Potential Economic Impact of the Peanut Genomic Project (PGP).

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The Peanut Foundation began organizing the Peanut Genomics Initiative (PGI) in 2005. The peanut industry felt that the cost of producing peanuts in the US was making US peanuts uncompetitive with other global origins and with other crops in the US. This talk will examine the cost savings for the US peanut industry through the use of Marker Assisted Selection in developing new varieties. The traits that the PGI identified in 2005 as important to the industry were disease resistance, drought tolerance, and improve nutritional benefits. All three of these areas of improvement will benefit the industry economically by reducing the cost of production, reducing water usage, and making the peanut more marketable based on improved nutrition. An additional effort on improving the sustainability of peanut has set the base levels for greenhouse gases, water usage, soil erosion, and energy consumption. This PGP will continue to help the industry show improvement in all these areas over the next several decades and make US peanuts a more sustainable crop. The PGP is an international effort as well and will also make peanuts a more sustainable crop in developing countries where there are limited resources for producing high protein crops such as peanut.