

Global Grain Market and Brazilian Agriculture Update

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The challenge of feeding a growing world population is not only about figures, but it is also about meeting specific needs that have led farmers from all parts of the planet to take hold of a set of technologies that will allow for an increased supply of agricultural products, as well as sustainable production settings.

With the natural resources being ever scarcer, it is necessary that crop technologies give a new qualitative leap, which will enable farmers to use such resources more sustainably, enabling production in areas that are currently considered inappropriate for farming activities due to factors that range from lack of water and irregular rainfall to the loss of good soil features.

Crop biotechnology is a major tool that, together with other farming practices, helps agriculture in various parts of the world to produce a greater quantity of grains and fibers, offering better conditions for the environment and a more rational use of inputs, particularly of agrochemicals.

The flourishing of biotechnology in the major crop producing countries is strongly linked to the rising of an institutional and legal setting that ensures safety in the research and seed production sectors. In this context, the Brazilian case for crop biotechnology adoption is exemplary for being supported by a legal landmark that offers clear direction to the many agents involved in the biotech industry, in terms of scientific evidence, and by an effective executive process, exactly due to the fact that there is a safe legal framework.

However, before reaching this degree of having safe legal grounds to work on and efficiency, Brazil has spent almost a decade in extensive discussions that, if on the one side have contributed to the setting up of a strong legal landmark in biotechnology, on the other side, these debates have heavily encumbered the Brazilian society economically, particularly regarding the farmers. The Brazilian experience can and should be analyzed by other countries that share the same tropical kind of agriculture, in order to enhance the use of financial and human resources, scarce in many of such nations.

In Brazil, as the legal and institutional landmark were consolidated, the farmers quickly adopted crop biotechnology for the soybean, corn and cotton crops, in view of the results – direct and indirect – obtained through the employment of such technologies. In terms of research, the industries rapidly offered the Brazilian farmers the best available technologies.

Consequently, in the time period comprised between 1996/97 and 2011/12, the Brazilian farmers generated economic benefits amounting to US\$ 18.8 billion, through crop biotechnology usage, the major portion of which benefit remained in the hands of the farmers, either by cost reduction or the increase in productivity. In terms of the environment, also between 1996/97 and 2011/12, the Brazilian farmers saved 27.8 billion liters of water, 231.6 million liters of diesel oil, and 22 thousand tons of active ingredients.

Given the size of the Brazilian agricultural activities, all the technologies that bring economic gains with them, and, above all, environmental ones, are quickly adopted, as a means to ensure competitive advantages that Brazil has in farming production. And the Brazilian experience of building on to the competitiveness in the farming activity can be shared with countries apt in tropical farming.

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As the exchange in technology experiences progresses between Brazil and other tropical countries, the greater the chances that the farmers from these countries increase the domestic availability of food and fibers, and, subsequently, grow with the surplus that may be exported to other regions. Thus, these countries will contribute toward the challenge of mitigating the lack of food, particularly in the African continent, where the basic conditions to duplicate the case of success of the Brazilian agriculture are present.