



Rijksdienst voor Ondernemend
Nederland

*Sector Agribusiness Minas Gerais
NBSO BRAZIL Belo Horizonte*

*>> Duurzaam, Agrarisch, Innovatief
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Colofon

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Opgesteld door: Willem Moraal
Contactpersonen: Willem Moraal
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1 Summary

This sector sketch describes the commercial and industrial value chain involving agricultural or livestock production in Minas Gerais. Leading world supply of sugar, coffee and orange juice Agribusiness represents 24% of Brazilian GDP (2016) and generates 30.5 million direct and indirect jobs. It contributes with 81.86 billion US Dollars to the Brazilian trade balance.

The second most important activity only after mining, Agribusiness is also of vital importance to the economy in Minas Gerais. On a national level, Minas Gerais generates 14% of total Brazilian Agribusiness GDP.

The key Agribusiness activities in Minas Gerais; Coffee, Sugar, Beverages, Dairy, Genetic Improvement, Cattle, Potatoes and Fruit are discussed in further detail as well as opportunities for Dutch Agribusiness companies that are looking to Brazil as potential export market.

2 Agribusiness Brazil

Agribusiness in Brazil is defined as the entire commercial and industrial value chain involving agricultural or livestock production. The value chain is commonly divided into three parts.

The first part, the business upstream of the agricultural sector, or the "pre-farm" stage, is represented by industry and commerce that provide inputs for rural production, such as fertilizer manufacturers, chemical defenses and equipment.

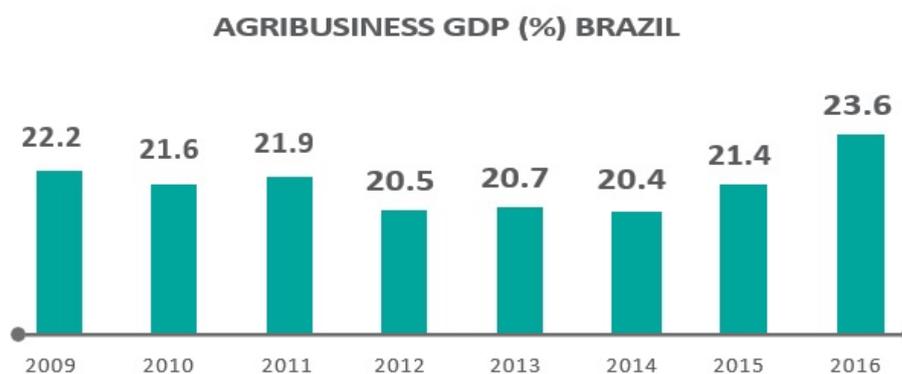
The second part deals with the farming business itself, or "on the farm", which represents small and medium-sized and large farmers, ranging from individual farmers or corporate farms.

The third part represents the activities downstream, or "post-farm" business; the transport, processing, distribution and sale of agricultural products to the final consumer. This includes the slaughterhouses, the textile and footwear industries, packers, food distributors and supermarkets.

2.1 Contribution to GDP

Agribusiness is of vital importance to the Brazilian economy in terms of GDP as well as employment. Agribusiness represents 24% of Brazilian GDP (2016) and has been increasing steadily since 2012 as shown in the figure below:

Figure 1. Agribusiness GDP as share of total GDP (%) Brazil

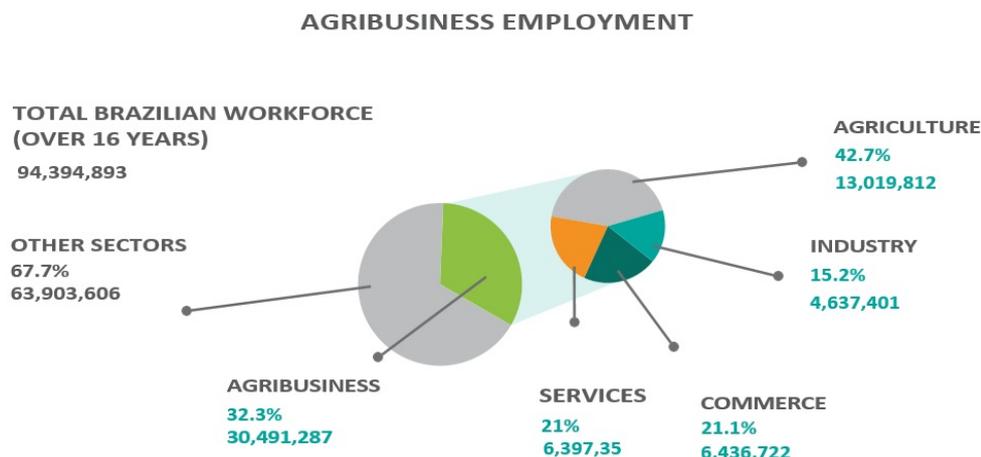


Source: CEPEA/USP AND CAN

2.2 Employment

In terms of jobs, the importance is even more relevant since it represents 32% of all jobs in Brazil, or 30.5 million Brazilians depending directly or indirectly on agribusiness. The biggest number of jobs are found in the labor-intensive (on the farm) production followed by industry, commerce and services as shown in the figure below.

Figure 2. Agribusiness employment breakdown Brazil

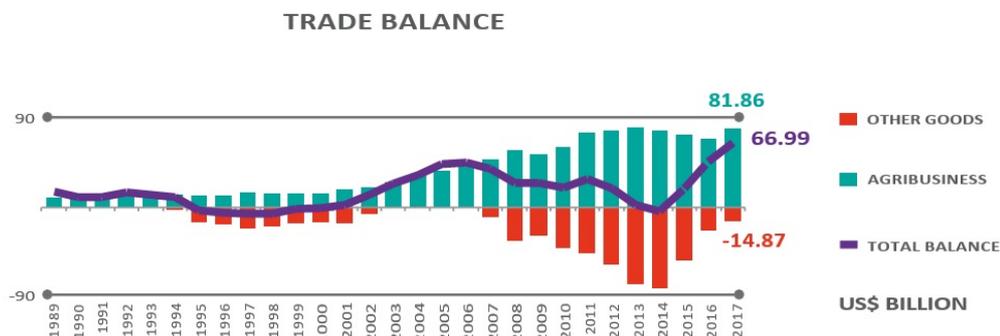


Source: IBGE/PNAD 2015 (CNA AND ICNA)

2.3 Trade balance

The importance of agribusiness to the Brazilian trade balance is easily understood when looking at top export products: Soya Beans, Sugar (cane or beet), Poultry Meat, Corn, Coffee and Frozen Beef are all in the top ten of exported products. Not only does agribusiness contribute significantly to total amount exported, it also “saved” the Brazilian trade balance during the past seven years from becoming negative as shown in Figure 3.

Figure 3. Trade balance Brazil 1989-2017



Source: MDIC and Agrostat/mapa. Prepared by CNA

2.4 Importance to world food supply

Brazil is one of the world’s leading producers and suppliers of food, fibers and agro-energy. Recent years have shown important productivity gains obtained through technology and local farmers entrepreneurship as well as agriculture and livestock production chain organization. Projections by the United Nations Food and Agriculture Organization (FAO) and the Organization for Economic Cooperation and Development (OECD) estimate that, over the next ten years, Brazil’s production of various agricultural and livestock products will grow at rates far above the world’s average. The overall importance of Brazil to the rest of the world as food supplier is shown in figure 4. It leads world exports of Sugar, Coffee, Orange Juice, Soy Beans, Chicken and Beef with participation varying from 20 to 76%.

Figure 4. World ranking in 2017 - Brazilian production and exports 2017

BRAZILIAN PRODUCTION AND EXPORTS 2017

	SUGAR AÇÚCAR	COFFEE CAFÉ	ORANGE JUICE SUCO DE LARANJA	SOYBEANS SOJA EM GRÃOS	CHICKEN CARNE DE FRANGO	BEEF CARNE BOVINA	CORN MILHO	SOY OIL ÓLEO DE SOJA	SOY MEAL FARELO DE SOJA	COTTON ALGODÃO	PORK CARNE SUINA
PRODUCTION	1 st	1 st	1 st	2 nd	2 nd	2 nd	3 rd	4 th	4 th	5 th	4 th
EXPORTS	1 st	1 st	1 st	1 st	1 st	1 st	2 nd	2 nd	2 nd	4 th	4 th
SHARE OF WORLD TRADE (EXPORTS)	48%	27%	76%	43%	42%	20%	20%	12%	22%	8%	11%

Source: USDA. Prepared by CAN

3 Agribusiness Minas Gerais

Minas Gerais is a state in Southeastern Brazil. It ranks as the second most populous, the third by gross domestic product (GDP), and the fourth largest by area in the country. The state's capital and largest city, Belo Horizonte, is a major urban center in Latin America. Its metropolitan area is the third largest in Brazil, with just over 5.5 million inhabitants, after São Paulo and Rio de Janeiro.

The state has the largest roadway system and the second largest railway system in the country, besides and international airport and five dry ports to facilitate customs. NBSO has been in the city of Belo Horizonte since its opening in 2014.

Figure 5 Economic importance of Minas Gerais



State of Minas Gerais

Population: 20.9 million
 Economy: 137 Billion US\$ (2016)
 Size: 586.528 km² (> 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).

Although Minas Gerais is best known for its mining activities it is also a major producer of milk, coffee and other agricultural commodities as shown in Figure 6.

Figure 6. Agribusiness highlights Minas Gerais



Source: MDIC/SECEX/INDI

High tech companies are present as well (e.g. Philips, Helibras, Embraer etc.) and there is a strong presence of the automotive industry with manufacturers like Fiat, Mercedes-Benz and Iveco.

3.1 Economic contribution of Agribusiness in Minas Gerais

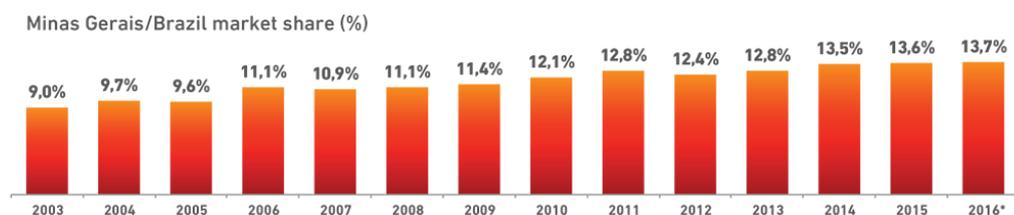
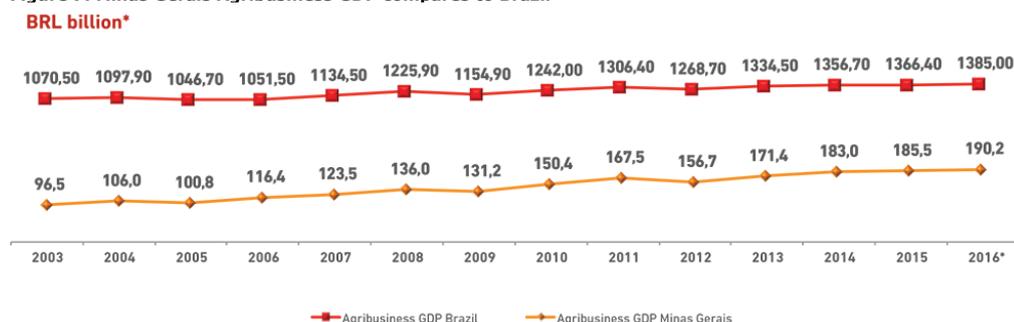
The main characteristic of Agribusiness in Minas Gerais is plurality. Equal in size to France, the diversity of climate, soil and terrain of the state favor the growing of countless different crops and diversity in livestock. In addition to these aspects favorable to agricultural exploitation, the state counts on an organizational structure to support rural producers, especially in the fields of research, technical assistance and rural extension programs.

The food industry in Minas Gerais is also highly diversified. The state produces everything from fresh to fully industrialized processed food. This sector counts 6.400 companies ranging from small companies to cooperatives and major industries like Bauducco/Pandurata, Copenhagen, Unilever, Yoki, Cargill, Algar, among others.

3.1.1 Agribusiness GDP

The diversity, size of territory and activities related to food industry result in a share of approximately 14% of total Brazilian Agribusiness GDP as shown in figure 7.

Figure 7. Minas Gerais Agribusiness GDP compares to Brazil



*2016 prices

Source: MDIC/SECEX/SEAPA

3.1.2 Labor

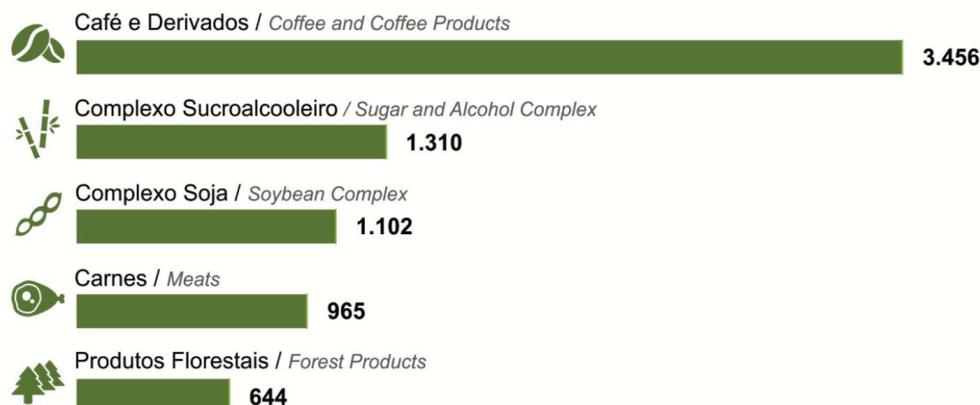
In term of labor, Agribusiness is of extreme importance. Agricultural, forestry and fishing employs 244 thousand in the state of Minas Gerais. The food processing industry is responsible for yet another 160.000 direct jobs in Minas Gerais totaling over 400.000 direct jobs in Agribusiness.

Senar Minas (National Rural Apprenticeship Service) offer Minas technical training for Agriculture and Senai (National Industrial Apprenticeship Service) for Industry. Higher qualification is offered by the top ranked Federal Universities of agricultural education such as UFV (Viçosa), UFTM (Triangulo Mineiro) and UFLA (Lavras). There are more than eleven thousand agronomists, food engineers and specialist in other related areas registered in the state, according to Crea-MG (Regional Council of Engineering and Agronomy).

3.1.3 International Trade

In Brazil, Minas Gerais is the main exporting state of coffee and has outstanding participation in the foreign sales of products from the sugar-alcohol complex, soy complex and meat. The top five Agro export products in Minas Gerais are shown in figure 8.

Figure 8. Top 5 Agro export products Minas Gerais (US\$ Million)



Source: MDIC/SECEX

In 2017 exported Agribusiness products generated 544 tariff codes (equivalent to HS codes) and were exported to 172 countries, The main destinations were China, the United States, The Netherlands, Germany, Italy and Japan. In 2017, the sector's foreign sales accounted for 31,4% of all exports made by Minas Gerais and generated foreign exchange equivalent to US \$ 7.95 billion.

Agribusiness will continue to be influenced by the growing demands of (international) markets, which will require an increasingly sophisticated control, guided by animal and plant health surveillance policies, at all stages of planting and cultivation, livestock farming and trade.

The professionalization of business management in the various links of the production chain, especially in the primary production segment and the issue of certificates of origin, traceability, product quality certification, should be intensified in order to meet the requirements of the destination markets.

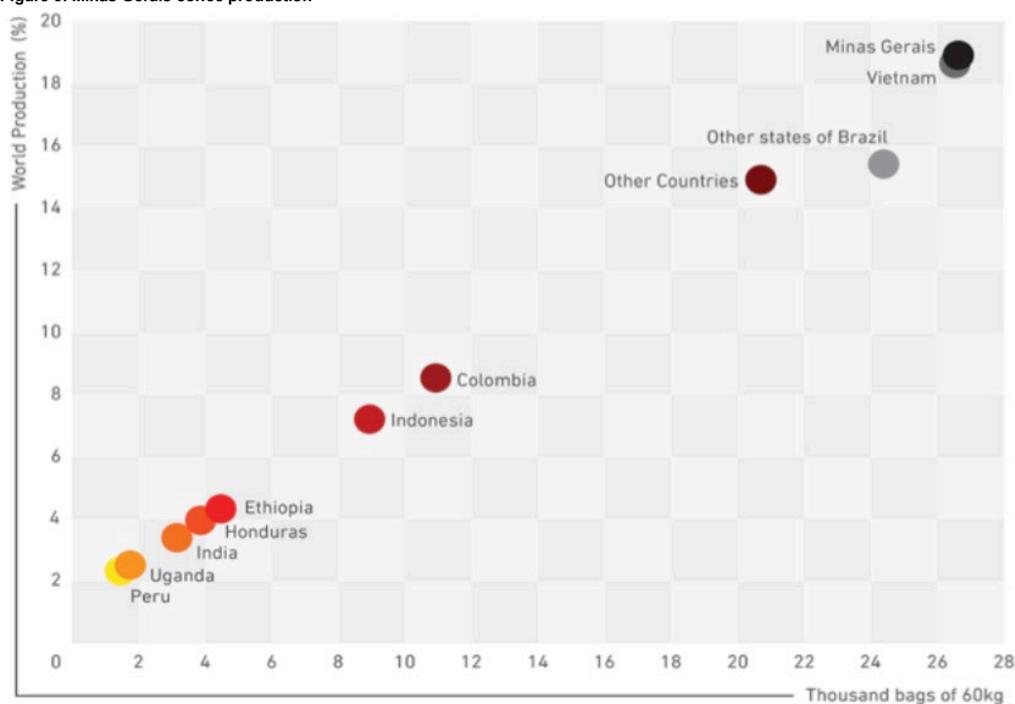
4 Key sectors and opportunities Minas Gerais Agribusiness

4.1 Coffee

Accounting for more than 65% of total Brazilian coffee exports, Minas Gerais leads coffee production in Brazil. In terms of Minas Gerais exports, coffee leads the international sales of Agribusiness and is the second most important export product, after iron ore.

Figure 9 shows not only the importance of coffee relative to other Brazilian states but also the absolute importance of Minas Gerais as coffee producer when compared to other countries.

Figure 9. Minas Gerais coffee production



Source: MDIC/SECEX/INDI

The planting conditions in the south of Minas make the region the main Brazilian coffee producer. According to the Brazilian Association of Special Coffees, Minas Gerais has the largest concentration of special coffee producing regions. An overview of the different Brazilian coffee regions is given in Figure 10 clearly showing the concentration of production in Minas Gerais and the different coffee regions within the state.

Figure 10. Coffee plantations in Brazil

Coffee Plantations in Brazil

Source: Brazil Specialty Coffee Association

- Minas Gerais**
 1 - South of Minas
 2 - Mantiqueira de Minas (Geographical indication)
 3 - Chapada de Minas
 4 - Matas de Minas (Mountains of Minas)
 5 - Cerrados de Minas
 6 - Cerrado Mineiro

- São Paulo e Minas Gerais**
 7 - Alta Mogiana

- São Paulo**
 8 - Mogiana
 9 - Média Mogiana
 10 - Marília e Garça
 11 - Ourinhos e Avaré

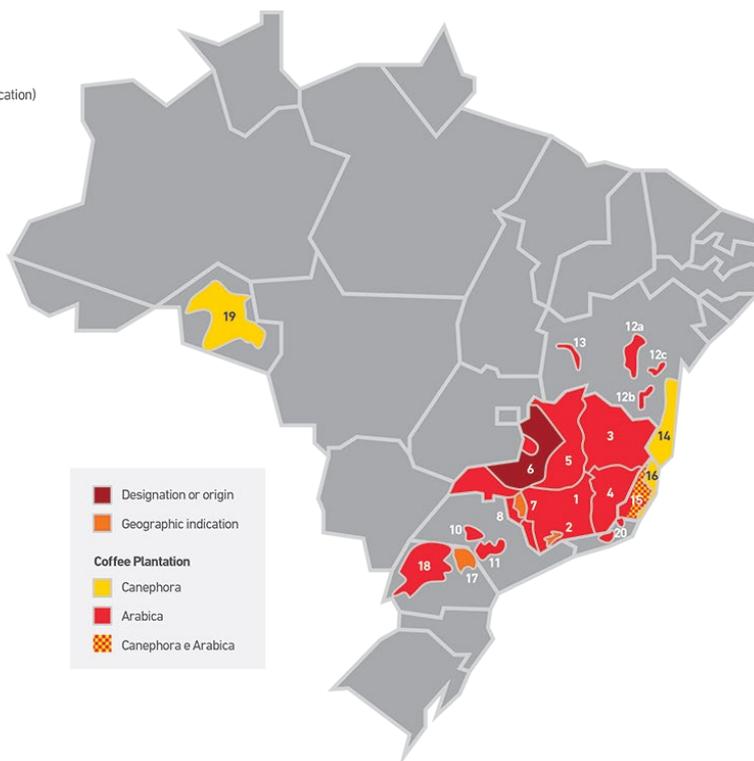
- Bahia**
 12 - Planalto Baiano:
 a - Chapada Diamantina
 b - Planalto de Vitória da Conquista
 c - Serra de Itirucu/Brejões
 13 - Cerrado Baiano
 14 - Atlântico Baiano

- Espirito Santo**
 15 - Montanhas do Espírito Santo
 16 - Conilon Capixaba

- Paraná**
 17 - Norte Pioneiro do Paraná
 (Geographical indication)
 18 - Paraná

- Rondônia**
 19 - Rondônia

- Rio de Janeiro**
 20 - Rio de Janeiro



Source: MDIC/SECEX/INDI

The Brazilian branch organization for the coffee industry is ABIC (Brazilian Association Coffee Industry). Statistics, member industries and contact information is readily available on their website. In Minas Gerais the industry is represented by SindiCafe-MG (Coffee Industry Employers’ Union - Minas Gerais).

Dutch Douwe Egberts is active in Brazil and operates from Sao Paulo. Opportunities for Dutch companies can be found in the area of supplying Coffee Roasting machines for large coffee industry as well as the smaller specialty producers. On the field specialty coffee is very labor intensive and low tech, but larger mechanized field producers can be potential clients for precision agriculture equipment.

4.2 Sugar

Brazil is the world's largest producer and exporter of sugar and the second largest producer of ethanol. In this scenario, Minas Gerais stands out as the third largest producer of ethanol and the second largest sugar producer in the country (2015/2016 harvest). The state, besides having favorable cultivation conditions due to the climate and the fertile soil, also has an ICMS tax policy that favors the production of ethanol at very competitive prices. Currently the sugar-energy sector is present in 130 municipalities with a planted area of 929 thousand hectares of sugarcane.

The sugar cane industry is represented by The Brazilian Sugarcane Industry Association (UNICA). Members can be contacted though their website. In Minas Gerais the industry of sugar cane (Bioenergy, Ethanol and Sugar) is represented by SIAMIG (Association of Sugar, Ethanol and Bio-energy Industries).

Dutch DSM is active in Brazil in Bio-Ethanol production and research and development in the field of bio-ethanol fermentation. Opportunities for Dutch companies can be found in the field of improving the Ethanol production from Sugar Cane Biomass as well as other agricultural produce.

4.3 Beverages

Minas Gerais has a diversified beverage sector, with production of cachaça, beer, soft drinks, juices, energy, among others. Among the main highlights in the state, AMBEV operates four production units. The production plant in the municipality of Uberlândia was projected to be the largest in the world. The FEMSA Coca-Cola plant in the municipality of Itabirito is also considered the most modern of the group. In addition, the State stands out in the craft/specialty beer sector, with internationally renowned companies such as Wäls, Backer, Falke Bier, Krug Bier and others.

Dutch Unilever produces (soy-based) juice in Pouso Alegre (Southern Minas Gerais). Opportunities can be found for Dutch companies interested in a merger with or acquisition of a local craft/specialty beer brewer. Local cachaça producers are looking for export opportunities and could use the Netherlands as a point of entry for the European market. Dutch Gin producers could enter the Brazilian market through the existing network of specialty spirits producers.

The beverage sector in Minas Gerais is represented by Sindibebidas (Employers' Union of the Beer and Beverages Industry) and can be contacted for further information.

4.4 Dairy

Brazil produces about 34 billion liters of milk a year (2017), out of which 27 percent is produced in Minas Gerais, thereby the leading milk producing state in Brazil. USDA data from the US Department of Agriculture indicate that Brazil is the fifth largest producer in the world, behind the European Union, India, the United States and China. The processing and production of dairy products occurs in more than 700 companies spread throughout the country. Some of the leading industries in this sector are in Minas Gerais, such as Danone, Itambé, Embaré and Cemil.

Figure 11 shows in a graphical way the dispersion and diversity of the milk processing industry in Minas Gerais.

Figure 11. Dairy industry Minas Gerais



Source: Silemg

According to SILEMG (Employers' Union of Dairy Industry), representing 150 milk processing companies in Minas Gerais, there is still along way to go in terms of quality control and certification of milk. Industry however is rapidly developing and some companies are ready for international cooperation through merger or acquisitions. Opportunities for Dutch companies can also be found in sales of milk extraction machinery as well as storage and the transformation industry. SILEMG welcomes potential suppliers of Dutch technology of equipment to introduce to its members.

4.5 Genetic improvement

Minas Gerais has Scientific and Technological Institutions (ICTs) that are a reference in animal breeding and genetic improvement of agriculture. Embrapa (Brazilian Agricultural Research Corporation) and Epamig (Agricultural Research Company of Minas Gerais) stand out in the protection of crops. Both of them have collaborations with universities such as UFLA, UFV and UFU. The UFV develops projects in the areas of Plant Science for genetic improvement in agriculture. Uberaba, in the headquarters of the Brazilian Association of Zebu Breeders (ABCZ), houses the Centre of Excellence in Bovine Genetics, created in 2009, with the objective of developing zebu genetics in Minas Gerais.

There is a link between the Netherlands and Brazil through cooperation between Wageningen and Viçosa University in the field of agriculture. Dutch companies active in the field of genetic improvement of livestock and interested to operate in Minas Gerais are advised to contact ABCZ and ASEMG (Association of Pork producers).

4.6 Cattle

Minas Gerais has the 2nd largest cattle herd in the country with about 23.5 million animals, or 11.2% of the national herd according to IBGE (Brazilian Institute of Geography and Statistics). Data referring to the slaughter of cattle under Federal, State and Municipal inspection published by the IBGE show that in 2014 3.2 million heads of cattle were slaughtered in Minas (10% of national total).

Slaughterhouses and meat processing industry in Minas Gerais are represented by Sindicarne (Employers' Union Meat Processing Industry). Most of its processing technology comes from Brazil and Italy. Industry representatives have no urgent needs for access to new technology but would like to get better access to European markets. A common complaint heard by the industry representatives is that there is none or little destination for the leftover bones after processing of meat. This could be a niche opportunity for Dutch glue or gelatine producing companies.

4.7 Potatoes

Minas Gerais produces leads Brazilian potato production. The Agricultural counselor of the Netherlands in Brazil, Mr. Bert Rikken, in cooperation with the NBSO Belo Horizonte visited the Triangulo Mineiro area in November 2018 to study the value chain of potatoes (from seed potato to the industrialized product) in Minas Gerais. Since Holland has a long history with potatoes, both in farming as well as the potato food processing industry, the objective of this visit was to map potential demand for Dutch products and services as well as identification of investment opportunities. The area of Triangulo Mineiro (approximately 400 km West of Belo Horizonte) was chosen not only based on production numbers, but due to the privileged climate and geographical characteristics enabling a certain degree of mechanization in farming and the presence of the largest potato processing factory in Brazil, called BemBrasil.

BemBrazil, holds a market share of 55% and produces yearly a stunning 250,000 tons of pre-fried potato products, by far the largest fries producer in Brazil. They have a refrigerated storage capacity for 115,000 tons potatoes and work is in progress to double that capacity enabling a year round full capacity production.

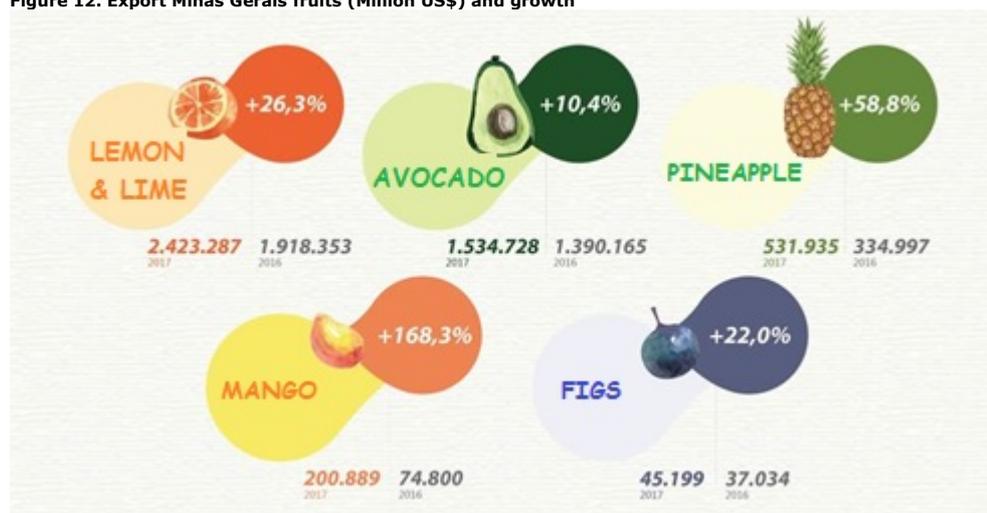
Dutch companies are well represented “on the farm” with seed potatoes and machinery/cooling techniques as well as machinery used in the processing facilities. There is room for introduction of new types of potatoes. Since there are only two local industries of relevance in the potato processing business (BemBrasil and Serya), and a lot of the national (and potentially growing) demand is still supplied by imports, there is room for investment. McCain is said to have been studying the opening of a plant in the area. Currently, fries are imported from plants in Argentina. FIEMG would like to talk to companies interested in investing in Minas Gerais. They have a team ready to guide and accompany foreign investment under the program called EXPAND. Please contact the NBSO Belo Horizonte office for further information and contacts.

4.8 Fruits

Although statistics on production and exports of fruits in Minas Gerais do not justify the dedication of a paragraph in this sector sketch, they are included due to recent growth and potential opportunities for Dutch companies. These opportunities can be found in the field of irrigation (new irrigation projects and dredging of existing systems) and processing/packaging of fruits, especially in target regions stimulated by state government (Jaíba project).

Growth in export (first semester 2017 vs. 2016) of the five most exported fruits in Minas Gerais: Lemon & Lime, Avocado, Pineapple, Mango and Figs is shown in Figure 12.

Figure 12. Export Minas Gerais fruits (Million US\$) and growth



Source: SEAPA/MDIC

Fruit producers in the regions stimulated by investments in irrigation projects of Jaíba (municipality of the same name) and Gorutuba (municipalities of Janaúba and Nova Porteirinha), are located in the north of Minas. By exporting, they seek to increase the sales and profits. The foreign market is a mechanism for producers to get out of the dependence of the wholesalers of the national fruit market, who throw the price down during harvest periods due to the fact that perishable products cannot be stored. Currently 30-50% of the fruit (and vegetable) produce is lost before reaching the final consumer. There the provision and investment in storage facilities, cold chain management and agro logistics in general are another interesting opportunity for agri-business.

The Jaíba Irrigation Perimeter - the Jaíba Project - dates back to the early 1950s, when the first efforts of occupation and colonization were made through the National Institute of Immigration and Colonization (INIC). 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, but their 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 Jaíba 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.

Figure 13. Jaiba Irrigation Project



5 Conclusion

Agribusiness in Minas Gerais represents various opportunities in different fields for Dutch companies that are looking to export products or services to Brazil. Opportunities vary from DNA improvement of livestock to machinery for dairy produce as well as coffee roasters for specialized coffee.

The NBSO office in Belo Horizonte will be able to connect interested companies to the various industry representative bodies or directly with major industries active in food production.

Data and information sources:

ABCZ www.abcz.org.br/
CREA-MG www.crea-mg.org.br/
EMPRAPA www.embrapa.br
EPAMIG www.epamig.br/
EXPAND www.expand.fiemg.com.br/
FAEMG www.faemg.org.br
FIEMG www7.fiemg.com.br
IBGE www.ibge.gov.br/
INDI www.indi.mg.gov.br
MDIC www.mdic.gov.br
SECEX portal.siscomex.gov.br
SENAI www.portaldaindustria.com.br/senai/
SENAR www.senar.org.br
SIAMIG www.siamig.com.br/
SILEMG www.silemg.com.br/
SIMPAMIG www.sindicatodaindustria.com.br/sinpamimg/
SINDIBEBIDAS www.sindicatodaindustria.com.br/sindbebidasmg/
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SINDUSCARNE www.sinduscarne.org.br/
UFLA www.ufla.br
UFTM www.uftm.edu.br/
UFV www.ufv.br
ÚNICA www.english.unica.com.br/

For any further questions, please contact NBSO Belo Horizonte.



Willem Moraal
Deputy Representative Belo Horizonte

Netherlands Business Support Office Brazil
Rua Sergipe, 1167, sala 1502 | 30130-174 | Belo Horizonte

T: +55 (0)31 - 3504 3381
M: +55 (0)31 - 99262 0113
E: wmoraal@nbsbrazil.com.br
W: www.nbsbrazil.com.br
Skype: NBSO Brazil

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Rijksdienst voor Ondernemend Nederland
Postbus 93144 2509 AC Den Haag
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