Reducing Regulatory Barriers for Genome Editing Applications

Stuart J Smyth Department of Agricultura and Resource Economics University of Saskatchewan Canada

Abstract

Regulatory burdens are a hidden cost in the innovative process, as they drive up the cost of commercialization. The added time and cost to comply with overly rigorous regulations is factored into the final price of products, meaning that adopters and consumers never have the opportunity to identify how significantly this has increased the price of the products. The pace of innovation in plant breeding is posed to increase as genome editing technologies are more commonly utilized in the development of new varieties, resulting in regulatory efficiency becoming more important than was previously the case. As changing climates impact production around the world, plant breeders need to ensure they have access to the best technologies that are capable of off-setting these impacts by providing crop varieties with enhanced tolerances. New varieties need to be developed and reach the market more rapidly than ever before to ensure that food production does not diminish as climates change.