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Farm Foundation Traceability Meeting  
Kansas City, MO  
January 23, 2003

Convened at 1:05 p.m. at the Kansas City Airport Hilton in the Osage A room.  
Attendees: Walt Armbruster, President Farm Foundation (FF); Steve Halbrook, VP FF; Susan Harlander BIORational Consultants, Ron Olson (General Mills); Brett Meyers, National Association of Wheat Growers; Leon Corzine, National Corn Growers Association board member; Greg Wandrey, Pioneer Director of Product Stewardship (biotech corn); Angela Baysinger, Farmland, Director of On-Farm Food Safety; David Miller, Director Commodity Services, Iowa Farm Bureau; Aziz Elbehri, Ag Economist USDA, ERS; Peter Goldsmith, Professor Agribusiness Management, University of Illinois; Warren Preston, Chief Economist ---, Seed Program at USDA, AMS; David Shipman, Deputy Administrator, USDA, GIPSA; Rick Siemer, President, Siemer Milling Company; Ed Greene, Restaurant Service Inc. (Burger King exclusive supply chain management); Glen Weaver, ConAgra (technical services and quality assurance); Ruth Kimmelshue, Cargill, Director Center of Expertise for Quality Assurance; Barry Krisoff, Economist USDA, ERS; Jon Caspers, President-elect National Pork Producers Council; Eluned Jones, Associate Professor and Director Master of Agribusiness program, Texas A&M University; Jill E. Carter, Carter Consulting; and DeeVon Bailey, Professor, Utah State University.

Opened with introduction from Eluned Jones, Texas A&M. Stated that reason for being here was partly as a result of Farm Foundation's (FF) Roundtable who expressed interest in forming a group to address the issue of traceability. Eluned indicated that the organizers wanted the group to take ownership of what is discussed. She stated that the organizers and facilitator (Jones, Bailey, and Carter) were there to facilitate but not to lead the discussion. Persons invited to this meeting were invited based on their position and interest. The academic sector was not heavily represented on purpose so that the discussion would not be focused on theory but more on "real" world problem, and the group would address nexus of public and private sector involvement. Others wanted to attend, but for various reasons could not be at this particular meeting. Eluned discussed the agenda and also discussed the survey that had been sent out to potential participants. Requested participants to fill out questionnaire provided in binder handed out to participants. Eluned introduced herself and provided a brief background. Introduced Walt Armbruster.

Walt Armbruster gave a brief overview of the mission of FF and the reason for their interest in this topic. Explained how FF has worked with land-grant system to try to influence policy and economic issues relating to the rural economy. Introduced Steve Halbrook as the VP of FF. Told about the FF web page. Explained that FF wants to take a broad view on the issue of traceability and not necessarily take a position on particular

issues. He indicated the FF is interested because their board identified traceability as one of the top issues facing the food industry. They wanted to bring an array of actors together to address the issue. Hence, this is the reason for the meeting. Walt cited a recent *Wall Street Journal* article on DNA tracking of tainted meat. They, Farm Foundation, want to explore long-term impacts. They hope that this meeting will provide an arena to provide fact-based information to all market participants about potential changes that will be made as a result of traceable food systems. Walt explained that FF's initial intention was to hold several workshops ending with some report or a major conference of some type addressing the issue of traceability. Walt indicated that the activities of the group should benefit private sector decision makers and ultimately consumers.

DeeVon Bailey explained that three years ago, he had MBA student studying in UK and also working with Smithfield Foods...European issues as fore-mover in the area of traceability and assurance (TA) in food system. He explained the concept of TA as being a global issue. He explained that no members of the press were involved in the meeting and that minutes and discussion content would be distributed only to the members of the roundtable. He explained that the group should view both short run and long run aspects of the traceability issue in their discussions. He then introduced the professional moderator for the meeting, Jill E. Carter.

Jill Carter: Stated that her job was the people side of things and not the content side. She explained that Eluned Jones would be the recorder and DeeVon Bailey would be taking notes. She explained the following ground rules. 1. All members are expected to participate. 2. Speak as individuals with knowledge and experience not necessarily your organizations/company's viewpoint. 3. Discussions in the room remain confidential outside the room. 4. Follow allocated times for discussions, goal development, and other agenda items. 5. All members commit to mutual respect for one another. 6. Emphasize discussion rather than formal presentation. 7. Stay focused on the issue being discussed. 8. No side discussion. 9. Don't interrupt. 10. Discussions should not debate semantics/definitions rather they should emphasize issues and commonly understood meanings.

Jill initiated a brainstorming section by asking for issues from the group by going around the table and received the following comments.

- 1 Is the agric. system keeping ahead or following the consumer?
- 2 How do things like organic and other standards interact with traceability and assurance (TA)?
- 3 Do we have traceability systems in place in case their error was an intentional or unintentional contamination of the food supply?
- 4 Balance of testing and tracing- liability and legal transfer.
- 5 Educations across the supply chain – identify and rectify gaps.
- 6 Liability and education issues. Customer education about what is and can be done on the farm – cost sharing (willingness to pay).

- 7 Balance of thinking about new product concepts – recognition (demonstrating and communication) of value by company and customers (communicating all through the marketing chain to consumers).
- 8 Recognition of consumer as supply chain driver.
- 9 Education (independent producers can cause problems and it is very difficult to trace back). We need education and also technology to get back to the producer. We need to glean from all different sectors what about we can utilize.
- 10 Disconnect between consumer perception, technical reality, and government regulation. How they interact as we move into a whole new realm of products. Perhaps zero tolerance at the consumer level but not zero tolerance at others. Perceptions of risk and what is technically possible.
- 11 Perceived vs. real risk.
- 12 Clear in case of meat products why moving toward TA, but in case of the grain system, who is driving the need for TA (doesn't seem like the consumer is driving this)
- 13 Explore non-governmental methods for achieving a safe food system.
- 14 Discuss the role of government vs. the private sector in TA in both a voluntary and regulatory setting. How do you draw the line between market facilitation and taking over the function of business?
- 15 As the market adopts TA systems that are consumer driven-how do you stop the tidal wave from becoming government regulation? Facilitation of markets.
- 16 Market/consumer driven demand for TA – Will this drive domestic and trade policy? Should it?
- 17 Grain processing has been built to blend. As a practical matter, how do you apply TA to a system that is physically built to blend. How do protocols of TA info systems/infra structure that co-mingles?
- 18 How do we deliver to consumer what they want even when it may not be reasonable? (PETA, etc.) What potential regulatory issues would cause suppliers to be unable to have a constant supply or make food less affordable?
- 19 Integration of information systems – mock recalls and requirements – 18.5 Implication for continuous supply of food to consumers
- 20 Finding the balance between standard setting and process setting – Some believe process should be prescribed, some say what standard should I achieve and I will decide how best to achieve it. (performance, product integrity, assure traceability). Certifying the process or certifying the product (consumer wants product certified).
- 21 TA – how do you develop systems that facilitate trade rather than hinder it. Who pays for all of this? Who determines threshold standards/protocols (performance/assurance certifying process or/vs. product).
- 22 Location of responsibility
- 23 The direction we take in this country- how does it affect our competitiveness with other countries?
- 24 Who pays for traceability?
- 25 U. S. competitive position and the issue of TA.
- 26 Regulation in U. S. vs. competing/trading countries
- 27 Can dichotomous systems be reconciled?

- 28 Problem of defining hybrid market structures and will they need oversight. Hybrid markets – where is oversight needed? “ (Myriad of different market structures). Where is the economic feasibility of oversight?
- 29 How much of TA emergence is making current infrastructure and oversight obsolete? How is what is happening in private supply chain development making obsolete the existing structure to facilitate trade?
- 30 How is value identified through TA shared across the supply chain (participants)? As systems are put into place, a continuous system may be producing a value greater than the sum of the parts. How is the value shared along the system?  
VVC
- 31 Is TA value related to economies of size?
- 32 Are consumers willing to pay for more information about their food? Who will pay for it? Need more understanding of the economics related to TA.
- 33 Traceability affects the structure of the supply chain - cuts out smaller suppliers. Pure traceability drives the structure. Traceability and testing beg the issue of tolerance levels.
- 34 Tolerances? What should be the tolerance levels? What level? What is feasible both technically and economically?
- 35 How can two systems be combined? 50% of U. S. wheat is exported.
- 36 Creditable systems. In reality traceability on my farm better than some instances in Europe.
- 37 New technologies (GPS) and how it can be used to document TA.
- 38 How to bring a resolution to the lack of approval of biotech products. What will break the stalemate (WTO, or what)?
- 39 Electronic data basing. How can so much information be organized to be creditable and auditable? It needs to be easily accessible?
- 40 Open or closed architecture of the database. Independent traceability systems being developed and how this makes systems closed in terms of being able to do exchanges. How do we handle the human error associated with these systems (e.g., human error associated with electronic ear tag reading)?
- 41 Statistical inference on use of TA technology (human and computerized)
- 42 What are the cost components related to TA in grain? Who incurs costs?
- 43 Independent systems don't necessarily facilitate communication along the supply chain without appearing to be colluding. Evolution of consensus within and across supply chain (communication).
- 44 History of agriculture is one of a common language and close relationship between government and standards, downstream driven by gaining value through differentiation beyond that. This is much more about proprietary change and advantage. Moving from substantial equivalence to an era of substantial difference.
- 45 What should be public information and what should be private information in TA systems?
- 46 Motivating factor for TA is to manage risk. Does it really manage risk? Can test all you want but if tested at a foreign port still have liability.
- 47 Private vs. public information – how will this constrain evolution – who has ‘right to know’ the information?

- 48 Questions of risk management. Does TA really reduce or manage risk and minimize liability exposure?
- 49 Don't want one-size-fits-all system.
- 50 What level of traceability and what adds value? Is it important to know the tree that the carton holding a food product came from? How far should TA extend into non-food ingredients? How to contain the application?
- 51 Cultural (paradigm) shift from producing commodities to where everyone part of a food marketing chain.
- 52 Is there a system where at one level all is standardized and above that what is customized? How can this process (system) be optimized? Set standard at one level and let players decide how to achieve it. Can we optimize/find threshold of where TA has relevance (customer will pay or value can be defined)?
- 53 Economics of oversight vs. technical feasibility and level of risk.
- 54 What does consumer really want and how much is the consumer willing to pay?
- 55 How do we compete in the EU where more TA exists? Regulations in EU are aspirations and in the U. S. are minimum standards. Global competition drivers?
- 56 Political drivers
- 57 Most of food industry getting good at trace back and trace forward (food manufacturing system – TA being done at one step forward and one step backward in the chain). Can UPC code system be extended? Every farmer could have an individual UPC code (perhaps role of government to assign these). Need a global identifier one which everyone in industry can agree. Recall feasibility.
- 58 Definition/extent of TA and level of knowledge/documentation at each level from retail to farm.
- 59 What is traceability to the consumer? What information are we trying to traceability? Are there are types of information that needs to be communicated. There are elements of traceability that would provide information with respect to management and marketing.
- 60 Needs to be more than idle curiosity.
- 61 Stats/protocols need to be developed – scientific, risk assessment, consumer perception. What is technically achievable, what is economically achievable?
- 62 Locations of resistance to TA.
- 63 Realization of value within the chain as motivation for TA. Internal “custom” for TA within supply chain. Efficiency gains (profitability).
- 64 Appropriate resources for supporting TA.
- 65 What is possible within a system that is subject to environmental factors?
- 66 U. S. no longer a closed system. What is the 3<sup>rd</sup> World's ability to handle these systems? We are not a closed system.

Following this brainstorming session a half hour break commenced. During the break, the organizers developed suggestions for general categories in which to place the 67 comments recorded during the opening session. Participants were asked to place their own comments into one or more of these categories. The suggested categories were accepted by the group and included the following:

Values/cost/customer

Public/Private Responsibility  
Risk/Liability  
Technical/Technology  
Structure of the Industry  
Education/Communication  
Global Issues

After assigning the 67 comments to different categories, the group decided to fold the two categories, Education/Communication and Global Issues, into other categories. The group placed the 67 comments into the following categories:

**Value/cost/customers**

1. Is ag system keeping ahead or following the consumer
2. Liability and education issues. Customer education about what is and can be done on the farm – cost sharing (willingness to pay).
3. Balance of thinking about new product concepts – recognition (demonstrating and communication) of value by company and customers (communicating all through the marketing chain to consumers)
4. Recognition of consumer as supply chain driver
5. Similarities vs. differences between meats and grain sectors: What are the drivers?
6. Clear in case of meat products why moving toward TA, but in case of the grain system, who is driving the need for TA (doesn't seem like the consumer is driving this)
7. How do we deliver to consumer what they want even when it may not be reasonable? (PETA, etc.) What potential regulatory issues would cause suppliers to be unable to have a constant supply or make food less affordable?
8. Who pays for TA?
9. U. S. competitive position
10. Can dichotomous systems be reconciled?
11. Are consumers willing to pay for more information about their food? Who will pay for it? Need more understanding of the economics
12. What are the cost components related to TA in grain? Who incurs costs?
13. What level of traceability and what adds value? Is it important to know the tree that the carton holding a food product came from? How far should TA extend into non-food ingredients? How to contain the application.
14. Cultural (paradigm) shift from producing commodities to where everyone part of a food marketing chain.
15. Economics of oversight vs. technical feasibility and level of risk
16. What does consumer really want and how much is the consumer willing to pay?
17. Most of food industry getting good at trace back and trace forward (food manufacturing system). Can some of that be used to track back into grain. Can UPC code system be extended? Every farmer could have a individual UPC code (perhaps role of government to assign these). Need a global identifier one which everyone in industry can agree. Recall feasibility.
18. What is traceability to the consumer? What information are we trying to traceability? Are there are types of information that needs to be communicated. There are

elements of traceability that would provide information to management and marketing.

19. Needs to know vs. idle curiosity.
20. Locations of resistance to TA.
21. Realization of value within the chain as motivation for TA. Internal “custom” for TA within supply chain. Efficiency gains (profitability).
22. Problem of defining hybrid market structures that will need oversight.
23. What is possible within a system that is subject to environment factors?
24. Disconnect between consumer perception, technical reality, and government policy.
25. Don’t want one size fits all.

### **Public/Private Responsibility:**

1. How do things like organic and other standards interact with traceability and assurance (TA)
2. Disconnect between consumer perception, technical reality, and government regulation. How they interact as we move into a whole new realm of products. Perhaps zero tolerance at the consumer level but not zero tolerance at others. Perceptions of risk and what is technically possible.
3. Explore non-governmental methods for achieving a safe food system.
4. Discuss the role of government vs. the private sector in TA in both a voluntary and regulatory setting. How do you draw the line between market facilitation and taking over the function of business?
5. As the market adopts TA systems that are consumer driven, how do you stop the tidal wave from becoming government regulation? Facilitation of markets.
6. Mkt/consumer driven demand for TA – Will this drive domestic and trade policy? Should it?
7. Finding the balance between standard setting and process setting – Some believe process should be prescribed, some say what standard should I achieve and I will decide how best to achieve it. (Performance, product integrity, assure traceability). Certifying the process or certifying the product (consumer wants product certified).
8. TA – how do you develop systems that facilitate trade rather than hinder it? Who pays for all of this? Who determines threshold standards/protocols (performance/assurance certifying process or/vs. product)
9. Location of responsibility
10. The direction we take in this country- how does it affect our competitiveness with other countries?
11. Regulation in U. S. vs. competing/trading countries
12. Problem of defining hybrid market structures and will they need oversight. Hybrid markets – where is oversight needed? “ (Myriad of different market structures). Where is the economic feasibility of oversight?
13. How much of TA emergence is making current infrastructure and oversight obsolete? How is what is happening in private supply chain development making obsolete the exiting structure to facilitate trade. .
14. What should be public information and what should be private information

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15. Private vs public information – how will this constrain evolution – who has ‘right to know’ the information?
16. Cultural (paradigm) shift from producing commodities to where everyone part of a food marketing chain.
17. Is there a system where at one level all is standardized and above that what is customized? How can this be optimized? Set standard at one level and let players decide how to achieve it. Can we optimize/find threshold of where TA has relevance (customer will pay or value can be defined)
18. Political drivers
19. Most of food industry getting good at trace back and trace forward (food manufacturing system). Can some of that be used to track back into grain. Can UPC code system be extended? Every farmer could have a individual UPC code (perhaps role of government to assign these). Need a global identifier one which everyone in industry can agree. Recall feasibility.
20. Don’t want one size fits all.
21. Definition/extent of TA and level of knowledge/documentation at each level from retail to farm.
22. Appropriate resources for supporting TA.
23. Paradigm shift in understanding extent of application of TA.

#### **Risk/Liability:**

1. Balance of testing and tracing- liability and legal transfer
2. Perceived vs. real risk
3. Creditable systems. In reality, traceability on my farm is better than some instances in Europe.
3. How to bring a resolution to the lack of approval of biotech products. What will break the stalemate (WTO, or what).
4. Motivating factor for TA is to manage risk. Does it really manage risk? Can test all you want but if tested at a foreign port still have liability.
5. Questions of risk management. Does TA really reduce or manage risk and minimize liability exposure?
6. Most of food industry getting good at traceback and trace forward (food manufacturing system). Can some of that be used to track back into grain. Can UPC code system be extended? Every farmer could have an individual UPC code (perhaps role of government to assign these). Need a global identifier one which everyone in industry can agree. Recall feasibility.

#### **Technical Issues/Technology:**

1. Do we have traceability systems in place in case there was an intentional or unintentional contamination of the food supply
2. Balance of tracing and testing. Within system – of all factors that diminish value (technology to communicate factors)
3. Within system – of all factors that diminish value (technology to communicate factors)
4. Integration of information

5. Tolerances? What should be tolerances? What level? What is feasible, technically and economically?
6. How can two systems be combined? 50% of U. S. wheat is exported.
7. New technologies (GPS) and how they can document TA.
8. Education (independent producers can cause problems and it is very difficult to trace back). We need education and also technology to get back to the producer. We need to glean from all different sectors what we can utilize.
9. Electronic data basing. How can so much information be organized to be creditable and auditable? It needs to be easily accessible.
10. Open or closed architecture of the database. Independent traceability systems being developed and how this makes systems closed in terms of being able to do exchanges. How do we handle the human error associated with these systems (like electronic ear tag reading)
11. Definition/extent TA and level of knowledge/documentation at each level from retail to farm.
12. Statistical inference on use of TA technology (human and computerized)
13. Need a global identifier one which everyone in industry can agree. Recall feasibility.
14. Standards/protocols development – scientific, risk assessment, consumer perception.
15. What is possible within a system that is subject to environmental factors?

### **Structure of the Industry:**

1. Education across the supply chain – identify and rectify gaps
2. Grain processing has been built to blend. As a practical matter, how do you apply TA to a system that is physically built to blend. How do protocols of TA infra systems/infra structure than co-mingles.
3. Integration of information systems – mock recalls and requirements – 18.5 Implication for continuous supply of food to consumers
4. How is value identified through TA shared across the supply chain (participants)? As systems are put into place, a continuous system may be producing a value greater than the sum of the parts. How is the value shared along the system. VVC
5. Is TA value related to economies of size?
6. Traceability affects the structure of the supply chain - cuts out smaller suppliers. Pure traceability drives the structure. Traceability and testing beg the issue of tolerance.
7. Tolerances? What should have tolerances? What level? What's feasibly technical and economical?
8. How will commodity, TA structures, and IP work together in some market?
9. New technologies including GPS, not just biotech.
10. How to bring a resolution to the lack of approval of biotech products. What will break the stalemate (WTO, or what).
11. Electronic data basing. How can so much information be organized to be creditable and auditable? It needs to be easily accessible.
12. Open or closed architecture of the database. Independent traceability systems being developed and how this makes systems closed in terms of being able to do exchanges. How do we handle the human error associated with these systems (like electronic ear tag reading)

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13. Independent systems don't necessarily facilitate communication along the supply chain without appearing to be colluding. Evolution of consensus within and across supply chain (communication)
14. Most of food industry getting good at trace back and trace forward (food manufacturing system). Can some of that be used to track back into grain. Can UPC code system be extended? Every farmer could have a individual UPC code (perhaps role of government to assign these). Need a global identifier one which everyone in industry can agree. Recall feasibility.
15. Coordination/communication.
16. U. S. no longer a closed system. What is the 3<sup>rd</sup> World's ability to handle these systems? We are not a closed system.

Following placing the comments into these categories, the participants were asked to list items in each category they believed were something the Roundtable could work on during the next year (not prioritized). It was decided that some of the items in each category could be distilled further. Small groups were assigned at random (in most cases) to do this synthesis. Criteria for this were 1) what issues are most pressing and 2) was comment something on which this Roundtable could have an impact? The small groups met for approximately 30 minutes to do this synthesis. Jill Carter made the assignment that we should think during the evening about what this group could do that had not ever been done by any other group. She made the point that our decisions the next day would be about what we could be doing and that participants should not feel pressure about getting something done immediately. One participant indicated that value could be added by the group if it did nothing more than providing priorities. Carter indicated to participants that this Roundtable would not do the actual work, but would provide guidance to what should be done by others such as Jones and Bailey.

The synthesized comments provided by each group were the following:

#### Group 1 Report: Value/Costs/Customer (Priorities)

1. Customer (end user) signals, costs, value, and trade  
Signals - who should interpret and give signals about what customers want. Who does this best? Who is leading this movement customers, govt., etc. Should be led by who is willing to forego cash to lead the system, i.e., willingness to pay. Perhaps TA is only important for some inputs.
2. Costs – how is cost allocated in the chain? Who are how is the value proposition determined? Costs could be very different at different points in the chain. Notion of value is different for different players in the marketing chain.
3. Value – How is value determined? How does this differ depending on buyer or seller?
4. Trade – how to deal with differences in TA protocols in different marketing systems?

#### Group 2: Public/Private Responsibility

1. Regulation and oversight
  - At what level should there be regulation and/or oversight? voluntary (market driven) or mandatory (government)
  - Is there a market failure or public vs private good?
2. What form of oversight?  
Should regulation be private or government?  
Certification vs. seal of approval
3. Who does the regulation and oversight?
4. Who pays?
5. Price discovery?
6. Who absorbs costs?
7. Harmonizing government requirement

#### Group 3: Risk Liability

1. Who assumes liability?
2. Does TA actually reduce risk/liability? (Don't believe in many cases that it does)
3. What is the risk if you don't have a TA system? (Potential loss of customers – some companies may not want traceability to avoid be tracked)
4. What can be done to add creditability to TA?

#### Group 4: Technology

1. Consumers need to know. They may be satisfied by testing, where tracing becomes impossible or too costly.
2. Structure
  - a. One step forward vs. one step back vs. one size fits all (monitoring information one step ahead and one step behind within the marketing chain)?
  - b. Need to recognize independent roles.
3. Architecture of system
  - c. Open or closed?
  - d. What information passes through?
  - e. Tracking technology – GPS, UPC codes, nanotechnology – is there some system that can grid entire chain?
4. Tolerance levels, thresholds, action levels
  - a. Role of market vs. regulatory
  - b. Who will set them
  - c. Industry standards
  - d. Tolerances for regulatory/non-reg approved
  - e. What's possible, safe cost of keeping out?

#### Group 5: Structure of the Industry

1. Information collection and sharing – must have infrastructure

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2. Transference of TA in a system into co-mingling infrastructure – two determinants of TA – one driven by safety and liability (larger firms more able to do this) but another dimension is that smaller firms could specialize. Safety and liability largest issue. More safety issues with meat.
3. More product differentiation achieved through more coordination and communication
4. TA is driven by safety and liability.

Carter then asked participants to fill out an evaluation for today's session. She indicated to participants that nothing concrete needed by noon of the next day but, that they should be thinking of whether or not there was something the Roundtable would like to pursue or do to further the progress of what they have done today.

Jones asked participants to examine whether or not there was uniqueness in this group that might provide a distinctive synergy that can provide a unique perspective that couldn't be gained elsewhere. She also asked participants to consider whether this contribution would take the form of a short paper, educational program, letter or memo suggesting research, or funding for education programs, etc.

The session adjourned at 5:30 p.m.

January 24, 2003

Carter called the group to order at 8:15 a.m. She gave a report of the synthesis she, Jones, and Bailey had done the night before. She pointed out a set of the written, synthesized points done by the five groups near the end of the previous day's session that were hanging on the wall. She went through the timetable for the day's meeting and asked if the group would accept the agenda. The day's agenda was accepted.

Jones spent some time explaining that some of the terms used by economists and some used by business people can be different. She used the example of "market structure" where economists view this traditionally as size and number of firms, product differentiation, etc. Business people using the term "market structure" are speaking about the types of customers in a market. One participant indicated that he used the term "structure" to mean the actual bricks and mortar relating to a business.

Carter spoke about outcomes for the meeting. She indicated that feedback from the previous day's evaluation forms was that some participants wanted more information about outcomes expected from the group. She indicated that this was done on purpose since the organizers were not really certain about what the group would believe were the major issues and they did not wish to impose their own set of issues on the group before the group had first developed their own set of issues and potential outcomes. She indicated that we would suggest possible outcomes, but that the group would make decisions about what outcomes they wanted to pursue.

Carter asked if there were comments about the synthesized comments formulated at the end of yesterday's meeting. In response to a question, Jones explained more about

possible outcomes, such as a “white” paper and how this could be accomplished. The group offered several comments on various issues relating to potential outcomes. The discussion was principally related to how the Roundtable could have an impact. After a fair amount of discussion, it was decided that the group would proceed by discussing some of the current things being done by the industries represented at the table and then proceed by looking at possible outcomes that could be produced by the Roundtable. The group seemed to support the formulation of a white paper as an outcome. A government representative indicated that they could not participate in statements about policy positions, but that they could help with gap analysis.

An industry participant indicated that since systems are being developed to gain proprietary advantage, that sharing about systems would likely only be in generalities. Another industry participant indicated that rather than discussing the five areas separately in individual groups, that issues cut across each of the areas and should be addressed in total rather than by category. Another participant indicated that rather than indicating specific policies, the Roundtable could help to elevate issues to where they will receive more attention. Another participant indicated that the most important outcome was simply that the FF has formed the Roundtable and that his business could communicate that a forum exists that interest groups and others can be directed to regarding issues relating to TA (need a printed description about the Roundtable so could be handed to people when questions arise). This suggested that a need existed for public documentation that the Roundtable exists.

An industry representative indicated that even more concrete actions could be taken. For example, when they are seeking industry-consensus standards the Roundtable could help or provide some direction to that process. Another industry representative indicated that there is competition among groups and universities to provide this type of information. There is a need to elevate this group’s effort so that there isn’t an expectation for representatives to attend and contribute to different groups and efforts. Jones indicated that a general press release has been drafted and will shortly be released. Participants indicated that one of the compelling reasons for participating in the group was the fact that it was a non-profit organization that was the sponsor (Farm Foundation), there was an open agenda, and the weight of the people who were participating.

It was suggested that the group describe who is the constituency (end users) and what is being done at each segment of the marketing chain.

A few comments were made about this such as the following:

Starts with the genetics (seed and animal)

Production (crop and animal) At this point, it was suggested by Jones that participants examine the flow chart in the folder and make changes and additions. The group examined the flowchart and indicated that the chart needed to be extended to the consumer. More discussion occurred. One participant indicated their company has one market for “post-harvest, chemical-free, corn” that has mechanisms in place, including audits, to track back even to the seed corn. This corn is fed to layers in a Pacific Rim country (they receive a significant premium for this). A statement was that “The determining factor is what the customer will pay for.” There were other discussions

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about grain contracts that are available and specific companies using traceability in the grain industry. There was also a comment about using GPS in these systems. There was a comment about certifying producers that would allow some co-mingling for producers that are not large enough to meet certain contract or buyer requirements.

A comment was made that smaller producers might actually benefit from this system since they can specialize by meeting specific requirements from some buyers. Seed companies are following strict traceability protocols with bar coding systems. Flour millers are implementing traceability for many different reasons (they know where grain was purchased and where product is going). However, we are not set up to do end-to-end traceability. There would be enormous cost involved. We can control our part of the marketing chain but not that of our buyers. We can control one step back or one step forward, but the entire system is difficult. Traceability is possible fairly easily to a location or a bin (band) but more difficult to the individual farms. Easier to deal with fewer people for a number of different reasons.

On the meat side there are a number of things that are possible with traceability. We are tracking one set of characteristics at farm (grading characteristics once the animals are slaughtered) but once animals meet the hurdle (say are eligible for slaughter) then they pass into processing where a different set of characteristics is tracked. We have forward tracking capability but not much backward. Do we need backward tracking in a system when homogeneous pools have been established? An example was given of how in one instance a problem occurred with a meat product and traceability was able to track back to the farms where the problem occurred. The business was then able to educate producers about the problem and what was needed to correct it. As a result, a Japanese customer was pleased with the effort to solve this problem.

One participant indicated that an even more dramatic potential problem that illustrates potential value of TA is the StarLink episode. Other participants indicated that processes have improved so that this should be less of a potential problem in the future. One government representative indicated that the global approval process still poses significant potential problems even though we have made significant changes since StarLink. A representative indicated that farmers lost potentially billions of dollars as a result of StarLink. As a result, protocols have become more stringent at the farm level. Elevators know where corn comes from and keep track of it.

Jones: A unique contribution of the group is to bring people together with common knowledge and then elevate the discussion. A discussion of the gaps that exist and how they can be addressed is a method for doing this.

Gaps:

One participant indicated that there are intentional and unintentional gaps as a result of proprietary concerns.

Understanding the role or potential role of government.

Gaps between value-added systems and systems for other purposes (especially food safety).

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Gaps exist for being able to identify GMO crops that might end up being fed to livestock

Being able to track to meat cuts (technological gaps)

Integrity gap – willingness to share accurate information

Understanding how far we need to go with traceability (is a one step forward one step back (in the marketing chain) what is needed?)

Definition gap exists

Technological (not always compatible systems) gaps exist in cattle industry for transferring information between segments of the marketing chain

What public good gaps exist? Agro-terrorism, public safety, etc. How will this play out if an event occurs?

Mechanical gaps exist at the mill level to be able to assure identity preservation.

Labeling claims represent gaps because there isn't always standardization (role for government?)

Knowledge gap about what the drivers are for the issue of traceability – food safety, consumer demand, supply chain management (consumer doesn't care how product made but perhaps the company does?)

Gap in the supply chain (record keeping inadequate). This is tied to incentives that exist.

Huge education gaps exist. Example, what is the EU proposing and what is possible to be done. Education about what the system can do and what is actually being done (say in Europe).

Limits of liability are much lower in the EU than in the US

Reluctance on the part of producers – producers need to be educated about why or why they should participate

Gap in what is expected and what can be done (tolerances)

Gap in big and small firms and their ability to implement TA systems (if really important should be able to be done by the entire chain).

Direct marketing farmer to consumer needs no documentation of traceability (not usually). The introduction of intermediaries injects this potential need.

Need to gear potential severity of an outcome with what is required or possible. What is the risk and benefit and does it match the costs.

Gaps in representation on Roundtable, e.g., consumer groups

Consumer understanding gap exists. Are consumers willing to pay? Do they understand what it would cost to provide TA?

Gap between what the consumer wants on a label and what can be put on a label (e.g., can't put GMO-free on a label)

Gaps in understanding about who is going to shoulder the risk of TA systems.

Some investigation about how the system prepares itself for shocks to the system (e.g., StarLink) In the EU, the system has been developed mostly to trace back for BSE. How would other types of unexpected events affect this?

Gap in the economic analysis of the costs and benefits of TA systems. This is the broad sense, not from value-added supply chain approach. (Corn growers have put together a cost of IP at the farm gate).

Most analysis is on a segment-by-segment basis. This needs to be done on a system basis.

Example, if price a car by the cost of its parts it is much more expensive that if

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priced as a whole.. Correlation vs. causality is also an issue. Just because E.coli exists in an animal at the farm level doesn't necessarily translate into contamination in final products.

Need to be careful about the cost issue since academic studies usually look at “average” costs. Farmers can self select and be part of a system or not. Premiums can be adjusted to entice farmers. This is more accurate than average cost studies. Costs vary by location, farm, etc. If costs, are reported they should be reported in ranges.

Jones and Bailey were assigned to draft a white paper based on these comments. This will first be provided to the group in the form of an outline from which participants can provide comments. Carter asked if there was anything that had been missed? One participant asked if there was a way to find out about other groups that are doing similar activities to the Roundtable. Jones indicated there will be cooperative efforts between us, the group at the University of Illinois, and the ERS effort. One participant indicated that input could be provided when the outline is provided to the participants that would support or emphasize a particular point. It was indicated that the Pew Foundation has an effort in this area and should be contacted. Some representatives of the Pew Foundation will be attending the ERS Traceability conference next week. They should be included in this group. FSIS should likely also be included. Another comment indicated that the paper should indicate that TA is provided for different purposes (a little for some management purposes to full (not just TA but prevention) for, say agro-terrorism).

There will not be a definite date set for a next meeting. Jones and Bailey will put out the minutes and then the outline for the white paper. A website with password access will be established for communication. Email communications will indicate when new postings are made to the web site. Farm Foundation is looking at 6-12 month involvement. Follow up meetings will be decided through consensus after examining what information is provided and established in the white paper. Participants were asked about others that should be included in the group. One participant indicated APHIS (John Weimers), FSIS and FDA. We may have telephone conference calls. Basically we will make efficient use of time.

Discussion about the press release took place. Steve Halbrook indicated that release is made in very general terms. No companies will be mentioned but rather just general segments of the industry.

Thanks were expressed to participants for their efforts. Also to Jill Carter. Explanation of ERS meeting being held in Washington DC on Monday the 26<sup>th</sup> was given by Aziz Elbehri.

Group adjourned at noon.