Sustainability
Agenda

- What are some of American Crystal Sugar customers needs?

- What does it mean to be Sustainable?

- The direction ACSC is going
General Mills has committed to sustainably sourcing 100% of their priority ingredients by 2020.
• Responsibly sourcing their 10 priority ingredients by 2020:
  – rice, wheat, corn, potatoes, sugar beets, sugar cane, cocoa, palm oil, fruits (including strawberry and raisins/sultanas) and vanilla
What does “Sustainable” Mean

- Continuous improvement
- Producing more with less

Must be:
- Economically Sustainable
- Environmentally Sustainable
- Sociologically Sustainable
• General Mills and Kellogg’s are looking for sellers who will help them meet their goals.

✓ We are one of their suppliers
✓ We want to keep them as a buyer
Ken Powell, CEO General Mills
BSR Conference Fall 2016

Why we should be sustainable

BCR Conference 2:28-5:08
General Mills needs your help

BCR Conference 9:52-10:11
What does this mean for American Crystal Sugar Company

- We need to share production information with our customers
- We need to build trust with the consumer
American Crystal Sugar Company

Facts:

1. Root yield per acre increased by 17% 2008 – 2015
2. Sugar yield per acre increased by 19.1% (mostly tonnage increase)
3. Decreased the amount of production land being used by 20%
4. Improved our soil health: cover crops, less tillage, maintaining surface residue
5. Improved soil conservation, 24.1% reduction in soil loss (reduction in soil tillage)
American Crystal Sugar Company

Facts:

6. Reduced Diesel consumption by 76.3% due to fewer cultivation and herbicide applications
   a) Reduced 2 passes of cultivation with Genetically Engineered
   b) Reduced 1 pass of herbicide spraying with Genetically Engineered and in many cases 2 to 3 fewer applications are made

7. 29% reduction in energy used per acre
   a) Equivalent 11,211 gallons of diesel per year
   b) 18.7% reduction in Greenhouse Gas
   c) Reduction of 44.8 lb of CO2 eq/A
✔ We have a good story

✔ We need to share our story with the consumer

✔ We need to relay our production practices in a form conducive to customer needs
• American Crystal Sugar Company and some shareholders are working in collaboration with United Sugar Corporation, General Mills and Syngenta.
Why Syngenta

- Syngenta has developed and provides the program to measure sustainability metrics applied to sugarbeet production
- This program is approved by Field to Market for sustainability measurement
- General Mills has worked closely with Syngenta on developing and applying this project
Data Collection and Analysis

• Syngenta AgriEdge Excelsior program
  – Land.db farm management software

• This approach sets the growers up for long term continuous improvement and brings them a greater value in farm record keeping and analysis

• Commitment to data privacy
Field To Market
Metrics for Analysis

Field To Market is a nonprofit organization

- Developed a Fieldprint Platform to measure growers advances in sustainable agriculture
- Uses NRCS information for the production practices metrics
Sustainability and Land.db program

https://videos.sproutvideo.com/playlist/ee9ed9be1360/0dd6ea2dee594bb0?type=sd&layout=1&selectedcolor=000000&highlightcolor=f0eded&textcolor=55565a&dividercolor=f0eded#
• We need your help, we are looking for volunteers to help with collection of grower production practices
• Free use of the AgriEdge Land.db program, training and support
• The financial record keeping portion of the program is optional if you want to use it for your own management of your farm operation. The financial information will not be reviewed nor used by American Crystal Sugar Company
ACSC Sustainability Team
along with Joe Hastings, Tyler Grove and Brian Ingulsrud

Put together a report on Conventional vs GMO sugarbeets
The report ended up on the desk of Ken Powell, CEO General Mills
Ken Powell statement on Genetic Modified Technology

BCR Conference 35:33-37:08
"We need highly productive, very intense agriculture"

"... believes Genetic Modified Technology will play a role..."

"need to protect the supply demand while protecting habitat diversity"
Contact your Agriculturist if you are interested in helping

Sign up sheet is available: We need your name, email and telephone number

Macie O’Shaughnessy and/or Jason Huus (Syngenta) will be contacting you with support and installation of the Land.db program
THANK YOU

• Thank you to the growers that are already participating in the program
• Your efforts are greatly appreciated