By Brian Ellsworth

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GETULIO VARGAS Brazil (Reuters) - With its biofuels business increasingly dominated by giant corporations, Brazil is seeking to extend its biofuels sector to include farmers like Lucas Scariot, who makes around $10,000 per year from selling grain.

For the past three years, Scariot has sold soy beans at a premium over market prices to a biofuels company under a government program aimed at supporting small farms and creating jobs in the countryside while cutting fuel imports.

This year Scariot planted canola for the first time in a field he usually leaves fallow during the winter, diversifying the region's soy-dependent agricultural base and providing a new raw material for local biodiesel production.

"It's good for the farmer because it gives us additional value for our crops," said Scariot, a 22-year-old farmer and agronomy student who along with his father works 20 hectares -- equal to about nine Manhattan city blocks -- of verdant and hilly land in Brazil's southernmost state of Rio Grande do Sul.

"And now we have incentives for new crops, because people are always talking about soy, soy, soy. We can't just depend on that," said Scariot, who also raises pigs and chickens at his farm house.

The program is meant to boost production of biodiesel, which can be used in heavy vehicles like trucks, and reduce diesel imports the way the 30-year sugar cane ethanol program has cut the use of motor gasoline.

Brazil's government hopes backing small farmers will help avoid problems associated with its ethanol sector, including growing concentration in the hands of large agribusiness and notoriously bad labor conditions that have drawn global condemnation.

But efforts to use new raw materials, including untested crops such as castor bean plants, have sparked criticism that it is sinking millions of dollars into inefficient biofuels production that mostly benefits the politically well-connected.

SMALL FARMS

The program offers tax breaks to 30 participating biofuels producers and helps them get better financing arrangements. Those companies in 2009 purchased raw materials from around 51,000 small farmers, a figure slated to reach 100,000 by the end of this year.

Those benefits attracted Oleoplan, a biodiesel producer with close to 800 million reais ($450 million) in annual sales, that now buys more than a third of its raw materials from small farmers like Scariot.

"The results have been fantastic," Oleoplan's director Domingos Costella said at the company's headquarters, where a maze of machinery -- clouded in the overpowering smell of soy -- grinds up hundreds of tonnes of the crop, extracts its oils and mixes it with other chemicals to create fuel.

"This is a way for us to secure more raw material while still keeping the small farmer in mind."

The company plans to nearly double fuel production by next year in part because of the additional supply.

As part of the arrangement, Oleoplan provides technical assistance to farmers or farming cooperatives to help them boost crop yields and make more efficient use of fertilizer.

Brazil began biodiesel production in 2005 and in 2010 is expected to produce 2.4 billion liters (634 million gallons). This year it began requiring all fossil diesel to be sold with a minimum 5 percent biodiesel mix.

Biodiesel backers say hiking that rate would cut carbon emissions and reduce state oil company Petrobras's imports of diesel and distillate fuels, which last year reached 78,000 barrels per day -- more than 10 percent of its diesel output.

Petrobras has found new ways to refine vegetable-based oils together with diesel in its petroleum refineries.

While the country's ethanol program has won praise, it is also targeted by critics who say it contributes to rising food prices and makes use of quasi-slave labor. Authorities hotly deny the first accusation but have acknowledged the second.

The government last year put Cosan, the world's largest sugar and ethanol group, on a list of companies that put workers in slave-like conditions, though it was quickly removed.

"We can create better jobs than the ones in the ethanol sector, and with biodiesel those jobs can go to family farmers," said Arnoldo de Campos, coordinator of the program for the ministry of agricultural development.

WONDER CROPS?

The effort has faced furious criticism for falling into a common trap of biofuels innovation -- betting on crops with hyped-up energy promise that ultimately fall short.

The program recruited thousands of family farmers to grow castor bean plants, which sprout spiky green seeds that advocates insisted could produce large amounts of oil and grow on degraded soil with little water.

But no producer participating in the program has been able to commercially produce biofuels from the crop. Critics say this is because production costs and yields are too high to justify using it for fuel.

As a result, Brazil's largest biodiesel maker had to shut two plants in the poor northeast after months of supporting castor bean cultivation, sparking outrage among farmers.

"We warned the government about the technical problems associated with turning castor beans into biodiesel, but the politicians just wouldn't listen," said Miguel Dabdoub, a chemistry professor at the University of Sao Paulo who has helped lead the development of Brazil's biodiesel sector.

He says political leaders from Brazil's northeast took advantage of the program to promote ill-advised schemes in much the same way the U.S. agriculture industry has used political clout to push for inefficient corn-based ethanol.

But he praises efforts to incorporate small farmers into biofuels production.

Glemir Valenca, 39, says his soy crop yields over the last two years have been the highest ever thanks to a combination of good weather and technical assistance from biodiesel producers.

"We're getting more money for our crops and we're getting advice so we can produce more," he said. "It's something that's been really good for us."

($1=1.76 reais)