Structure

- Landscape analysis: needs in ag/science space
- ASA strategic plan: Enhancing connections to the CCA program
- Open discussion
Agricultural Supply Chain Landscape
On-Farm Sustainability

Cover Crop Acreage by Year and Region

Cover crop acreage has tripled since 2011

No-till Prevalence by Farm Size

Since 2005, no-till prevalence has increased amongst small and large farms

Producers spent $257 million on seed for cover crops in 2017

In 2017, 61% of cover crops were planted on farms of over 1,000 acres

Studies are finding that conservation helps farmland be more resilient to variable weather. In 2019, fields where reduced tillage and cover crops had been used drained more quickly and allowed for normal planting. Many non-conservation acres remained too wet and remained unplanted.

KEY TAKEAWAYS

1) Soil health matters – Resilience, Water quality, GHG opportunity
2) The adoption of cover crops is increasing at a rapid rate
3) The prevalence of reduced and no-till has been variable, but it may increase given recent societal emphasis on carbon sequestration
4) Cover crops and reduced tillage provide long-run agronomic benefits, but producers often face short-term hurdles (economics, knowledge) that keep them from realizing the full benefits

Strategic Directions: Corporate Social Responsibility (CSR) Reporting

86% of S&P 500 companies published sustainability or CSR reports in 2018

84% of S&P 500 total valuations are intangible assets not captured on a balance sheet. This has resulted in shareholders using ESG ratings to assess and manage risk associated with their investments

47% of US consumers say they would pay more for a sustainable product

As of 2017, about 25% of dollars under professional investment management in the US were invested according to SRI strategies. This equates to about $12 trillion dollars

WHAT DO CSR REPORTS CONTAIN?
- Usually focused around the three pillars of corporate sustainability: economic, environmental, and social
- Key issues related to ACSESS include: GHG footprint, Water quality & quantity
- Many reports align with the United Nation’s 2030 Sustainable Development Goals
- CSR reporting is often integrated with a company’s annual report

This emphasis on social and environmental responsibility has been driving trends towards farm-level transparency. Technology facilitating traceability, reporting, and verification from farm to table is becoming more widely used.

CSR reporting has increased greatly over the past decade. The prevalence in sustainable, responsible, and impact investing (SRI) is a major driver of this increase

Percent of S&P 500 companies publishing CSR reports, by year

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KEY TAKEAWAYS
1) The vast majority of publicly traded companies publish CSR reports – this was not the case just a decade ago
2) This trend is driven by shareholder risk management expectations due to unprecedented levels of intangible assets regarding stock valuations
3) The need for corporate-level sustainability metrics is driving a trend towards increased farm-level sustainability and product traceability
Climate Change/GHGs

Agriculture is a noteworthy contributor of GHGs, including carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). The ag industry released approximately 650 million MT of CO₂ in 2017. However, ag also holds potential to reverse climate change, through carbon sequestration and regenerative farming practices.

Background

Policy

11 states have carbon pricing policies (i.e. cap and trade)

Global Carbon Emission from Fossil Fuels

Since 1990, global carbon emissions have risen nearly 20x

- The National Sustainable Agriculture Coalition (NASC) is a key advocate in climate policy formulation, and has recently released a position paper to identify priorities for federal policy and USDA programming
- California is a significant agricultural player and is widely known for its progressive climate policy, including goals for economy-wide carbon neutrality by 2045 and agriculture-focused carbon sequestration

Key Takeaways

1) Agriculture is a noteworthy contributor to GHG emissions, but the industry also has the potential to reverse this effect through sustainable farming practices
2) Compared to many developed countries, the US has lagged in the implementation of federal climate policy. The most progressive US policies are implemented at the state level on the east and west coasts

Strategic Direction: Investments and Alliances Findings

INVESTMENTS

- Investments in agri-food tech have increased at a 37% CAGR since 2012 and are expected to continue to rise.
- Major market include U.S., China, and India
- Relevant sectors include biotech, midstream technologies, farm management software, sensing & IoT

Alliances

- Most major partnerships are at least 50% composed of industry members, giving ASA/ICCA the opportunity to be a leading scientific voice
- Major partnerships span the international, national, and regional domains, providing opportunity for engagement at various levels
ASA Strategic Plan
Strength in ICCA

**13,500+ certified professionals**

Estimated Reach—**over 220 million acres**

**Specialties:**
- Certified Professional Agronomist (CPAg)
- Sustainability (SSp)
- 4R Nutrient Management (4R NMS)
- Resistance Management (RMS)
- Precision Agriculture (PASp)

**Top Products/Sectors**
- Fertilizers
- Crop Protection
- Seed
New Strategic Direction

Diversity, Equity and Inclusion

External engagement

Publications
ASA Strategies

• **Knowledge to action**: Translate research into practice, driving solutions to relevant societal issues.

• **Engagement, inclusion, and diversity**: Promote and enhance diversity and inclusion throughout ASA.

• **Enhanced business model**: Innovative business model to serve the members, the profession and ensure financial stability of ASA.

• **Grand Challenge**: Drive soil – plant – water – environment systems solutions for healthy people on a healthy planet in a rapidly changing climate.

ASA objectives

• **Scientific translation and impact**: Increase both the number and types (categories) of research translational products produced by ASA by 25% each year for use by practicing agronomists to promote sustainable production of food, feed, fiber, and fuel.

• **Reach, diversity and inclusion**: Increase the diversity of society membership and leadership, our interactions with closely aligned professional and scientific societies, and our interactions with external organizations that promote sustainable production of food, feed, fiber, and fuel.

• **Business development and growth**: Explore new and enhanced revenue sources leading to pilot investment in 2 new revenue positive-growth areas.

• **Enhance member engagement and leadership**: Launch a career-long, cross-functional leadership development program for transdisciplinary teams.
ASA Objective: Scientific translation and impact

- Listen and learn
- Education enhancements
- Field training schools
- Specialty workshops/conferences
- Other business tools?
Scientific translation and impact

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- Market analysis on agronomist needs
- Review/package existing content
- CCA/membership engagement, fundraising, partnership development
- Launch member/CCA field training events

SAC-virtual
SAC-hybrid planning
SAC-virtual
SAC-virtual

Education webinars: New LMS - Increasing webinars, topics covered, delivery tools

Additional specialty conferences - opportunistic

Development: Member portal
ASA Objective: Business development and growth

• External engagement council
• Business development team
• Ecosystem service market: technical assistance, verification, training
• Data services and translational services
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**Business development and growth**

**Establish business development team:** contract support and development - market analysis, membership engagement

- Virtual annual meeting - marketing
- Planning and execution: 2021 hybrid annual meeting
- Review/package existing content

**Education to non-CCAs:** Scoping and marketing analysis, fund raising

- Data services scoping: internal task force
- Strategic alliances - connections to NAL, Int'l research centers, repositories, industry
- Launch pilot: data service offerings

**ES Tech Assist:** Planning and program development

- Launch - ESMC focused TA and verification - quarterly meetings and assessment points

**Partnership development - strategic alliances for Ecosystem services - Grand Challenge**

- Publications advertising, Sponsorship of journals and targeted content: ACS321
- Preparation for launch: development
- Launch