Food Traceability
Policy Development May 2011

Issue:
Full traceability of food from the farm gate to the retail level has become standard in some countries, and U.S. retailers and consumers increasingly express interest in developing similar systems in this country. Traceability offers both potential opportunities and challenges for U.S. farmers and ranchers. Full traceability could help minimize both the direct and indirect costs of food recalls and improve consumer perceptions of food safety. Traceability could also become a useful marketing tool, helping farmers and ranchers capture more of the value of retail products with defined attributes targeting particular market segments. It is also becoming more of an issue in export markets, particularly those countries with their own traceability programs. On the other hand, traceability would also likely entail additional management challenges and costs for producers, processors, and retailers, including potentially higher legal liabilities reaching back to the farm level.

Background:
Oversight of food safety in the U.S. is currently shared by the Food and Drug Administration (FDA) and the USDA Food Safety and Inspection Service (FSIS). Current traceability standards at both agencies are based on the 2002 Bioterrorism Act, which requires that firms involved in food production and distribution maintain records that allow traceability one step forward and one step back. Significantly, the legislation specifically exempted farms from the “one up, one back” regulations. The trace back capability is meant to help identify the source of any contamination of a food product while the trace forward capability permits potentially contaminated products to be identified and removed from distribution channels. In practice, tracing back or forward is a fairly difficult and often imprecise process because of the high level of complexity of processing and distribution operations, as well as the sheer volume of product that quickly moves through the system. More importantly, while firms are required to keep records that permit one step back tracing of their inputs and one step forward tracing of products, they are not required to keep records that associate a particular input (either individually or by, for example, lot number) with a particular output.

Conceptually, full food traceability would provide the ability to track a retail food product back through the supply chain all the way to the farm of origin of the product's raw ingredients. For most food products, there is a practical limit to the degree of precision that is feasible with respect to traceability. For example, it will not generally be feasible to trace a gallon of milk from the retail level to a particular farm. The gallon of milk sold at retail most likely includes milk from many different farms that was blended at the processing plant. In such cases, identifiers such as lot or batch numbers can help to identify the multiple farms which were the source of raw ingredients from which a suspect retail item was produced. Even this level of traceability can present challenges which are not trivial. Consider how many farms may be involved in supplying wheat to a flour mill capable of producing multiple tons of flour – corresponding ultimately to multiple thousands of loaves of bread – every hour. Clearly, the food traceability system involves important, and sometimes difficult, tradeoffs between the benefits of more complete information and the costs of collecting and managing that information.

Most discussions of food traceability ultimately focus on fresh products – meat, poultry, dairy, fresh fruit and vegetable products – since these have the most potential for food-borne pathogens. With respect to these types of products, U.S. traceability standards generally lag behind those of other countries. For example, the European Union (EU), Australia, Japan, South Korea, Brazil, and Canada have developed meat traceability systems to permit the tracing of retail meat products back to the farm (or farms) of origin. These systems exist not just (or even primarily) to facilitate trace back/trace forward in response to a food safety event, but also to
permit the rapid identification and location of suspect live animals in the event of a disease outbreak. In areas where bovine spongiform encephalopathy (BSE) and/or Foot and Mouth Disease (FMD) have been prevalent and persistent problems, developing this animal disease management and eradication function has been a more pressing issue than in the United States.

Looking ahead, market pressure to develop food traceability systems will continue to increase. In the livestock sector, the most intense pressure will most likely come from foreign, rather than domestic, customers. In many major foreign markets (notably Japan and South Korea), consumers are increasingly accustomed to having access to information on the farm-level origin of retail meat products. The U.S. is currently less equipped to provide that information than just about any other major meat exporter. As the share of production going to export grows (already over 20 percent for pork and almost 10 percent for beef), the potential negative consequences of this competitive disadvantage will become greater.

While improving food traceability will clearly increase costs, there are offsetting benefits beyond just maintaining market share with foreign consumers. Traceability could reduce the market impacts of food safety events by allowing FDA and FSIS to narrow the scope of food recalls and increase the confidence of consumers in the efficacy of recalls, potentially reducing the negative impacts on demand from such events. Moreover, traceability could enhance marketing options for producers, giving consumers greater confidence in products marketed for specific attributes (e.g., organic, hormone-free, locally-grown, etc.). Consumer willingness to pay for such attributes is notoriously difficult to quantify, but recent growth in the market for such products has been impressive.

As the market for traceable food products grows, the incentives for such products to be voluntarily provided increases, perhaps ultimately rendering the debate over mandatory programs irrelevant. On the other hand, there may be advantages to a standardized traceability system that would be difficult or impossible to achieve with what would probably be a patchwork of voluntary systems. Particularly for purposes of disease control/eradication, a standardized, centralized system for achieving traceability could hold significant advantages over incomplete voluntary systems.

**Questions:**

What level of food traceability can we live with and support?

How can traceability be made to more directly benefit farmers and ranchers? What role would the government play in such a system?

Are on-farm practice audits necessary for traceability?

Is consistency across commodities important for traceability? How could we ensure consistency of any traceability program across retailers and state lines?

How would individuals whose products are combined with other producers’ products that don’t provide traceability be protected?

To what extent is our current lack of traceability reducing our share of world export markets?

**Farm Bureau Policy:**

339 - Food Quality and Safety

Lines 141-143: We support limiting food origin traceability to no further than the farm of origin. Traceability should not extend to the field level or input level. Any system should be non intrusive and economically feasible.

309 Livestock Identification

Lines 13-15: We support the establishment and implementation of a voluntary national animal identification system capable of providing support for animal disease control and eradication.