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Grain sorghum for ethanol production in the state of Mato Grosso, Brazil

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Brazil (even in a time of low growth) has become the largest importer of USA ethanol. Thus, it increases the possibility of the use of sorghum grains in the corn ethanol industries that are emerging in the state of Mato Grosso. In Brazil the cost of one liter of ethanol produced with sugarcane is about US\$ 0.40 while that produced with corn is US\$ 0.50. But the planting of sugar cane is limited to a radius of less than 100 kilometers of the industries and the planting is prohibited in some regions (Amazon, Pantanal, etc ...). Corn is produced on a large scale throughout the country, enters into various agroindustrial chains and can be stored for an incomparably longer period than sugarcane. The byproducts of corn ethanol production have varied and perennial demand, mainly for feed. In years of occurrence of large corn harvests the use of corn to make ethanol is more profitable than spending for its storage. Sugarcane produces more ethanol per hectare (around 6,500 liters) than the maize potential (around 2,500 liters), but corn allows the cultivation of at least one more crop in the same area and in the same crop year. The use of sorghum grains to produce ethanol can reduce the cost difference between ethanol from sugarcane and corn ethanol because sorghum has lower production costs than maize, has a more flexible production period and also assists in crop rotation. In relation to the state of Mato Grosso (Brazil's largest grain and maize producer), any action that increases the domestic consumption of agricultural production or adds value to it, such as grain ethanol industries, has the potential to increase GDP the same.