

Food Security in Alaska: Status, Challenges, and Opportunities

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Project Purpose

Better understand the current state of food production in Alaska and to identify options that may stimulate the expansion of local food production and promote overall food security within our State.



North to the Future!

Alaskan state motto adopted in 1967 but still holds today

- Entrepreneurial spirit
- Community resilience
- Agricultural innovation
- Widespread interest in expanding local food systems



Project Timeframe

- Archival review began in March 2012
- Key informant interviews April – May 2012
 - Stakeholder workshop October 2012
- Final report submitted to the Rasmuson Foundation June 2013



Research Process: Phase I

- Archival Review

- Review local food production trends and initiatives across the nation
- Inventory the types of local food/food security initiatives underway in Alaska
- Determine factors that increase local food production capacity
- Identify links between local food production and human health
- Identify current opportunities for expanding local food options
- Identify individuals involved in local food issues in the State of Alaska who may be interviewed as key informants and attend the workshop

Research Process: Phase II

- Continue archival review
- Conduct key informant interviews
- Plan, advertise, and conduct stakeholder workshop
 - SWOT analysis of food security in the state, project initiative ideas, guest speakers
- Propose and assess options for addressing local food production and food security needs in the State of Alaska

Project Findings



Project findings were based on:

- A review of more than 200 sources related to local food production and food security issues
- Forty-six key informant interviews
- Interactive food security workshop that included 62 participants

Examples of Archival Research

Included review of documents from the following sources (non-exhaustive):

Peer-reviewed literature; Alaska-based non-profit organizations and local businesses; Alaska Native Tribal Health Consortium (ANTHC); State and federal agencies; Alaska Food Policy Council; UAA and UAF and affiliate organizations (such as ISER, CCEL)

Food Security in Alaska

- 14.6% of households in the U.S., and 11.6% of households in Alaska, are food insecure (USDA, 2008).
- 80,000 Alaskans live in food insecure households (ASCDPHP, 2008).
- In Alaska, the greatest number of food insecure individuals resides in Anchorage and the surrounding areas, but the prevalence of food insecurity is greatest in rural regions of the State (23.4%) (ASCDPHP, 2008).
- Alaskan households headed by either single or multiple adults are more likely to experience food insecurity if children are present, and Alaska Native adults are twice as likely than non-Alaska Native adults to be food insecure (ASCDPHP, 2008).

Food Production in Alaska

- The USDA ranks Alaska last compared to other states in agriculture production (USDA, 2008).
- In 2011, Alaska exported \$2.5 billion in seafood (Office of the Governor, 2012). It is estimated that 60-70% of Alaska seafood is sold to export markets (Alaska Seafood, 2013).
- There are now ~30 farmers markets, 11 community supported agriculture (CSA) businesses, and 5 U-picks in the State.

What is local food?

Definition adopted by the US Congress in the 2008 Food, Conservation, and Energy Act (i.e. the 2008 Farm Act):

“The total distance that a product can be transported and still be considered ‘locally or regionally produced agricultural food product’ is less than 400 miles from its origin, or within the State in which it is produced.”
(Martinez et al., 2010)



Photo by Sonoran Institute

Does local = secure?

According to Hamm (2009), *community* food security is defined as:

“.....a condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice.”

Seven operating principles of a healthy food system:

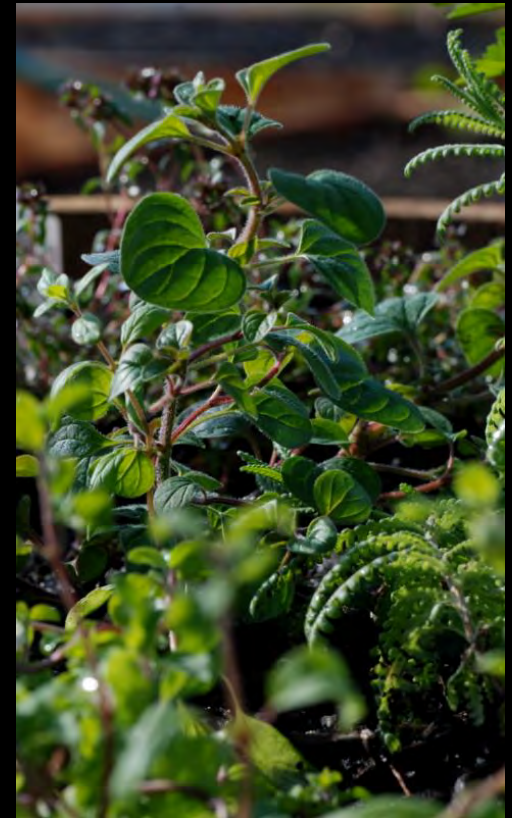
- Ensure community food security for all residents
- Be community based
- Be locally integrated
- Be reasonably seasonal in nature
- Present primarily opportunities rather than problems
- Connect across the layers of the system, from people to soil
- Be diverse

Farming in the state of Alaska

- There are only about 500 farms in Alaska, most clustered in the 880,000 acre Matanuska Valley northeast of Anchorage.
- Alaska's top five agricultural products are greenhouse and nursery products, hay, dairy products, potatoes, and cattle and calves.
- The most valuable livestock commodity produced in Alaska is milk, followed by eggs and beef cattle. Alaskan farmers also raise chickens, hogs, sheep, and lambs. Native Alaskan Inuit maintain herds of reindeer as a source of meat and hides.
- Greenhouse and nursery products are the top agricultural revenue producers in Alaska. Barley, hay, oats, and potatoes are the prevalent field crops (Alaska Economy, 2011).

Iterative Research Process

- Archival review informed Phase II of the research process
 - Selected key informants and developed interview guide based on Phase I
 - Continued research
- Findings from archival research and interviews informed stakeholder workshop





Food system activities and outcomes (Ingram, 2011)

Food System ACTIVITIES

Producing food: *natural resources, inputs, markets, ...*

Processing & packaging food *raw materials, standards, storage requirement, ...*

Distributing & retailing food *transport, marketing, advertising, ...*

Consuming food *acquisition, preparation, customs, ...*



Food System OUTCOMES Contributing to:

Social Welfare

- Income
- Employment
- Wealth
- Social capital
- Political capital
- Human capital



Food Security, i.e. stability over time for:



Environmental Welfare

- Ecosystem stocks & flows
- Ecosystem services
- Access to natural capital



- Increase volume and consistency
- Support provision and protection of land
- Improve access to equipment and resources
- Increase number of farmers
- Expand farming across the State

AFPC Goal 4, Objective 4c, generally Goals 1 & 3

Production

- Create infrastructure to support current and increased production
 - Establish processing plants for value-added foods
 - Establish short- and long-term food storage facilities

AFPC Goal 4, Objective 4c, generally Goals 1 & 3

Processing & Packaging

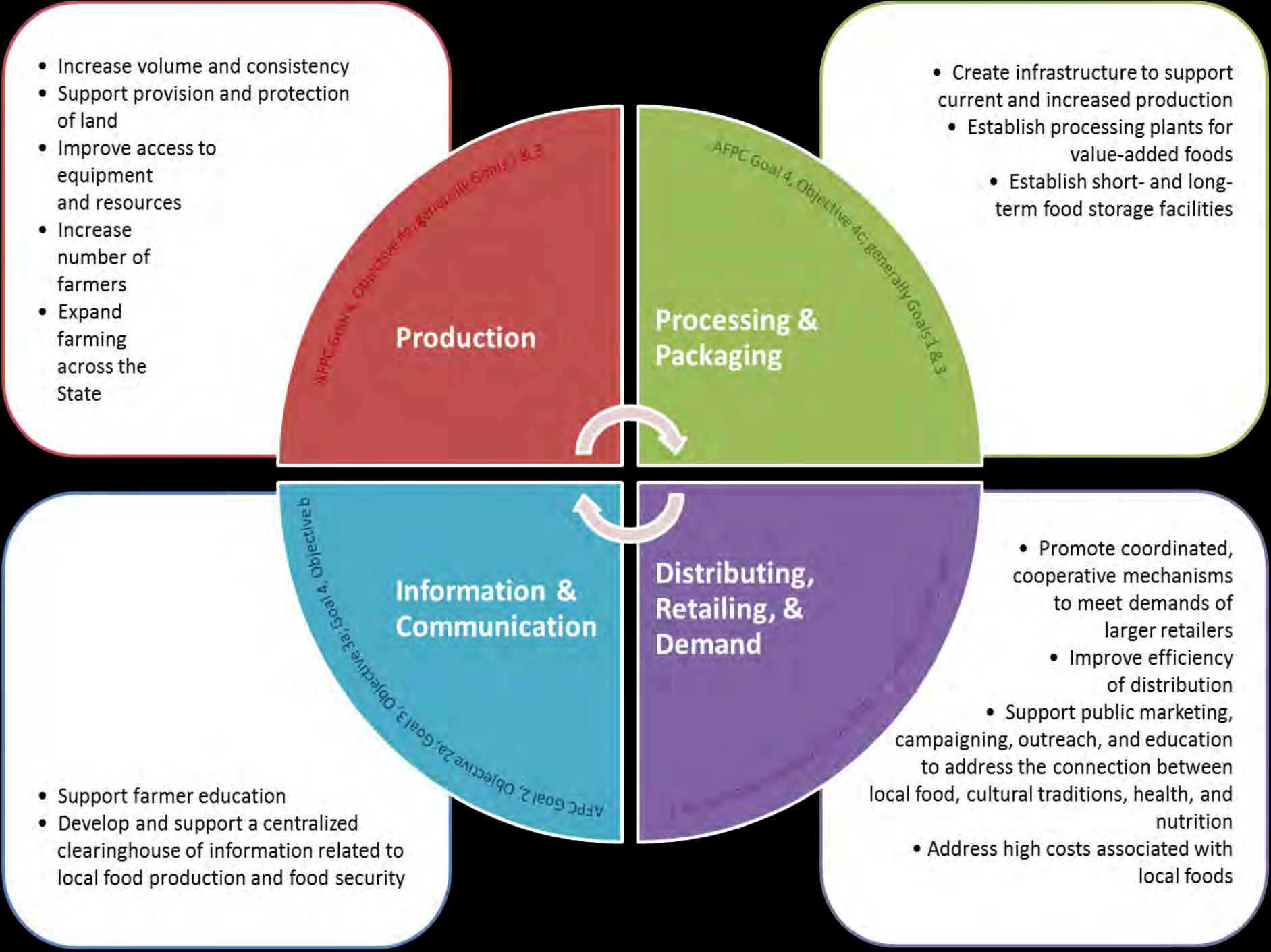
- Support farmer education
- Develop and support a centralized clearinghouse of information related to local food production and food security

AFPC Goal 2, Objective 2a, Goal 3, Objective 3a, Goal 4, Objective 4b

Information & Communication

- Promote coordinated, cooperative mechanisms to meet demands of larger retailers
 - Improve efficiency of distribution
- Support public marketing, campaigning, outreach, and education to address the connection between local food, cultural traditions, health, and nutrition
 - Address high costs associated with local foods

Distributing, Retailing, & Demand



Common Themes: Challenges

Policies and programs to develop and support local food systems vary across cities and states. Little consistency can be found regarding how such programs are administered.

Food Security in Alaska: Challenge

An integrated food system, in which food is primarily grown locally and the money used to purchase products stays in the state, currently does not exist in Alaska (Caster, 2011).

However, this type of system would help support local economies, control costs associated with transportation, promote a small and mid-scale agricultural production system that builds local farm economies, link local markets, and provide education to individuals about growing nutritious food.

Common Themes: Challenges

- Today, Alaska has the smallest state agricultural industry despite being the largest state.
- Between 2003 and 2008, Alaska has produced just over \$30 million in agricultural products annually and USDA ranks Alaska last compared to other states in agriculture production (USDA, 2008).
- Alaskans spend approximately \$1.4 billion on food in retail grocery stores in 2007 (American Fact Finder in ISER, 2012).

Common Themes: Challenges

The average age of Alaska farmers is 56 (USDA, 2009), and it is estimated that there are <50 Alaska Native farmers in Alaska (Heidi Rader, personal communication, 2013); there are similar concerns about the ageing of Alaskan commercial fishing permit holders (ADL&WD, 2012).

Common Themes: Challenges

Limitations to farming in Alaska include:

- lack of capital for farm investment;
 - capacity constraints;
- lack of distribution systems for moving local food into mainstream markets;
- limited research, formal and informal education, and training programs for marketing local foods (Caster, 2011).

Applying the state motto

How do we go “North to the Future” to support local food production and to increase food security in the state?

Connecting the Dots



Community gardens are flourishing in Alaska! Anchorage is ranked 9th for most community garden space per capita according to The Daily Green (ADN, 2009).

The Calypso Farm & Ecology Center and The School Garden Initiative, created in response to “the need for hands-on educational opportunities in schools, a gardening and nutrition connection for children and locally grown food for the community” (Calypso Farm, 2013).

The Alaska Farm to School Program was created by legislation in May 2010 and is housed within the DNR (Robb, 2012). Of top priority is to increase the use of locally grown food in school cafeterias.

A Few Successes!

- Local and regional initiatives:
Food Mosaic Project, ACAT's Yarducopia,
Alaskan Grown Program
- Alaska Botanical Garden Junior Master
Gardener Program
- ~30 farmers markets, 11 community supported
agriculture (CSA) businesses, and 5 U-pick farms

Common Themes: Opportunities

According to a survey of Anchorage residents, 69% indicated that less than a quarter of their food consumption was from local sources, and 26% of participants alternately indicated that between 25-50% of their diet was local. Only 7% had no interest in local foods (Byers et al., 2011).

Opportunities: Support

- Since 2005, The Rasmuson Foundation has funded more than 65 projects totaling more than \$8.5 million to support the storage, processing, and distribution of food within Alaska
- The Marston Foundation has supported food projects in western Alaska;
- The Anchorage Community Land Trust (ACLT) oversees the new Bragaw community garden in Anchorage.
- With state funds, the Alaska Food Coalition works to provide food to food insecure populations across Alaska.
- The Alaska Native Fund through the Alaska Conservation Foundation (ACF) supported marine-based food security proposals during the 2012 and 2013 funding cycles.

Opportunities: Supports

State funding opportunities and initiatives include, but are not limited to: Chef at the Market; Alaskan Grown Specialty Crop Competitive Grant; Alaska Teacher's Scholarship Program; Farm to School; Alaska Agriculture Innovation Grant; the Alaska Farmers' Market Program; and the Alaska Seafood Marketing Institute programs.

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Thank you and Questions

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