

# Energizing Agricultural Transformation

What we Heard - Next Steps

Alberta SouthWest

Regional Economic Development Alliance

**Natalie Gibson** 

INNOVISIONS

— & ASSOCIATES -





## Top Trends in Agriculture





#### **Three Phases**



#### **INVENTORY**

- Who is growing what? Categories
- Producer capacity?
- Challenges & Opportunities?
- Exporting?

## MAKE A TACTICAL PLAN

- · What we heard
- Gaps
- What else can be done to support Agri-business
- Create a tactical plan

#### CAPACITY-BUILDING

- Workshops to build awareness, train and/or matchmaker sessions
- Ask an Expert opportunities
- Resource Identification





#### **Phase 1: Inventory**

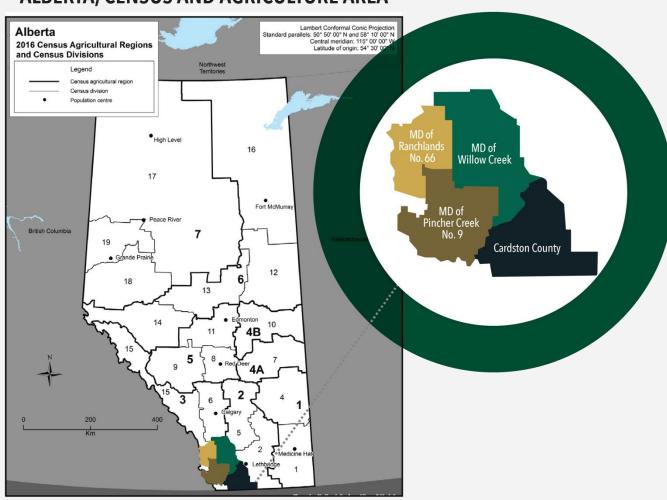


- Who is growing what?
- Categories and volume of production, range of food processors, etc.
- What capacity are they at?
- Do they wish to expand?
- Exporting? Importing?
- Where are the stated challenges and opportunities in the region?
- Are succession plans in place?
- Who has a future focused on innovation?
- Who needs/wants assistance?



#### **Ag Inventory**

#### ALBERTA, CENSUS AND AGRICULTURE AREA





#### **Supply-Chain**

From field to fork – a snapshot of the Alberta SouthWest's Ag Supply-Chain







## North American Industrial Classification System (NAICS)

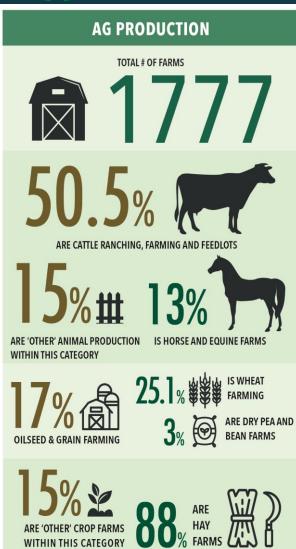
| NAICS                   | Digits |
|-------------------------|--------|
| Agriculture             | 11     |
| Oilseed & Grain Farming | 1111   |
| Dry Pea & Bean Farming  | 111130 |
|                         |        |
|                         |        |
|                         |        |
|                         |        |







## **Ag Inventory**







#### **Albert SouthWest Ag Supply Chain**

**Custom Dairy** Western Wear **Native Grass** Livestock Mineral Manure Manage Horse Meat Pet Food Greenhouse Processing Manufacturer Farm Consortium Formula & Retailers Grazing Systems Wedding Venue (Exporter) Supplement (Exporter) Vegetable & Herb Cattle Ranching Commodity & Specialty Crops (peas, beans & **Organic Beef Overhead Door** Water Processing Greenhouses & Farming **Producers** Manufacturer Tomato, Basil, Flowers) Ag Transportation Honey Production intercropping) & Custom Food Processing & Cheese **Natural Organic** Cannabis -Combining Manufacturer Co-packing Fertilizer Auction Value-chain (goat & yak) (ready meals & Mart snack food) **Dairy Processors** Herb Farming Agri-tourism Honey (International/exporters) Ranches (Garlic) Production Saddle Maker & Retreats Wholesale Meats Equine Livestock Chiropractor Equipment Horse & Equine Manufacturer Nutraceutical **Producers** (Exporter) (Rhodiola) **Animal Disease Research Institute** FARMERS, Farm & Feed Supply (Canadian Food Inspection Agency) RANCHERS, Research conducted in a variety of fields Ag Equipment & **PRODUCERS &** including **Grain Brokers Machinery Dealers** · Plant viral diseases (Exporter) **PROCESSORS**  Food allergens & toxins **Fuel & Supply** Soy Bean Mill Companies Pesticides in food Feed & Fertilizers **Custom Operators** Oilseed Mill (P3) **EDUCATION & SUPPLY** (providing harvesting Lethbridge Research & spraying & fertilizing CHAIN RESEARCH **Development Centre** services) Seed cleaning, (Agriculture & Agri-food Canada) milling, & trading The Centre conducts research In 7 sector **Transportation &** strategies: **Hauling Companies** 

#### Area Resources (Government & Non-Profit)

- · Local Economic Development Organization
- Local AG Service Boards

Agricultural Financing

- Community Futures
- · Regional Government Ag Field men; Provincial Alberta Ag, All and FOTOT Fordered Amiliant and Amil Ford County (AAFC)

Seed Packaging

and Trading

#### & Programs

Major post secondary institutions with programs & research in a variety of agriculture disciplines.

· University of Lethbridge

#### **Academic Institutions**

#### Cereals

Argo-ecosystem Resilience

- · Dairy/Pork/Poultry & other livestock
- Forages & Beef
- Horticulture
- Oilseeds
- Pulses

#### Alberta Ag & Forestry

R&D Extension, Research Scientists

## **Albert SouthWest Ag Supply Chain**

FARMERS, RANCHERS, PRODUCERS & PROCESSORS

Custom Dairy Farm Consortium

**Water Processing** 

Western Wear Retailers

Overhead Door Manufacturer

Natural Organic Fertilizer

Herb Farming (Garlic) **Native Grass Grazing** 

Vegetable & Herb Greenhouses (Tomato, Basil, Flowers)

Cannabis - Value-chain

**Equine Chiropractor** 

Nutraceutical (Rhodiola)

Manure Manage Systems

> Honey Production

Livestock Mineral Formula & Supplement (Exporter)

Dairy Processors (International/exporters)

Wholesale Meats

Horse & Equine Producers

Greenhouse Wedding Venue

Agri-tourism Ranches & Retreats

Food Processing & Co-packing (ready meals & snack food)

Saddle Maker

Livestock Equipment Manufacturer (Exporter)

Cattle Ranching & Farming

Organic Beef Producers

**Auction Mart** 

Cheese Manufacturer (goat & yak)

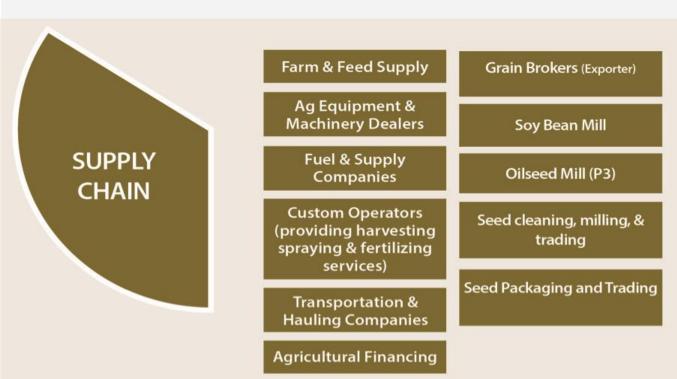
Horse Meat Processing
(Exporter)

Commodity & Specialty Crops (peas, beans & intercropping)

Pet Food Manufacturer

Ag Transportation & Custom Combining

## **Albert SouthWest Ag Supply Chain**



#### **Area Resources** (Government & Non-Profit)

- Local Economic Development Organization
- · Local AG Service Boards
- Community Futures
- Regional Government Ag Field men; Provincial Alberta Ag, Alberta EDT&T;
   Federal Agriculture and Agri-Food Canada (AAFC), Trade Commission Services (TCS) & Consulates
- AFSC



## **Ag Inventory**



TOTAL GROSS FARM RECEIPTS IS

~\$8.76 (2016)

OF THE FARMS REPORTED

39.6% = \$49,999 or less

42.9% = 50,000 to 499,999

12.6% = 500,000 and over

4.3% =  $^{\$}2$  million or more

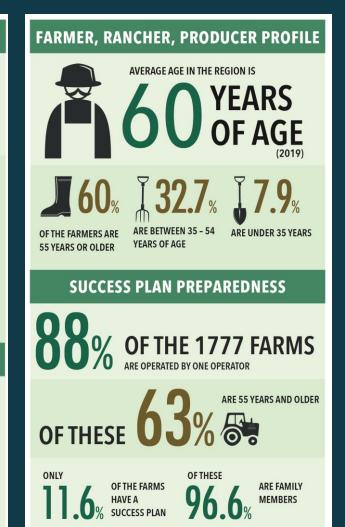
#### **TENURE AND SIZE OF FARMS**

17773.2

MILLION ACRES UNDER AGRICULTURE PRODUCTION

T 53%







#### Workforce

#### **AVERAGE HOUSE HOLD INCOME (2019)**

VS.



**ALBERTA SOUTHWEST** 

\$89,079.30

IS ROUGHLY



**ALBERTA** 

\$125,000



## **Average Income**

#### **AVERAGE HOUSE HOLD INCOME (2019)**

VS.



**ALBERTA SOUTHWEST** 

\$89,079.30

IS ROUGHLY

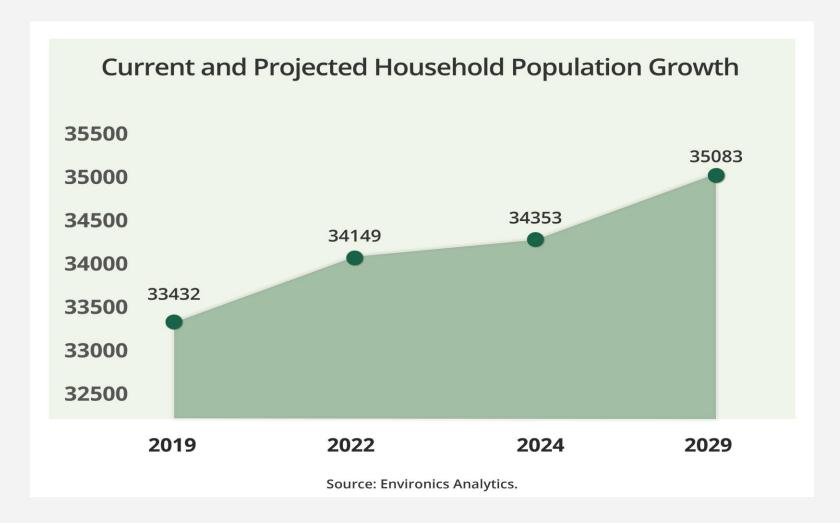


**ALBERTA** 

\$125,000



### Alberta SouthWest Projected Growth







## AlbertaSW vs Alberta Farmland Value



#### Alberta farmland regions

| Region    | % change | Value \$/acre* | Value range**      |
|-----------|----------|----------------|--------------------|
| 1 Peace   | 4.0%     | \$2,119        | \$1,000 - \$3,200  |
| Northern  | 6.1%     | \$3,371        | \$1,600 - \$6,500  |
| 3 Central | 5.9%     | \$4,109        | \$1,400 - \$8,500  |
| Southern  | 12.7%    | \$6,157        | \$1,900 - \$14,100 |

\*FCC reference value \$/acre.

\*\*The value range represents 90% of the sales In each area and excludes the top and bottom 5%.





## North American Industrial Classification System (NAICS)

| Top  | <b>Trends</b> |
|------|---------------|
| (Glo | bal)          |

- Rising population and resulting increase in food demand.
- 2. Declines in farm income.
- 3. Digital native consumers.
- 4. Digital disruption and consolidation.
- Food loss and waste. Farm Robotics
- 6. Remote Sensing. .
- 7. Machine Learning and Analytics.
- 8. Blockchain.

## Trends (Regional)

- 1. Increase in Peas/Bean production
- 2. Export capacity on the rise
- 3. Intercropping
- 4. Increasing focus on technology solutions
- 5. Increasing focus on data

That was then—
this is now...
Now what?

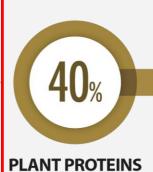






## **Top 5 Ag-Industry** - Identified Opportunities









peer groups to help productivity

**KNOWLEDGE** 



**ENVIRONMENTAL STEWARDSHIP** 



#### **OTHER**

E.g., Leverage assets, partnerships to help innovators, technology R&D, Southern AB heat units/sunlight (60%), new academic/industry partnerships





### Top 5 Challenges Facing Agri-Businesses





GOVERNMENT POLICIES AND REGULATIONS



ACCESS TO MARKET



LACK OF ACCURATE DATA



THE COST
OF NEW
TECHNOLOGY

Gap – Threats: Tribalism Barriers to Innovation







- What we heard
- Gaps
- What else can be done to support agri-business
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#### Plan B: Scenario Plans

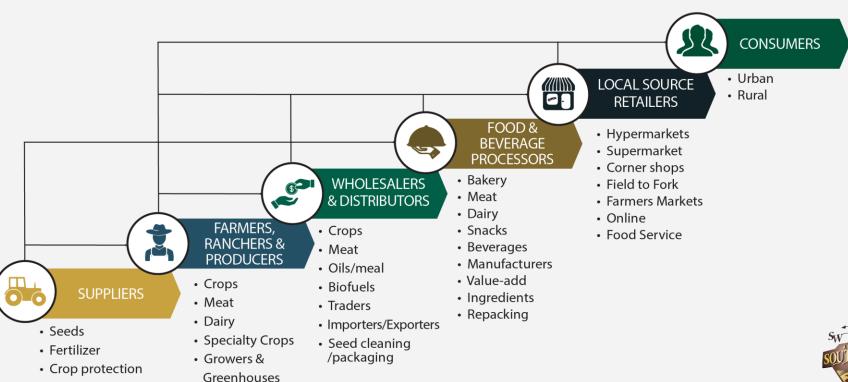
- ❖ Best case scenario what role can we play?
- Worst case scenario what role can we play?



Animal health & nutritionCrop insuranceFood ingredients

## **AlbertaSW Ag Supply-Chain**

From field to fork – a snapshot of the Alberta SouthWest's Ag value-chain







## AlbertaSW Ag Education, Research, Resources

#### **Industry Resources**

- Agricultural Research & Extension Council of AB
- · Agriculture & Food Council of AB
- AB Agricultural Economics Association
- AB Greenhouse Growers Association
- AB Barley Commission
- AB Association Agricultural Societies
- · AB Beef Producers Association
- · AB Cattle Feeders Association
- Western Dairy Council
- · AB Beekeepers Commission
- AB Pork
- AB Chicken
- Egg Farmers of Alberta
- AB Canola Producers Association
- AB Farm Fresh Producers Association
- · AB Farmers' Market Association
- AB Institute of Agrologists
- AB Organic Producers Association
- AB Pulse Growers Commission
- AB Safflower Growers Association
- AB Seed Growers Association
- AB Vegetable Growers
- · AB Wheat Commission
- · Barley Council of Canada
- Canadian Hemp Trade Alliance
- Taste Alberta
- Western Barley Growers
- Western Feed Industry Association
- Herb, Spice & Specialty Agriculture Association



#### Animal Disease Research Institute (Canadian Food Inspection Agency)

Research conducted in a variety of fields including

- · Plant viral diseases
- Food allergens & toxins
- · Pesticides in food
- Feed & Fertilizers

## Lethbridge Research & Development Centre

(Agriculture & Agri-food Canada)

The Centre conducts research In 7 sector strategies:

- Argo-ecosystem Resilience
- Cereals
- Dairy/Pork/Poultry & other livestock
- · Forages & Beef
- Horticulture
- Oilseeds
- Pulses

#### Alberta Ag & Forestry

• R&D Extension, Research Scientists

#### **Academic Institutions & Programs**

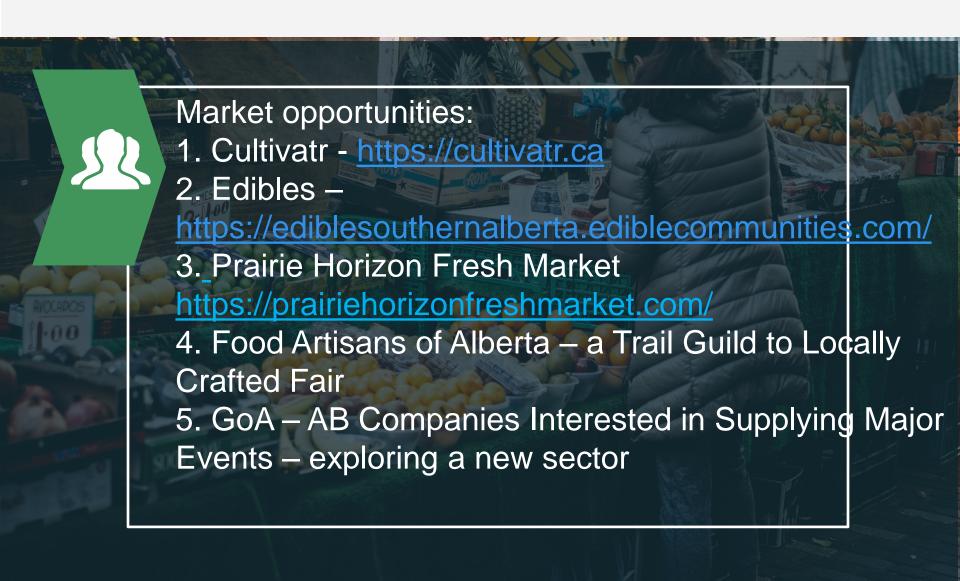
Major post secondary institutions with programs & research in a variety of agriculture disciplines.

- University of Lethbridge
- AgENT

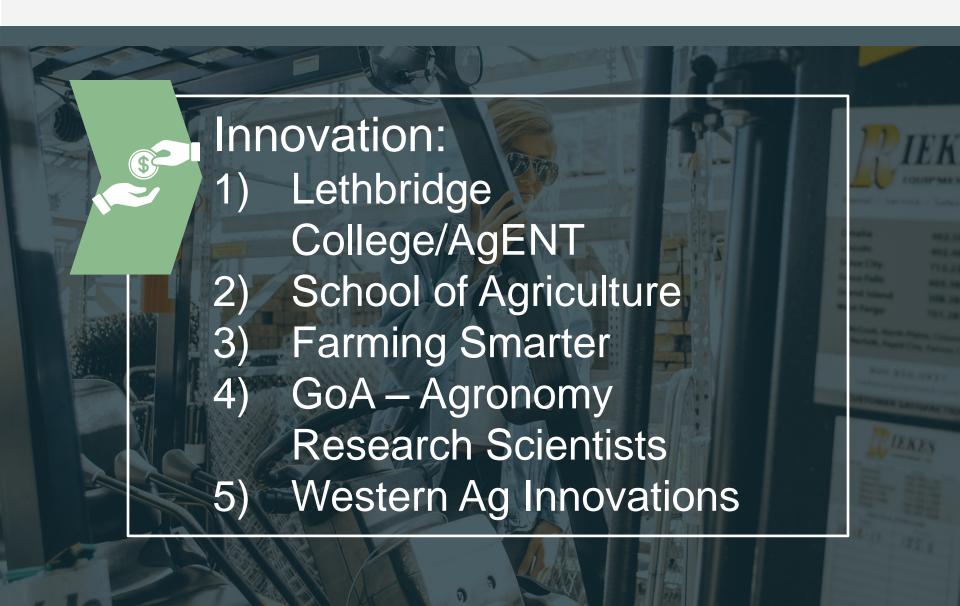
**Farm Smarter** 

Tecconnect

#### **Local Source - New Market Access**



#### **R&D** and Innovation Hubs



## **Working Exercise**



What has changed in the last month impacts on agri-business?

What are the most immediate gaps/missing pieces?

What are the effects on the different parts of the value-chain?

### **Working Exercise**



What would three small successes look like?

Are there any resources (organizations, corporations, other levels of government) that would have a stake in supporting aspects of this initiative?



#### Phase 3:



**CAPACITY-BUILDING** 

- Workshops to build awareness, train and/or matchmaker sessions
- Ask an Expert opportunities
- Resource Identification
- Next steps





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