Overview of the sugarcane industry in brazil marketing essay



After United States, Brazil is the second largest ethanol consumer. The potential demand for ethanol in Brazil has increasingly been expanding. It continues to expand at a rate equivalent 3 billion litres per year. However, the extent to which this potential consumption is transformed into demand depends on the price of hydrous ethanol relative to gasoline (Rabobank International, 2012, p. 5). Over 96 % of the ethanol in Brazil is made for fuel and the remainder for industrial use. Consumption increased rapidly when the program Proálcool was introduced. With this program, the government introduced the first ethanol-fuelled cars in 1979 . (USDA, 2011b, p. 18)

Exports are the main driver for production of ethanol. For example, in 1990s trade grew from about 550, 000 litres to 6. 4 billion litres in 2010. In 2011, Brazil became a significant importer of United States Ethanol as result of weak domestic sugarcane production. In real terms, it accounted 3. 93 billion litres in 2011. Brazil exports to 80 countries around the world; the major markets are the European Union, South Korea, the United States and Japan.

Brazil is expecting growth in the ethanol industry in the coming years. It will depend on the expansion in feedstock cultivated area, the competition for land with other crops and pasture, increases in feedstock productivity and efficiency improvements in ethanol conversion productivity. Not only high demand for ethanol for transportation but also additional demand is projected from the increased use of by-products, such as bagasse as renewable energy source. Bagasse is mostly used in sugar mills to produce electricity or steam. It also has environmental and economic benefits. Projections show that bioelectricity from sugarcane bagasse could supply 20

% of Brazil's electricity needs by 2018, compared with 16 % in 2008 (USDA, 2011b, pp. 30-35).

Overview of the sugarcane industry in Brazil

Sugarcane is needed to produce biofuels and sugar. Many mills already have the capacity to produce both. Brazil is the only country that can switch 5 % to 10 % of milling capacity between sugar and ethanol production, within a year in response to changes in relative profitability between both. This flexibility enables more export availabilities and adaptation to the demand and supply of the goods. Therefore, the sugar and biofuels industry is demanding increasing amounts of primary sugarcane products, which means that the sugarcane market is complementary and continuously growing (Brazil Economic Indicators, 2012). Moreover, the industry employs more than 1. 3 million workers in different areas. The annual revenue of the sector is more than USD 50 billion.

Figure: Sugarcane producing regions in Brazil

Source: UNICA, The Sugarcane Industry - Production Map, 2011.

Figure 8 shows where sugarcane is produced in Brazil. The main production region is the South-Central area, with 90 % of production, and in the Northeast region with 10 % of the production. Brazil is the global leader in producing sugarcane followed by India, Thailand, Australia and Pakistan. Usually, farmers harvest twice per year, thus allowing the production of sugar and ethanol throughout year. It is used for the internal and external markets. In the late 1990s, liberalization came to Brazil. This means the government involvement in the industry opened into free market rules https://assignbuster.com/overview-of-the-sugarcane-industry-in-brazil-marketing-essay/

without subsidies. The industry managed the balance between demand and supply with market instruments such as future trading and developing new opportunities for sugar and ethanol through the removal of protections barriers. Standards for ethanol made the good a globally traded commodity (Sugarcane today, 2011).

Table 3 shows the prices of sugarcane according to UNICA, (2012a): the cumulative average sugarcane price for the 2011/12 crop from April to August is R\$ 0. 4942 per kilogram. Mainly it is measured in R\$ per ton, which is R\$ 70. 34 per ton for 2011/12. Compared to the previous year, the price was R\$ 57. 66 per ton. It increased to R\$17. 36 per ton for same period from April to August in 2010/11 (Brazil – Sugar semi annual, 2011).

Table : Average prices paid to growers/suppliers or sugarcane in São Paulo State

Harvest year

Sugarcane quality (Kg of TRS/ton of sugarcane)

TRS final price (R\$/kg ATR)

Sugarcane final price (R\$/t)

2007/08

146, 57

0, 2443

35, 81

2008/09

143, 25

0, 2782

39, 85

2009/10

132, 75

0, 3492

46, 36

2010/11

143, 36

0, 4022

57, 66

2011/12

140, 17

0,5018

70, 34

Source: UNICA, Average prices paid to growers/suppliers of sugarcane in São Paulo State, 2012, p. 12.

The cultivation area has significantly expanded over the previous 25 years. From 1975 to 2010, the area has grown four times the annual average for the total area harvested for all field crops. The harvested cane are rose from 4. 3 million hectares in 1990 to 9. 2 million hectares in 2010, which equals 15 % of the total harvested area; 68, 000 farms produce sugarcane in the country. However, growth has not been steady, as the expansion of the harvested area to sugarcane has responded to policies affecting both the sugar and ethanol sectors. During the first 14 years of the Proálcol regime (1975-89), sugarcane production grew 5. 6 % per year. Since 2003, after the introduction of the first flexi-fuel vehicle, sugarcane production has grown 9 % annually, which means 4 million new hectares added during the period. (UNICA, 2012a) The domestic consumption of sugarcane was 10. 4 Mt in 2010/11 harvests. However, the quality of the sugarcane is high, with 139. 2 kg ethanol per ton of sugarcane (The Economics of the Sugarcane Industry in Brazil, 2012).

According to the article The Economics of the Sugarcane Industry in Brazil (2012), sugarcane-derived products rank second in Brazilian agribusiness exports just after soy products. However, the sugarcane industry has annual revenue of more than USD 50 billion and it exports 27. 5 Mt to the following countries:

Russia (12. 5 %);

India (8. 3 %);

Iran (5. 7 %);

United Arab Emirates (5. 4%);

Saudi Arabia (4. 5 %).

According to UNICA (2012b), the forecast for the sugarcane harvest in the South-Central in 2012/13 calls for 509 Mt, which is 3. 19 % more than the previous year, at 493. 264 Mt. The data was taken with a satellite mapping of South-Central region obtained from the National Institute for Space Research, indicating an expansion of 3 % in the total area planted with sugarcane available for the 2012/13 harvest. Expanding the planted area should be a significant factor despite the projected increase in the total amount of sugarcane available for processing. Significant gains in agricultural productivity are not expected in the next harvest. The estimated agricultural productivity in the 2012/13 harvests considers factors such as crop flowering, a phenomena that happens under specific circumstances, which was a factor in productivity losses in the 2011/12 harvests. Furthermore, probabilities of frosts, pests, diseases, the extent of crop renewal, characteristics of sugarcane regions, harvest mechanization development and weather conditions are important aspects. However, it is not possible to forecast a significant increase in agricultural productivity; for this reason, the projection is working with a figure of 68. 7 tons of sugarcane per hectare, which was the same as the previous year. The projections for total recoverable sugars per ton of harvested sugarcane indicate an increase of 1. 79 % over the amount observed in the previous harvest. UNICA (2012b) expects an increase to 137. 53 kg per ton in 2011/12 and to 140 kg per ton in the 2012/13 harvests. In terms of total production, the 2012/13 harvests are projected to achieve 71. 26 Mt of total recoverable sugars per ton of https://assignbuster.com/overview-of-the-sugarcane-industry-in-brazilmarketing-essay/

harvested sugarcane, up to 5. 04 % over the previous year, when production equalled 67. 84 Mt (UNICA, 2012b, pp. 1-3).

PRESENTATION AND ANALYSIS OF THE COMPANY BBM OPERTA GMBH

BBM Operta GmbH stands for Bau, Bergbau und Montage (Engl. Mining, Construction and Erection). The company offers a broad spectrum of services and diverse activities domestically and outside Germany. Therefore, it is sometimes called the BBM Group. The diversification of services is seen in various industries, such as open-cast mining, underground mining, structural engineering, civil engineering, underground engineering and focusing on new industries such as mechanical engineering.

Company profile

BBM is a family-owned company that operates in the mining, construction and machinery sectors. The company was founded in Mülheim an der Ruhr in North Rhine-Westphalia, Germany. The region where the company is based is known as the Ruhrgebiet, which is very well known for its industry sector. It has been active in the market since 1990 under the name BBM. The group occupies promising commercial fields, for example in mining: the excavation of raw materials underground, open cast mining or civil engineering. BBM requires qualified and hardworking employees across Europe; employing more than 2, 000 across its industrial spectrum. Annual sales surpass EUR 100 million. It would not be possible to achieve that goal without the cooperation of many other companies in this area; good relationships with partners are very important to the company. In terms of size classification, BBM is a medium-sized company, likely to become a large company in the https://assignbuster.com/overview-of-the-sugarcane-industry-in-brazil-marketing-essay/

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near future (BBM Operta GmbH, 2009a; BBM Operta GmbH, 2011b; BBM

Operta GmbH, 2011c).

Figure 9 is the official logo of the company since 1990. Other companies and

partners recognize the brand in BBM's industries. Therefore, no visual

change has been planned (BBM Operta GmbH, 2009a; BBM Operta GmbH,

2011b; BBM Operta GmbH, 2011c).

Figure: BBM Operta's GmbH Logotype

Source: BBM Operta GmbH, Company's Internal Source, 2009a.

History of companies development

The history of BBM begins with the entrepreneurial commitment of the

Operta family in 1990 in the region of Ruhrgebiet in Germany. This area was

rich in coal, and industrialization was on the highest level. In the 1990s, the

German government required the closing of old coal mines in exchange to

open few high capacity coal mines. Restructuring of the region began and

the majority of people began searching for jobs outside the coal-mining

industry. Many coal-mining companies closed their businesses at that time.

However, the 1990s saw a new wave of demand for coal and the companies

could not cope with it. The Operta family saw a niche in this and entered the

market (BBM Operta GmbH, 2011c). Coal mining is the main activity, but

there are others that have been introduced. The milestones of the BBM

according to the interview are (see Appendix C):

1990: Coal mining;

1993: Construction;

1997: Opencast Mining and development of own resources facilities;

2003: General company;

2009: Construction and concrete works in Netherlands;

2011: Acquisition of the mechanical engineering company Meran;

2012/13: Increasing international commitment to Mongolia, Brazil and Australia.

Unique qualities

BBM has proved its success in various ways, some of which are distinct to the operating market conditions. For example, BBM's knowhow in coal mining is unique. No other companies in Germany have this kind of knowhow. Additionally, BBM's knowledge about technology is transferable to construction and mechanical engineering. BBM's employees are professionally educated to create added value. Their flexibility and allocation of work is remarkable. It is very easy to switch from one construction site to another and sometimes even between branches, mainly because of the large pool of workers makes allocation simpler. This pattern evolved in recent years and involves a special procedure for hiring workers. What is important to BBM's customers is the high quality they create in their services (see Appendix C). Consequently, this is why BBM has so many long-term partnerships and so much cooperation. This brings continuity in the company and growth. The success is also connected with the management. This

means that the management's operations function efficiently (BBM Operta GmbH, 2009a).

Internationalization process of the company BBM

The internationalization process differs from company to company (see Appendix C), and if the group is large, also between its own companies. BBM originally had operations only in Germany; there was no international commitment to foreign markets. It took from 1990 to 1997 to develop strategies and start operating abroad. Companies in the coal-mining industry usually start their business domestically and they are less likely to open up a company as a global start up (BBM Operta GmbH, 2011b).

In 1996, the management of BBM decided to apply for a tender in Bosnia and Herzegovina for an open-cut mine. The Bosnian and Herzegovinian government was keen to give projects to companies with German technology and the best price. In 1997, BBM won the tender and signed a contract in VareÅ; for operating in a reservoir. At this time, the strategy was to maintain operations in Germany and slowly to develop the operating mine in VareÅ;. The mine is still operating and generating profits. In addition, other smaller mines were acquired in Banovići, Breza or Kreka. Furthermore, an amphibolite quarry in Kota was acquired and proved to be successful (BBM Operta GmbH, 2009a; BBM Operta GmbH, 2011b; News, 2012)

International projects and entry modes

The first international involvement for BBM was good in terms of capturing experience for further growth. For more than a decade, the company stuck to just one project abroad. It took time to settle the affiliate for the first time

and manage the difficulties involved in operating in a developing country. In 2009, the company opened its first affiliate in the areas of the European Union, in Rotterdam. The international and future projects are (see Appendix C):

Open cut mines and Amphibolite quarry in Bosnia and Herzegovina;

Construction services in Rotterdam, Netherlands;

Open-cut mine in Tavan Tolgoi, Mongolia;

The New Sugarcane Harvester in Capivari, Brazil;

Underground mining in Queensland, Australia;

TSM (road header) machines in Turkey and China.

The projects above are listed chronologically and the last two will be realized the few next years. The open-cut project and the amphibolite quarry are described above. Construction is a broad term, involving structural, civil and underground engineering. An affiliate was opened in Rotterdam in 2009. It offers all as described above but with a specialization on industrial facilities and cooperation with industrial companies. The Dutch affiliate applied for a few tenders, but most of their applications were unsuccessful. Therefore, a new strategy was needed: cooperation with the German company RWE, an electrical distributor. This company builds all types of electrical distribution industrial facilities, e. g. power stations, powerhouses or power plants. The cooperation was a success in terms of flexibility of logistics and country of origin. In 2011, BBM finished a power plant in Groningen, Netherlands. New

industrial projects and cooperation are in sight for 2012. The entry mode can be described as a joint venture between BBM and RWE (BBM Operta GmbH, 2009a).

The last three projects (the open-cut mine in Mongolia, the New Sugarcane Harvester in Brazil, underground mining in Australia and TSM Machines in Turkey and China) are from 2011; since that time, the vision of the group has changed to moving more operations overseas. Before 2011, there was not much focus on the international markets. The restructuring of the group has also brought forward ideas for new international commitments. Other contract mining companies, such as the Australian companies Macmahon or Leighton, the Brazilian Vale, the British Rio Tinto and the American-based Peabody, have been successful with their internationalization process. Thus, new profits have been generated with the modernization of their visions in the previous decade and introductions of the internationalization processes to their businesses (BBM Operta GmbH, 2011b).

The project in Mongolia is, in terms of size, the biggest of the projects in 2011. Mongolia has huge amounts of different natural resources, especially high quality brown coal. BBM's unique knowhow offers all the resources necessary to operate on this project. The main idea of the investment is to develop the Mongolian infrastructure and to educate local employees with the knowhow from more developed countries. The deposit in the Gobi desert region is approximately 540 km from the capital Ulaanbaatar. It is going to be one of the world's largest power plants and coking coal deposits. The process began with a complex tender. The Mongolian state-owned company Erdenes had a range of international companies from Germany, Australia, https://assignbuster.com/overview-of-the-sugarcane-industry-in-brazil-

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Japan, and USA to choose from. Fortunately, BBM and the Australian company Macmahon were successful in the tender. (News, 2012) The two companies entered into a joint venture. This is also the entry strategy of the company (BBM Operta GmbH, 2011b; BBM Operta GmbH, 2009a).

Another very promising project is the New Sugarcane Harvester, which is something new to BBM, because it comes from the mechanical engineering branch. This project has potential because it is a new invention and the demand for harvesters in Brazil is enormous. The entry strategy in this case is foreign production or ownership (BBM Operta GmbH, 2011c). Underground mining is BBM's specialty. The Australian coal-mining industry is booming. The coalmines are in the area of Bowen Basin in Queensland and in Newcastle in New South Wales. The Australian companies are very well developed in operating in open-cut mines. In underground mining however, they still lack knowhow and experience, while Germany is the leader in this industry. In the Bowen Basin in the next 10 years, 17 new underground coal mines are expected to open. All these mines are estimated to operate until 2040 and 2050. The ten already operating underground mines are expected to operate until approximately 2030. To enter the market, ownership is required; a new affiliate has to be opened in Brisbane, where all coal-mining companies are stationed (BBM Operta GmbH, 2011c). The newly acquired mechanical engineering company Meran has brought a new notion to the BBM. Now the company can build and maintain their machines in their home facilities. The road header (Ger. Teilschnittmaschine - TSM) is a promising project for the near future. It is used for underground drilling in coal mines or tunnels. China and Turkey seem to be very attractive markets for BBM.

Especially, China's development in infrastructure and their need for coal have increased. Therefore, the company would use the entry mode exporting. It would partly produce the machines at home and partly in a low-income country such as China or Brazil (BBM Operta GmbH, 2011c).

The company has divided international projects into two groups: developed countries and developing countries. The management made this step after the second project in Netherlands, mainly because of the business environment. For all projects, environmental analyses were done such as PEST analysis. However, one must be on the site to get the real picture of the environment. For example, the outcome of the open cut project in Bosnia was bigger than the construction project in the Netherlands. What the company determined is that in a developing country there are more possibilities to generate higher incomes than in developed countries. However, the effort is twice as large as in developed countries. Sometimes, it also depends on the industry, because it is hard to benchmark different industries and projects. Many factors influence the internationalization process. For example, having good relations in the industry is very much worth the effort. All in all, the significance of the internationalization process at BBM is increasing. More chances to generate profits exist when acting globally (BBM Operta GmbH, 2011b; BBM Operta GmbH, 2009a).

Table: SWOT Analysis - Strengths and Weaknesses

Strengths

Weaknesses

+ Vision is modernized and adjusted to International commitment

- Little international experience

+ Incubator for top projects

- Lack of young engineers and managers

+ Experience from top projects

- Mix between experienced and young is missing in the company

+ Creates High performance

- Controlling

+ Goal-oriented

+ Flexible workforce

+ Entrance into the Mechanical Engineering industry

The SWOT analysis is a systematic situation analysis. The S stands for strengths and the W stands for weaknesses of the company. These are situations that are analysed internally in the company. For example, internal issues are finance, human resources, organization and technology. The O stands for opportunities and the T stands for threats. These situations are analysed externally. For example, external issues are competition, technology, customer expectations or policy (SWOT – Analyse Geschichte und Tipps zur Anwendung, 2012).

The SWOT analysis (see Appendix C) has shown prosperity in the international environment for the BBM. What is significant to emphasize is the high performance that the company creates in their services.

Furthermore, in that case high performance is related to high quality services. Despite having already captured international experiences, these are not enough for entering serious top projects. This can be described as a serious weakness of the BBM. Besides strengths, weaknesses are also shown on the previous page in a SWOT typical form (see Table 4):

The global economy is facing upturns and downturns but natural resources are constantly growing. Mining companies such as Rio Tinto or Vale have grown immensely in the last global economic downturn. (Rohstoffe und Schwellenländer im Anlagefokus, 2012; Latin American mining investment boom continues unabated, 2012). The situation is similar with BBM. The greatest of the opportunities is the international development. Most likely, the majority of the companies operating abroad are facing potential threats. Possible opportunities and threats for the company are listed on the next page in the SWOT format (see Table 5):

Table : SWOT Analysis - Opportunities and Threats

Opportunities

Threats

+ International development

 Small pool of experienced workforce and too little young workforce might cause expanding threats

+ The company has potential to establish their brand

- Threat of not sufficient work personnel for an international project

+ The company could expand in more niches

- Threat of not sufficient machines prepared for an international project

+ Regenerative resources (e. g. sugarcane), implementing technology from mining

- Risk minimization might cause lower profits

+ Emerging markets: BRIC

+ Mining boom in Queensland, Australia

Porter's five forces: The New Sugarcane Harvester and the sugarcane harvesting industry in Brazil

The purpose of Porter's five forces analysis in this thesis is to understand the competitive intensity and therefore the attractiveness of a sugarcane harvesting market. The concept identifies the forces that influence the business situation and understanding of the market. It aids in understanding the strength of a company in the competitive environment and potential entry. The idea is also to understand whether the product or machine is profitable. If the source of the forces is known, then the company can identify its strengths and improve its weaknesses. The five forces are: "Supplier power, buyer power, competitive rivalry, threat of substitution and threat of new entry" (Porter, 2004).

The New Sugarcane Harvester is a unique product on the sugarcane harvesting market. The product was the inspiration of coal-mining engineers working with underground drilling machines. Its development stage showed https://assignbuster.com/overview-of-the-sugarcane-industry-in-brazil-marketing-essay/

promising harvesting and crop data. Moreover, BBM emphasized the international commitment in the emerging markets with various strategies for entering the Brazilian market.

However, it is necessary to understand the meaning of the market analyses of the sugar, ethanol (biofuels) and sugarcane industries that have been done. The agricultural sector is the most important sector for economic growth and foreign exchange earnings in Brazil. Multinational companies have already recognized the potential in the agricultural sector and therefore created subsidiaries there to expand their businesses. BBM has also seen the potential of entering the Brazilian agriculture sector in the sugarcane harvesting industry. The sugar industry in Brazil is becoming one of the most important ones in the world, which has an important effect on the world sugar prices. Furthermore, Brazil is also one of the major suppliers of ethanol to the world market, which also means they have the power to influence world ethanol prices. In Brazil, the majority of engines use ethanol for fuel. These industries would supply global markets without sugarcane. The sugarcane industry is becoming increasingly important for Brazil. The mechanization of sugarcane harvesting has long been in process; however, some areas of Brazil cannot be harvested with existing machines.

Threats of substitution

According to Porter (2004), substitute products are products in other industries. A threat exists when a product's demand is affected by the price change of a substitute product. In the case of the sugarcane harvester, the direct substitutes are manual harvesting and mechanical harvesting. Three million farmers work every day, cutting sugarcane, which has a dangerous https://assignbuster.com/overview-of-the-sugarcane-industry-in-brazil-marketing-essay/

effect on their health. Therefore, the government is in the process of forbidding handwork, but delays this every year. By the end of 2014, the State of São Paulo finally wants to stop cutting by hand to prevent modern slavery. Probably, farmers will cut by hand only in the North-west of Brazil in higher grounds (Brasilien setzt alles auf Zucker, 2010). Threats exist if the government extends the law: farmers will then choose manual harvesting instead of the New Sugarcane Harvester. Mechanical harvesting is expensive but efficient. If the price of large harvesters decreases, then this could also present a threat to the New Sugarcane Harvester. The switching cost from the big machine will be five times lower, which means five New Sugarcane Harvesters (which operate like the manual harvesting but mechanically) cost the same as one big machine. One small machine will replace ten hand workers, which means (BBM Operta GmbH, 2011c):

(1)

(2)

Indirect substitutes, which could present a threat, are artificial sugar sweeteners or gas/oil. These two substitutes have an indirect impact on the New Sugarcane Harvester. The artificial sugar sweeteners (aspartame, cyclamate, saccharin, stevia, sucralose or lead acetate) can affect the sugar industry through price reduction. However, this will have an indirect impact on the sugarcane harvester industry (Artificial Sweeteners, 2012). Another indirect substitute is petrol. Biofuels have an image as environmental friendly fuels. However, if the petrol price changes, it could influence the biofuel industry, which also would have an impact on the sugarcane

harvester industry. According to Porter (2004), substitute products affect the product's price elasticity and the same holds true in the sugarcane harvester industry. If there are many substitutes on the market, demand becomes more elastic, because customers have more options to choose from.

Buying power

According to Porter (2004), the force of buying power is the impact that customers have on a manufacturing industry. The New Sugarcane Harvester will be a standardized product, which means the relationship to the producing industry is close. In the sugarcane harvester industry, powerful buyers generally dictate their terms to their suppliers. The buyers can be structured according to industry (BBM Operta GmbH, 2011c):

Agriculture;

Beverage producer;

Power plants;

Biofuel producers;

Sugar producers.

In the agriculture sector, small and medium-sized farmers are the potential buyers for the product. This group of buyers mostly demands not only low prices but also on the high performance and efficiency of product. Their loyalty is essential to firms due to the competitive nature of this industry. However, the large part of creating business is the aftersales service and maintenance (Wang, 2010, p. 7). One idea is that many small farmers buy

the harvester and use a sharing system, as is done in Germany. These societies may be the first buyers of the sugar cane harvester. These buyers are not educated or at least not well educated. They are price sensitive. However, they know the efficiency rate of harvesting, the price, the local demand and the supply.

Beverage producers using sugarcane are the next buyers in the industry. For example, in Brazil there are 30, 000 small and medium producers of Cachaça (a Brazilian spirit) and few large producers. These producers have their own fields and their own types of sugarcane, and they are usually well educated. However, they need to harvest their fields with a harvester. They use manual or mechanical harvesting, and the New Sugarcane Harvest presents a valuable option for them. If they use manual harvesting, they could be forced to stop within the government law, which would mean they have to close their business. Another option is a mechanical harvester, which is expansive. Despite being expensive, it would not bring the efficiency they need. The efficiency of beverage producers is approximately 30 % to 50 % of the mechanical sugarcane harvester for their harvesting. (BBM Operta GmbH, 2011c).

Another industry that might need to buy the product is biomass power plants. They use bagasse, a remnant of sugarcane, to create bioelectricity. These plants have the highest bioconversion efficiency of capture of sunlight though photosynthesis, and are able to fix around 55 tons of bagasse (remnants of sugarcane) per hectare of land under sugarcane on an annually renewable basis. It is a new trend in Brazil and the government supports it with subsidies (Deepchand, 2005, p. 1-5).

The last two industries are also the major buyers: sugar and the biofuels producers. These are the large players in the industry, and they buy large mechanical harvesters. For example, the company Cosan mills, cultivates, collects and processes sugarcane. The main raw material they produce is sugar and ethanol, i. e. biofuel. Cosan produces 5 % of the sugar and 4 % of the ethanol consumed globally. It has 23 plants, which occupy 600, 000 hectares of land and employs 45, 000 people. Therefore, they have a great need for efficient sugarcane harvesters. However, large harvesters are costly and they face difficulties on rough fields. Furthermore, the efficiency is good but their price and service costs are too high. (BBM Operta GmbH, 2011c; Cosan Limited, 2012).

As mentioned above, potential buyers come from different industries. In particular, the sugar and biofuel producers are very powerful. The buying power from them might be very strong, which co