EXECUTIVE SUMMARY

The Advisory Committee on Biotechnology and 21st Century Agriculture (AC21) is a broad-based, diverse group of agricultural experts and stakeholders charged with examining the long term implications of the use of biotechnology on agriculture and the work of the United States Department of Agriculture (USDA) and providing guidance to USDA on pressing individual issues, identified by the Office of the Secretary, related to the application of biotechnology in agriculture. The AC21 has been in existence since 2003 and since that time has on several occasions considered the complexities and implications of the interactions among different agricultural production systems—production using genetically engineered (GE) crops, identity-preserved non-GE crops, and organic crops--and the need for coexistence among them.

In November 2012 the AC21 issued a report entitled "Enhancing Coexistence: A Report of the AC21 to the Secretary of Agriculture," which offered a series of recommendations around five major interconnected themes to the Department. That report is available on the AC21 website. In the intervening years, USDA has devoted significant efforts towards implementing those recommendations for which it has appropriate legal authority. USDA also recognized that some of the recommendations in that report called for actions that the Department could not implement under existing legal authorities. In 2015 the AC21 was given a new charge as a follow-up to one of the recommendations in that report that could not be implemented. The charge was to develop an approach by which farmers could be encouraged to work with their neighbors to develop joint coexistence plans at the state or local level and to consider how the Federal government might assist in that process. This report is a response to that new charge.

AC21 members have worked in a spirit of vigorous and constructive engagement to address the charge, and recognize a number of important elements that provide context for the committee's recommendations and the tools it offers in this report:

- The agricultural landscape continues to grow more and more complex, due to the
 increasing diversity of products available, the changing domestic and international
 regulatory landscape, and the increasing demands by consumers for more
 information about the foods they consume.
- All of these trends lead to the need for increased transparency within the agricultural community, with trading partners and with consumers.
- Enabling coexistence is essential for farmers to be able to maximize their
 opportunities and take full advantage of the wide variety of technologies available to
 them. The issues around coexistence are particularly relevant for farmers growing
 identity-preserved crops (whether non-GE, organic, or other value-added crops), for
 which being able to meet contractual standards is essential for obtaining the
 associated premiums.
- It is significant that diverse stakeholders have been brought together to construct a model framework to help farmers work together to address their intersecting commercial and management concerns. Farmers have a long history of working

together to resolve issues, and there is much more that unites farmers than divides them.

In addressing its charge, the AC21 has developed a suggested model to aid localities in convening local coexistence discussions, which may aid farmers in identifying ways to work more effectively with their neighbors on coexistence issues. It provides a suggested framework for broad-ranging discussions among farmers around the production challenges they face, a suggested structure for bringing local discussions about, and a description of potential resources to support such efforts. In addition, the committee has compiled a set of factors to consider relevant to IP crops help farmers better understand relevant production factors, how they can be affected by neighbors' crops and management practices, and also provided thoughts on discussing these topics with neighboring farmers as well.

These two elements are the central contribution of this report are envisioned as stand-alone documents that should be widely disseminated wherever appropriate. Accompanying these documents are a series of recommendations to USDA on how best to support their use, through high-level endorsement, though various dissemination mechanisms, through the identification and mobilization of appropriate support resources, and through interactions with State Departments of Agriculture. The AC21 also recommends that appropriate metrics be developed to measure the impacts of their use, and that USDA explore the possibility of obtaining additional legislative authority to directly provide incentives to encourage farmers to develop joint coexistence plans.

Finally, in this report the AC21 has sought to provide additional context around the increasing complexity of agriculture, the expanding range of new products and the challenges those products may offer to farmers and the marketplace, and has reinforced earlier work by the committee on the ongoing need of farmers for high quality seed suitable for their individual production requirements.

The AC21 provides this report cognizant of the evolution of agriculture and of the importance of the use of new technology in all forms of agriculture to offer new opportunities for farmers. The AC21 thanks USDA for the opportunity to contribute and remains optimistic that farmers working together offer the best opportunity to resolve the challenges that lie ahead.