



Work of the USDA Advisory  
Committee on Biotechnology and  
21<sup>st</sup> Century Agriculture (AC21)

BRS Stakeholder Meeting  
December 5, 2012  
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# What I'll talk about



- Why this update? (Because AC21 has completed a significant report)
- Recent history of the AC21
- Secretary's charge and the efforts to address it
- Process of reaching consensus
- Contents of the report
- Probable next steps

# Restarting the AC21



- AC21 was first established in 2003 but did not meet in 2009-2010
- In January, 2011, Secretary Vilsack announced the reactivation of the AC21 as part of a package of measures designed to bolster coexistence
- On March 18, 2011, a Federal Register notice soliciting nominations for qualified members was published
- On June 30, 2011, members of the AC21 were announced

# Overall charge for the AC21



- Under its Charter, the AC21's charge is to
  - examine the long-term impacts of biotechnology on the U.S. food and agriculture system and USDA
  - provide guidance to USDA on pressing individual issues, identified by the Office of the Secretary, related to the application of biotechnology in agriculture.



# Specific charge from the Secretary for the recent AC21 report



- What types of compensation mechanisms, if any, would be appropriate to address economic losses by farmers in which the value of their crops is reduced by unintended presence of genetically engineered (GE) material(s)?
- What would be necessary to implement such mechanisms? That is, what would be the eligibility standard for a loss and what tools and triggers (e.g., tolerances, testing protocols, etc.) would be needed to verify and measure such losses and determine if claims are compensable?



# Specific charge from the Secretary for the recent AC21 report, continued



- In addition to the above, what other actions would be appropriate to bolster or facilitate coexistence among different agricultural production systems in the United States?

# Composition of the AC21



- Chair, Russell Redding, Dean of Agriculture and Environmental Sciences at Delaware Valley College and former Pennsylvania Secretary of Agriculture
- Total of 23 members including representatives from the biotechnology industry, the organic food industry, farming communities, the seed industry, food manufacturers, State government, consumer and community development groups, the medical profession, and academic researchers
- Also includes 4 non-voting *ex officio* members from other Federal agencies

# The work process



- There have been five two-day public sessions of the AC21, with the first on August 30-31, 2011 and the most recent on August 27-28, 2012
- Four working groups were established to gather information for the full AC21's consideration.
- Working groups met via conference call, a total of 19 times.

# The work process, continued



- There were a number of presentations from outside experts as well as a panel discussion on current farm practices to help inform the committee's deliberations in public sessions
- The public was given an opportunity to provide comments at each public session: about 28 public comments were provided over the course of the 5 meetings

# Rationale and input from Secretary Vilsack



- Secretary and Deputy Secretary stayed closely involved with the AC21's efforts
- Stressed the need for “middle ground”
- Noted the need for promoting the health of rural communities, including the need for supporting all types of agriculture and all types of farm-related opportunities in those communities
- Provided his perspective on the existence of conflicts around coexistence issues

# Key points of contention in discussions



- Data on actual GE-related economic losses
- Are contracts adequate to address all GE-related risks that producers of identity-preserved products may face?
- Should the AC21 report specify what may be a “reasonable contractual requirement” for unintended GE presence in an identity-preserved (non-GE or organic) product?
- Who should bear the costs of addressing any losses?
- Discussions were DIFFICULT BUT CIVIL.

# Developing and finalizing a report



- When the AC21 was reactivated, process for report development was modified to facilitate timely production of reports with recommendations, and to seek, but not require, consensus
- Reports are drafted by Chair and Executive Secretary, and strive to incorporate the points of view of all members
- Process has allowed for careful negotiation of committee recommendations



# Developing and finalizing a report, continued



- When the final report was completed, members were given the choice of whether or not to join in consensus, and, either way, whether to provide additional comments which would be appended to the report
- Members' decisions required consideration of the package as a whole and a willingness to compromise



# Final result



- A carefully crafted package of recommendations provided enabled a very diverse group of individuals to support the report: 22 out of 23 members joined in consensus
- 18 members provided explanatory comments

# Contents of the report



- Working definition for coexistence
  - “...*the concurrent cultivation of conventional, organic, IP, and genetically engineered (GE) crops consistent with underlying consumer preferences and farmer choices.*”
- The bulk of the report organized around four themes
  - For each theme, there is a description of general background and the nature of the AC21’s discussions on the topic, including areas of agreement and disagreement
  - Each theme is followed by one or two recommendations



# Themes



- Compensation mechanisms
- Stewardship and outreach
- Research
- Seed Quality



# Research recommendations



- Quantification of actual economic losses incurred by farmers as a result of unintended presence, and occurrences of these losses over time and in different geographies.
- Assessment of the efficacy of existing on-farm and post-farm unintended presence mitigation techniques on a crop-by-crop basis and development of improved techniques as needed.
- Assessment of the efficacy of existing gene flow mitigation techniques in seed propagation/multiplication or production on a crop-by-crop basis and development of improved techniques as needed.
- Development of genetic tools to limit unwanted gene flow to sexually compatible plants.
- Gathering and aggregating, on an ongoing basis, data from seed companies on unintended GE presence in commercial non-GE seed supplies intended for IP uses.

# Compensation mechanism recommendations



- Evaluate data gathered regarding actual economic losses by farmers who grow crops for identity-preserved markets.
- If Secretary determines it to be warranted based on the data, establish a compensation mechanism based on a crop insurance model that would be available for all IP producers
- Do research to develop actuarial parameters for such a program
- Create eligibility and verification requirements



# Compensation mechanism recommendations, continued



- **If such a program is to be implemented, test out via a pilot**
- **Also create incentives for the development of joint coexistence plans between IP producers and their neighbors**
- **Develop standards for such plans and a system for third-party evaluation of them**
- **Incentives might be based on crop insurance premium reductions (conventional or “IP-specific”) or other mechanisms**
- **Revisit adequacy of existing crop insurance programs to address needs of non-commodity producers**

# Stewardship and outreach recommendations



- **USDA should spearhead and fund a broad-based, comprehensive education and outreach initiative to strengthen understanding of coexistence between diverse agricultural production systems.**
- **The broad collaborative effort should highlight the need for good on-farm production practices, strategies for neighborly farmer-to-farmer collaboration, the value of private marketing contracts, and the risks and responsibilities associated with meeting private contractual arrangements for IP production.**

# Stewardship and outreach recommendations, continued



- **USDA should work with a broad group of agricultural stakeholders to develop a package of specific mechanisms that: (1) foster good crop stewardship and mitigate potential economic risks derived from unintended gene flow between crop varieties and unintended presence in general; and (2) promote and incentivize farmer adoption of appropriate stewardship practices.**
  - **Includes development of toolkits**
  - **Encourages involvement of seed providers**
  - **Supports local efforts to develop planting zones**



# Seed quality recommendations



- **USDA should task the National Genetic Resources Advisory Council to develop a plan in conjunction with the seed industry for ongoing evaluation of the pool of commercially available non-GE and organic seed varieties and identification of market needs for producers serving GE-sensitive markets.**
- **USDA should work with seed suppliers to ensure that a diverse and high quality commercial seed supply exists that meets the needs of all farmers, including those supplying products to GE-sensitive customers.**



# Seed quality recommendations, continued



- **USDA should also recommit to maintaining the original genetic identity of accessions in its germplasm banks.**
- **USDA should continue its support for the development of an “Organic Seed Finder” database and develop a similar database for non-GE seeds suitable for IP use.**

# USDA response



- **Report presented to Secretary Vilsack on November 19, 2012 by AC21 Chair with several other AC21 members in attendance**
- **The Secretary thanked the Chair and committee for having accomplished a very difficult task, and indicated that the report was important and would be responded to.**
- **Appointed a senior advisor to lead development of a response plan.**
- **Indicated that actions in response could be expected in 2013.**