Introduction to Field to Market
ISCC Regional Stakeholder Meeting

Chisara Ehiemere
December 5, 2017
Field to Market: The Alliance for Sustainable Agriculture focuses on defining, measuring and advancing the sustainability of food, fiber and fuel production
How We Define Sustainable Agriculture

Meeting the needs of the present while improving the ability of future generations to meet their own needs by:

• Increasing productivity to meet future food and fiber demands
• Improving the environment
• Improving human health
• Improving the social and economic well-being of agricultural communities
Guiding Principles

- Engage the full supply chain including producers
- Focus on commodities crops with unique supply chains and traceability issues
- Science based
- Outcomes based
- Technology neutral
- Commitment to individual grower data privacy
- Emphasis on continuous improvement
- Measure broad-scale trends and field-scale outcomes
Deliverables: What We Are Doing

- **National indicators report:** Documentation of overall trends
- **Grower Fieldprints:** Individual opportunities for continuous improvement
- **Supply chain projects:** Direct engagement in continuous improvement

**Public data and models:** Collaboratively developed
Outcomes based
National Indicators Report
The Sustainability Story of U.S. Agriculture
National Indicators Report: Objectives

- **Analyze trends** over time for environmental and socioeconomic sustainability indicators
- **Establish a baseline** against which to measure future improvements
- **Create enabling conditions** for an informed, multi-stakeholder discussion of sustainability
- Advance an **outcomes-based, science-based** approach
- **Provide broad-scale context** for more local efforts
The Fieldprint® Calculator
Measuring Field Level Outcomes and Identifying Opportunities for Improvement
What is the Fieldprint Calculator?

• An online education tool for row crop farmers that indexes their agronomics and practices to a Fieldprint

• Helps growers evaluate their farming decisions and compare their sustainability performance

  – **In the areas of:**
    • Land use
    • Soil conservation
    • Soil carbon
    • Water use
    • Energy use
    • Greenhouse gas emissions
    • Water Quality
    • Biodiversity (in development)

  – **Comparing against:**
    • Their own fields
    • Their own performance over time
    • County, state and national averages
Measuring at the Field Level

**Management**

**2012 Corn**

- **Tillage System**: No-Till

- **Management System**

  - Corn grain; NT, anhyd, z16

  - Apr 20 - Fert. applic. anhyd knife 30 in
  - Apr 20 - Sprayer, pre-emergence
  - Apr 20 - Fert applic. surface broadcast
  - May 1 - Planter, double disk opnr w/fluted coulter
  - Jul 1 - Sprayer, fungicide
  - Oct 20 - Harvest, killing crop 50pct standing stubble

- **Crop Residue Removed**: 
  - Yes
  - No

- **N Credit Taken from Cover Crop**: 0 lb/ac

- **Vegetative Cover**

  - **Low = Less than 30% vegetative cover**
  - **Medium = 31 to 80% vegetative cover**
  - **High = More than 80% vegetative cover**

<table>
<thead>
<tr>
<th>Month</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>February</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© 2016 Field to Market. All Rights Reserved.
The Fieldprint values shown for a selected crop on the slider bars are plotted on the above Spidergram. The Spidergram axes are relative indices representing your resource use or impact per unit of output in each of the five resource areas. Lower values closer to the center indicate a lower impact on each resource.

The values on the slider bars are relative indices, where lower values (0) indicate greater efficiency and/or lower impacts on the particular resource area and higher values (100) indicate lower efficiency and/or higher impacts on the particular resource area.
Fieldprint® Projects
Supply Chain Partnerships for Continuous Improvement
Fieldprint Projects

• Demonstrate use of calculator on the ground to test utility at the grower level and through the supply chain

• Engage farmers across geographies, crops, and supply chains

• Sponsors include grower organizations, supply chain companies, conservation organizations, and NRCS
Supply Chain Partnerships in 20+ States

- Corn
- Cotton
- Potatoes
- Soy
- Rice
- Wheat

© 2016 Field to Market. All Rights Reserved.
Supply Chain Sustainability Program
Scaling Impact
The Future: FTM’s three basic functions

1. Benchmarking and data collection
2. Identifying opportunities for continuous improvement by leveraging existing tools/programs/initiatives
3. Aggregating information and enabling supply chain sustainability claims
Three tiers of verified claims

• **Participation:** Member in good standing
• **Measurement:** Project level engagement with 1-4 years of data
• **Impact:** Quantifying improvement over time with minimum 5 years of data
Harmonizing Metrics and Approaches

• Signed a MOU with The Sustainability Consortium in 2014 to harmonize measurement and reporting of sustainable agriculture
  – Field to Market’s benchmarks and metrics can be utilized to report against TSC’s key performance indicators on commodity crop production
  – Commitment to encourage data platform interoperability and collaborate on innovation projects

• Signed a MOU with the Innovation Center for U.S. Dairy in 2015 to align metrics to assess sustainability of dairy feed

• Collaborating with aligned efforts to harmonize metrics and approaches
  – National Cattlemen's Beef Association
  – Roundtable on Sustainable Biomaterials
  – SAI Platform
  – Stewardship Index for Specialty Crops
  – U.S. Roundtable for Sustainable Beef
Helping Farmers Measure Sustainability Performance Using Their Preferred Technology Provider
Thank You
For More Information
Visit www.fieldtomarket.org
Contact cehiemere@fieldtomarket.org