

In the global scenery of food and feed production, Brazil is known for its agriculture, cattle-raising and biofuels, among others. But, despite the increasing productivity, spoilage and other losses are crescent: more than 30% of our food is not eaten. Therefore, besides the shocking scale of food waste, it is the huge number of opportunities it presents for improvement that has to be the focus of the research and development activities. Agriculture has a role in food security and there is not a single solution for the problems it faces; there is a need for multiple alternatives to reach the desired solution. One of the solutions must be the establishment of accurate public policies - regarding the environment and compromising the citizens' access to their basic needs. Another solution is to have as many technological options as possible to produce in a sustainable way. Agriculture, as any other human activities, is affecting our world and its sustainability in various aspects, like: destruction of habitats, deforestation, and climate change. On the other hand Agriculture in Brazil is the pillar of our economy. So, Agriculture must be seen not as a problem, but as a solution, and some of them are already settled: we are a country with a clean energy matrix, a world leader in replacing nitrogen fertilizers by biological nitrogen fixation, and we have a rich biodiversity. To sustain a balanced environment and while increases the crop production, there is a need to integrate the conventional and biotechnological knowledge and tools. Among biotechnologies already in place (second and third generation fuels, improvement of biological nitrogen fixation, breeding programs and crop adaptation to abiotic stresses), genetically modified crops (GMO) have an important position in Brazil. Many circumstances contributed to the high adoption: a workable legal framework in place, a good seed supply chain, a strong and large scientific and technological knowledge related to biosafety and to the production of grains, cereals and food. So, knowing our biodiversity and using the most advanced biotechnologies could allow us to improve not just agriculture but also other economical and social activities. If we have to increase our production and productivity in a sustainable way, we have to use all alternatives, which include biotechnology.