development of the sector. This may ensure an organised and well-balanced future sustainable growth Hass production.

### **Next steps**

The larger (partly organic) fruit producing farms visited during the field visits (and others identified), will be invited to join a fruit logistics mission to the Netherlands in February 2020. During the mission they will meet with large scale Dutch organic importers and distributors in order to understand packing and quality requirements. They will also get the opportunity to learn about the latest technology in the sorting and export preparation phase, as to diminish losses during transport and for the products to arrive in the Netherlands in good condition.

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