# Report on the Findings – Implementing the Algoma Rural Agriculture Innovation Network (RAIN) Pilot Project

## -Discussion Paper-

### Summary and Purpose

The development of this discussion paper was commissioned for the Sault Ste Marie Innovation Center (SSMIC) as an extension of dialogue that this organization has recently been leading and facilitating with local agricultural producers, suppliers and other organizations concerning the establishment of a Rural Agricultural Innovation Network (RAIN) in Algoma. The purpose of this paper is five-fold:

1. To describe the local and broader context of the region's interest and need for increased support and collaboration between governments, organizations, communities and the agriculture sector.
2. To summarize the initial concept and vision for the RAIN.
3. To summarize the activities and outcomes of consultation process on the RAIN model from July to December 2010, involving SSMIC and rural stakeholders in the Algoma District.
4. To provide a brief summary of related research which describes and evaluates the experience of other jurisdictions who have undertaken similar initiatives, and to highlight findings that should be considered in this context.
5. To provide a summary of this initial research and consultation, along with related findings, that might be considered and referenced by decision makers and internal stakeholders within Algoma and the participating stakeholder organizations, in making decisions on the future of the industry.

The project has provided an opportunity and venue for focussed dialogue within and between the private sector and the respective representatives of the participating organizations on a vision and direction for a Rural Agriculture Innovation Network in Algoma. In this case, the project has created a path for the organizations to commit to and carry out a pilot project, which is a logical and necessary next step prior to committing to and commencing the comprehensive implementation of RAIN offices across Northern Ontario.

## The Algoma District Context

Algoma is one of the 11 districts of Northern Ontario; a collection of communities which in total have a land area of 802,000 km$^2$ or about 87% of the land area of Ontario[1]. In the north, conditions for farmers are challenging with an aging farming population, limited research capacity and infrastructure, shorter growing seasons and the threat of frost over nine months of the year (frost free days from 100-120 in most of the region[2]), but that does not mean that agriculture isn't present and cannot thrive in the area. In Algoma, the majority of agricultural production occurs in an area that begins just north of Sault Ste. Marie and extends south and east to Blind River. A considerable amount of agricultural production also occurs on St. Joseph Island, which is also known for its successful maple syrup industry.

*Algoma District at a Glance*[3]

| Item | Algoma | Province | Percent of province |
|---|---|---|---|
| **Farms, 2006 Census (number)** | | | |
| Total | 335 | 57,211 | 0.59 |
| Reporting under 53 hectares | 125 | 29,710 | 0.42 |
| Reporting 53 to 161 hectares | 131 | 18,648 | 0.70 |
| Reporting 162 hectares and over | 79 | 8,853 | 0.89 |
| **Land Use, 2006 Census (hectares)** | | | |
| Land in crops | 15,496 | 3,660,941 | 0.42 |
| Summerfallow land | 57 | 11,895 | 0.48 |
| Tame or seeded pasture | 4,488 | 303,400 | 1.48 |
| Natural land for pasture | 4,479 | 450,281 | 0.99 |
| Christmas trees, woodland & wetland | 12,811 | 750,355 | 1.71 |
| All other land | 1,444 | 209,581 | 0.69 |
| Total area of farms | 38,775 | 5,386,453 | 0.72 |
| **Greenhouse Area, 2006 Census (square metres)** | | | |
| Total area under glass or plastic | 37,438 | 11,760,576 | 0.32 |
| **Hired Farm Labour, 2006 Census (weeks)** | | | |
| Year round | 4,233 | 1,392,257 | 0.30 |
| Seasonal | 1,262 | 878,920 | 0.14 |
| Total | 5,495 | 2,271,177 | 0.24 |
| **Farm Capital Value, 2006 Census (farms reporting)** | | | |
| Under $200,000 | 92 | 4,226 | 2.18 |
| $200,000 to $499,999 | 163 | 18,858 | 0.86 |
| $500,000 to $999,999 | 58 | 16,803 | 0.35 |
| $1,000,000 and over | 22 | 17,324 | 0.13 |
| **Total Gross Farm Receipts, 2006 Census (farms reporting)** | | | |
| Under $10,000 | 131 | 14,500 | 0.90 |
| $10,000 to $24,999 | 90 | 10,828 | 0.83 |
| $25,000 to $49,999 | 46 | 7,397 | 0.62 |
| $50,000 to $99,999 | 33 | 6,521 | 0.51 |
| $100,000 to $249,999 | 21 | 7,965 | 0.26 |
| $250,000 to $499,999 | 9 | 5,589 | 0.16 |
| $500,000 to $999,999 | 3 | 2,745 | 0.11 |
| $1,000,000 to $1,999,999 | 1 | 1,098 | 0.09 |
| $2,000,000 and over | 1 | 568 | 0.18 |
| **Farms by Industry Group, 2006 Census (number of farms)** | | | |
| Dairy cattle and milk production | 12 | 4,937 | 0.24 |
| Beef cattle ranching and farming | 85 | 11,052 | 0.77 |
| Hog and pig farming | 1 | 2,222 | 0.05 |
| Sheep and goat farming | 4 | 1,365 | 0.29 |
| Poultry and egg production | 4 | 1,700 | 0.24 |
| Other animal production | 69 | 7,573 | 0.91 |
| Oilseed and grain farming | 2 | 13,056 | 0.02 |
| Vegetable and melon farming | 10 | 1,769 | 0.57 |
| Fruit and tree nut farming | 7 | 1,892 | 0.37 |
| Greenhouse, nursery and floriculture | 22 | 2,822 | 0.78 |
| Other crop farming | 119 | 8,823 | 1.35 |

| Item | Algoma | Province | Percent of province |
|---|---|---|---|
| **Major Field Crops, 2006 Census (hectares)** | | | |
| Winter wheat | 42 | 416,209 | 0.01 |
| Oats for grain | 543 | 53,399 | 1.02 |
| Barley for grain | 408 | 89,447 | 0.46 |
| Mixed grains | 439 | 70,194 | 0.63 |
| Corn for grain | 21 | 638,538 | - |
| Corn for silage | 155 | 129,807 | 0.12 |
| Hay | 12,964 | 1,037,062 | 1.25 |
| Soybeans | x | 872,455 | - |
| Dry white beans | 0 | 37,348 | 0.00 |
| Other dry beans | x | 28,816 | - |
| Potatoes | x | 15,441 | - |
| **Major Fruit Crops, 2006 Census (hectares)** | | | |
| Apples | x | 8,162 | - |
| Peaches | 0 | 3,195 | 0.00 |
| Sour Cherries | x | 1,030 | - |
| Raspberries | 2 | 467 | 0.43 |
| Strawberries | 15 | 1,717 | 0.87 |
| Grapes | 0 | 8,335 | 0.00 |
| Total fruit crops | 21 | 25,780 | 0.08 |
| **Major Vegetable Crops, 2006 Census (hectares)** | | | |
| Sweet corn | 18 | 15,628 | 0.12 |
| Tomatoes | 2 | 8,173 | 0.02 |
| Green peas | 2 | 8,693 | 0.02 |
| Green or wax beans | 1 | 4,807 | 0.02 |
| Total vegetables | 37 | 62,967 | 0.06 |
| **Livestock Inventories, 2006 Census (number)** | | | |
| Dairy cows | 869 | 329,737 | 0.26 |
| Beef cows | 3,983 | 377,354 | 1.06 |
| Steers | 1,196 | 311,989 | 0.38 |
| Total cattle and calves | 11,119 | 1,982,651 | 0.56 |
| Total pigs | x | 3,950,592 | - |
| Total sheep and lambs | 2,424 | 311,162 | 0.78 |
| **Poultry Inventories, 2006 Census (number)** | | | |
| Total hens and chickens | 29,540 | 44,101,552 | 0.07 |
| Total turkeys | 388 | 3,556,250 | 0.01 |

x - Suppressed Data.

[1] Harry Cummings and Associates. Algoma-Manitoulin Agricultural Economic Sector Profile. Guelph: December 2009.
[2] Ibid.
[3] 2006 Census of Agriculture and Economic Development Policy Branch, OMAFRA. January 2010. Online: http://www.omafra.gov.on.ca/english/stats/county/northern_ontario.pdf

Algoma's agriculture communities are diverse and have different characteristics and unique needs to their northern counterparts and neighbours to the south. This diversity is the starting point for developing a plan for the growth and sustainability of Algoma's rural communities. The Algoma region features a variety of farm types and sizes with farm production activities consisting of beef production, hay production, dairy production, greenhouse, nursery and floriculture production, as well as a range of other animal production activities including bees, alpaca, sheep, goats, bison and horses. With respect to crop production, the climate and soil conditions in the region allow for the production of a variety of field crops including barley, wheat, oats, corn, mixed grains, soybeans, canola and hay crops[4].

Interest is also developing locally on investigating the production of non-traditional crops and demonstrating the wide range of products that can be grown in Algoma, giving farmers options to diversify their cropping systems. Increased access to data and crop trial results specific to Algoma, investments in infrastructure as well as longer growing seasons due to climate change will all help farmers to continue to expand their businesses. The future looks promising for increases in Algoma's production of fruit, vegetable, grain, oilseed and other cash crops as well as livestock produced elsewhere in Ontario but not yet introduced at a commercial scale in Northern Ontario.

Non timber forest products (NTFP) including mushrooms, wild herbs, berries and other fruits that grow naturally in forests are also increasing in demand as consumers seek out organic, wild and sustainably harvested food products. The beneficial aspect of this type of agriculture is that it requires intact, healthy forests to exist, so emphasis on conservation is inherent in its development. Furthermore, harvesting NTFPs draws on the traditional ecological knowledge of local Aboriginal people, and enhances food security and access rights for First Nations[5].

A growing immigrant population also opens new markets for fresh foods and specialty meats. This changing demographic has led to transformation in consumer food preferences, and Algoma producers are recognizing the potential of this shift, with the primary market for new specialty foods found in the diverse ethnic population. The NORDIK Institute of Algoma University for example is currently working on expanding the demand for locally grown goat meat, a project which they have indicated could be expanded on in the future to include goat-based dairy products potentially marketed through a co-operative structure.

Agriculture in the Algoma region continues to have competitive advantages and economic opportunities including a substantial farmland base that supports the growth of a variety of crops; lower land prices relative to land prices in southern Ontario, its isolation from the threat of contaminants from large industrial farms; and its access to growing markets in north-eastern Ontario. For the region, it appears as if this is only the beginning for agriculture, as Algoma's

[4] Harry Cummings and Associates. Algoma-Manitoulin Agricultural Economic Sector Profile. Guelph: December 2009.
[5] Agriculture and Agri-Food Canada. Next Generation of Agriculture and Agri-Food Policy: Report on Aboriginal Discussion Workshops – National Report. March 2007. Online: http://www4.agr.gc.ca/resources/prod/doc/pol/consult/pdf/aboriginal_sessions_e.pdf

communities are demanding more and more fresh local products as an alternative from food brought in from elsewhere. As found in the 2008 Farmer's Markets of Ontario study, close to 60% of Ontario market customers reported that fresh produce was their primary reason for visiting farmers markets[6]. The NORDIK Institute has already created momentum in developing local food systems through a number of buy local and other marketing campaigns aimed at expanding the farmers market and identifying consumer needs and preferences. They have been successful to date with expanding the farmers' market in Sault Ste Marie through their continued work on the *Buy Algoma. Buy Fresh* campaign.

Algoma also features a variety of agri-tourism/entertainment activities and destinations. Some examples of the attractions include[7]:

- Rose Valley Maple Syrup in Echo Bay produces and sells all grades of wood-fired maple syrup from the farm year round. The farm also offers small bulk orders for commercial use such as restaurants or catering.
- Thompson's Maple Products on St. Joseph Island has been in operation since 1977 and is one of the largest maple syrup produces in Ontario. Visitors to the farm can observe how maple syrup is made. The farm can accommodate school groups and bus tours.
- Fairisle Maple Syrup on St. Joseph Island produces and sells maple syrup.
- Rainbow Ridge Farm on St. Joseph Island produces a variety of fresh produce for sale including corn, pumpkins, and vegetables.
- Rains Homestead Century Farm Bed and Breakfast is a fifth generation farm on St. Joseph Island and maintains the traditions of early settlers.
- Desbarats Country Produce in Desbarats is a family grower co-op retail-wholesale outlet. The market is open to public and by appointment to commercial businesses. The market specializes in locally grown produce and vegetables, locally processed products, maple syrup, jams, jellies, relishes, baking, etc.
- Algoma Farmers Market in Sault Ste Marie provides the public with locally prepared and grown products ranging from fruits, vegetables, preserves, honey and maple syrup to baking, crafts, textiles, and fibres.
- Penokean Hills Farms is a group of farmers who raise cattle without the use of growth hormones or antibiotics. The organization provides consumers with a wide selection of high quality, natural beef products.
- Meadowview Alpaca Farm in Bruce Mines raises and shears alpacas for their luxury fibre. The farm sells yarns and finished products. The farm also sells breeding stock.
- Cedar Rail Ranch Thessalon offers day long horse trail rides as well as overnight horseback riding vacation packages and activities such as boating, fishing, canoeing, sleigh rides, cross-country skiing, trout pond and petting farm.

[6] Harry Cummings and Associates. Algoma-Manitoulin Agricultural Economic Sector Profile. Guelph: December 2009.
[7] Ibid.

- Country Road Open House is a self guided tour of on St. Joseph Island that runs the weekend before Thanksgiving weekend. The tour was established in 1995 and includes several farm stops where farm produce is for sale.
- Growing Mennonite and Amish communities also draw tourism to the area for travellers interested in learning about and experiencing the culture.

Related to agri-tourism is the existence of agriculture fairs in the area. According to the Canadian Association of Fairs and Exhibitions (CAFE), significant social and economic benefits can be realized from fairs, with an average small fair (i.e. less than 500,000 visitors), having an injection of $750,000 on the local economy as well as supporting several full-year positions[8]. Agriculture fairs in the Algoma district include the Laird, Bruce Mines and Iron Bridge Fairs which show case vegetable producers, baking, crafts, livestock, poultry, heavy and light horse shows and tractor pulls among other events.

Another growing trend for Algoma farmers is the use of co-operatives as an alternative business model for the industry allowing the farmer (as part of the co-operative) to become more competitive. Co-operatives enable farmers to own and control business enterprises for procuring their supplies and services, marketing their products and also allow farmers to take advantage of economies of scale when purchasing supplies, services, equipment and infrastructure upgrading. Both NORDIK and SSMIC are working on continuing the development of producer groups and co-ops (with an emphasis on value-added/diversification) through business development, marketing and pilot initiatives. NORDIK for example has been working closely with livestock producer groups (such as Penokean Hills Farms and Northern Quality Meats) in expanding their capacity to grow their market and in the future is interested in working with these and other groups on the development of a co-operative retail outlet that would sell local products from farmers and artisans. It was suggested that other producer co-operatives need to be established to help in the development of other value added activities such as sheep and lamb producers who are looking to grow their local market and attract more producers into this commodity sector.

The SSMIC is also exploring the opportunity of developing a regional co-operative to market and sell biofuel, oilseeds and related by-products, beginning with a 3 year pilot project to prove the viability of the initiative. The project will support the creation of a new industry for Algoma through the establishment of new cash crops (oilseeds) and processing infrastructure (crushing and oil expelling) for the agricultural industry, secure feedstock sources for local biofuel producers and development of a distribution network for the co-op, while supporting environmental stewardship within the community.

Ownership in renewable energy ventures and participation in the bio-economy has also gained momentum in the agriculture sector of Algoma. In addition to the oilseed/biofuel co-op, related

[8] Enigma Research Corporation, 2009. In Harry Cummings and Associates. Algoma-Manitoulin Agricultural Economic Sector Profile. Guelph: December 2009.

research that has been coordinated through the SSMIC includes an inventory of biomass resources, identification bio-energy species (such as speckled alder) that are available or can be grown in Algoma as well as looking at alternative applications of by-products such as bio-solids from mill operations. The SSMIC is currently working on a sustainable biomass Production Zone project in partnership with St. Mary's Paper of Sault Ste Marie. The project involves field testing St. Mary's Paper's bio-solids in an agricultural setting as an alternative to traditional forms of fertilizer. These types of business structures have the potential to create growth at the community and regional level, building on the spirit of co-operation that is already prevalent in the area.

The economic impact of agriculture in the area is also important. Harry Cummings and Associates (2009)[9] studied the direct, indirect, and induced impacts of agriculture in the Algoma-Manitoulin district. According to their methodology, direct impacts refer to the on-farm jobs and farm gate sales generated by the agriculture sector in the district. Indirect impacts refer to jobs and sales generated 'off the farm' by agri-related businesses which interact directly with farm operations through buying and selling products and services. Induced impacts refers to jobs in the service sector, especially Education, Government, and Health and Social Service sectors that are supported by the people employed in the agricultural sector or in agri-related businesses that use the services provided by these three service industries. The results of their analysis show the agriculture sector in Algoma-Manitoulin currently sustains between 2,199 and 2,325 direct, indirect and induced jobs. This means for every job in the agriculture sector approximately 2 to 3 additional jobs are supported in the wider economy. In terms of dollars, it was estimated that the agricultural sector in Algoma-Manitoulin generates between $72 million and $80 million in direct and indirect sales. It is estimated that for every dollar generated by direct agricultural sales (farm gate sales), an additional $1.10 to $1.30 in sales related to agriculture is also generated.

## The Algoma Rural Agriculture Innovation Network

The Algoma RAIN is intended to be established initially as a 3-year pilot project for the delivery of projects and services that would be most beneficial to agricultural and agri-forestry related organizations, individuals and private sector partners in the Algoma region. The Algoma RAIN's primary focus is to enhance the industry through a networking infrastructure for stakeholders that will provide key information and value-added support to local growers, woodlot owners, rural businesses and agriculture organizations to improve opportunities for maximizing the collection and communication of information, and the value of rural based crops, commodities, products and services. The Algoma RAIN will accomplish this by fostering agro-based research coordination and creating linkages to technical, marketing, human resource capacity and business development assistance available within and external to the region. While effective economic development involves collaboration, the continued sustainability of an industry

[9] Harry Cummings and Associates. Algoma-Manitoulin Agricultural Economic Sector Profile. Guelph: December 2009.

requires an ongoing intermediary organization to coordinate efforts and keep the momentum alive.

The RAIN Concept was born out of discussions that have taken place in Northern Ontario centres to gain insight into a number of strategic areas of critical importance to the north including the need for improving Northern Ontario's agricultural and rural sector. These discussions have continued among agriculture and rural leaders and have expanded into a conceptual framework for Rural Agriculture Innovation Networks (RAINs) across Northern Ontario. The purpose of the RAINs would not be to replace existing efforts but instead to provide support through access to common resources and coordination of projects. This approach would maximize and leverage available expertise and resources to realize outcomes far beyond what individual organizations can achieve in isolation. To be effective, the RAINs must:

- Promote sustainable change for Algoma's agriculture industry;
- Support the efforts of agricultural institutions/organizations, particularly those made up of a volunteer base of producers and business owners;
- Support networking and idea sharing among organizations to advocate for Northern Ontario improvements;
- Network ongoing efforts with local food and agri-product initiatives in the region to facilitate market access;
- Foster collaboration and participation across a wider range of stakeholders and organizations;
- Advocate for Northern Ontario agriculture research and infrastructure improvements;
- Develop and implement strategies specific to engaging Aboriginal people and communities;
- Create innovation, productivity advances and competitive advantages within the agriculture industry of Algoma.

Past successes and current initiatives including government policy priorities and funding opportunities have encouraged the SSMIC and its partners to define a local RAIN project for the agriculture sector of Algoma in order to prove the validity and sustainability of the concept. An important goal of the Algoma RAIN pilot is to engage Algoma District agriculture serving organizations from across all commodity groups that are directly, indirectly, traditionally and non-traditionally related to agriculture.

Moving forward first with a pilot project will help to position the Algoma RAIN to grow into a diverse and comprehensive service delivery hub for agriculture organizations and the community members they represent; a model that can be replicated across Northern Ontario's agriculture districts. The SSMIC and partners have conceptualized and shared a preliminary vision and mission for the Algoma RAIN with a wide cross section of community stakeholders - this vision and mission are summarized as follows:

*Vision*

*To connect Algoma's agriculture community with timely information and support in order to improve opportunities for maximizing the value of rural based crops, commodities, value-added products and services, and the achievements of Northern Ontario agriculture.*

*Mission*

*The Algoma RAIN is dedicated to the needs of agricultural organizations, producers, suppliers and agri-entrepreneurs in Northern Ontario. Its primary focus is to enhance the industry by providing a collaborative and facilitative network for stakeholders that allows them to enhance their capabilities, diversify their productive output and successfully build their capacity to grow as organizations and individual business owners.*

The Algoma RAIN's activities are largely a function of the direction received from representatives of the local agriculture community. Its activities will be driven by the overall needs of the industry as determined through ongoing market and field research as well as focused consultations with stakeholders. Generally it is envisioned that the Algoma RAIN will provide support and coordination to research and business development activities, provide networking assistance, assist with public outreach and communications, as well as resource and data collection (see the Algoma RAIN Pilot Terms of Reference for a more detailed description of activities). The Algoma RAIN's establishment is intended to act as an enabler of collaboration and as such the RAIN will focus on activities that support and add value to already existing programs and services offered in the Algoma region in an effort to avoid duplication of past and ongoing efforts.

## Algoma RAIN Consultation Process

Prior to proceeding with implementation of the Algoma RAIN pilot project, the SSMIC along with support from the Community Development Corporations of Sault Ste Marie & Area, and East Algoma, Innovation Initiatives Ontario North, the NORDIK Institute at Algoma University, Algoma Soil and Crop Improvement Association and the Algoma Federation of Agriculture, carried out feasibility activities that would provide the due diligence necessary to assess the strengths, weakness, opportunities and issues related to the RAIN model. The project was intended to bring these organizations and their members to a level of comfort and understanding that would permit them to commit, in principle, to supporting the establishment of an Algoma RAIN pilot and to define the process through which this could be evaluated, planned and implemented.

The SSMIC believes that the RAIN model will support a comprehensive and coordinated approach combining collective resources and expertise of numerous organizations spanning several sectors; it may also provide an opportunity to reduce the financial burden of existing organizations and partnerships which are increasingly constrained due to the time demands on their mostly volunteer members.

To this end, the scope of the project encompassed the hiring of a consultant/facilitator who was tasked to undertake the following foundational work:

1. Development of a Terms of Reference which serves as a means of the participant organizations to summarize and agree on their collective vision for a future Algoma RAIN, along with a strategy for financing of the 3 year pilot.
2. Development of a "discussion paper" which outlines the Algoma District context and RAIN pilot as it relates to the challenges and opportunities for local agriculture as determined through literature reviews and the stakeholder consultation process.
3. Confirmation of support from rural stakeholders via letters of support which sets out their respective understandings, commitments and contributions (if applicable) to the larger Algoma RAIN implementation model.

These tasks and related deliverables were intended to:

- Ensure that the partner organizations and the agriculture community are aligned and in agreement with a strategic framework for this initiative.
- Define the process that will be followed to proceed to the pilot stage.
- Provide a tool for each of the partner organizations to commit to moving the initiative to the pilot stage.

SSMIC retained consultant Jessica Bolduc of Sault Ste. Marie-based, Possibilities Group Inc. to coordinate and facilitate a consultative process through which the partnering organizations, and project stakeholders could provide input to compile the project deliverables. The following process was followed:

1. The consultant developed and circulated a questionnaire to agriculture leaders and representatives who had been identified as key contacts in this process.

    - The questionnaire was intended to capture each participant's individual thinking on matters that will ultimately shape a strategic framework for the project.
    - The questionnaire also identified both strategic and tactical concerns that would need to be incorporated into the terms of reference for a feasibility assessment.
    - The questionnaire was circulated electronically by the consultant to the participants (by email) and via the on line survey tool "Survey Monkey", along with instructions on how to return responses.

    *Note: Due to time and other constraints such as the lack of high-speed internet in many of the rural communities, the response rate for the survey was quite low and it was determined that for this project, this method of data collection was not an effective nor sufficient way to engage stakeholders.*

2. Discussion groups were held with stakeholder groups on the following dates:

   Steering Committee Meeting - Laird Township Office, July 5th, 2010
   - Representatives from SSMIC, NORDIK, OMAFRA, AFA/OFA in attendance;

   Meeting with Martti Lemieux – Sault Ste Marie, August 26th, 2010
   - Chair of the Algoma Farmer's Market;

   Community Presentation - Laird Hall, October 27th, 2010
   - Representatives from the Thessalon First Nation BioCentre, ASCIA, Algoma Sheep and Lamb Producers, Algoma Maple Syrup Producers, Christian Farmer's Federation of NE Ontario, Desbarats Farmers Market, Algoma Farmers Market, Northern Quality Meats, Meadowview Alpaca Farms, SITTM Technologies, SSMIC, NORDIK, East Algoma CFDC, SSM & Area CDC, SSM EDC, MNDMF, OMAFRA, as well as other local producers and representatives from the Mennonite community in attendance;

   Algoma Federation of Agriculture Meeting - Bruce Mines Public Library, December 6th, 2010
   - Representatives of the Algoma Federation of Agriculture in attendance.
   - Participants of the meeting were also with representation on other committees such as the Algoma Cattlemen's Association and the Northern Ontario Agri-Food Education and Marketing;

   SSMIC and NORDIK Institute Progress Meetings: Algoma University, various dates.

3. Consultations with individual stakeholders from the agriculture community (including business owners and agriculture organization representatives) were conducted via telephone and email (where applicable).

   *Note: Connecting with individuals from the agriculture community was challenging due to the varying schedules of the farm owners. Where possible, arrangements were made to hold telephone conversations during the evenings and weekends to address this constraint. Email was also a convenient means of communication for those stakeholders who had access to high-speed internet and could respond at their own discretion.*

4. The responses to the survey, discussion groups and individual consultations were compiled by the consultant and summarized into summary notes and the project deliverables including this paper and a and terms of reference for the pilot project.

It is anticipated that all of the project deliverables would be circulated back to the participant organizations for review and approval prior to commencing with the pilot project.

## Findings of the Consultation Process

Although the timeframes for carrying out the consultation activities occurred during a very busy time of the year, the stakeholder interview process yielded a number of important findings:

- Many farmers have sought jobs off the farm to supplement their income and due to this and other factors the amount of volunteer time has been seen to be reduced significantly;
- Algoma farmers are an aging demographic, and the number of farms and farmland in production has decreased. As such youth attraction and retention is important in maintaining the future of the industry locally;
    - These facts combined with a general lack of interest from younger generations increases demand for young farmer incentives;
    - Strategies are needed to increase the involvement of youth in agriculture and agri-foods that include programming in areas where youth have access such as in schools and recreation centres to promote youth to start farms or greenhouses and to pursue studies in agriculture and agri-food sciences;
    - It was expressed that youth need to be aware of the wide range of opportunities in agriculture and how these opportunities can be profitable i.e. remove the 'poor farmer' stigma associated with agriculture;
    - Youth also need initiatives designed specifically to give them a chance to explore first-hand various types of agricultural activities (i.e. farms, summer employment, marketing internships etc);
    - Youth and others interested in entering the agriculture industry also require additional start-up support for their new businesses.
- Stakeholder consultations have also revealed that a lack of farm infrastructure is limiting growth in the industry;
    - Farmers have expressed that investing in storage equipment to handle and dry the various grain and oilseed commodity crops grown in the area will provide a central place through which they may move and market their product, and also help to offset transportation costs, making cash crop production a more cost efficient activity in the region:
        - An investment such as this would stimulate new interest in expanding cash crops grown in Algoma District, which may have a ripple effect by way of increased field equipment sales, service requirements and other spin-off effects for existing businesses in the agriculture sector.
    - One of the biggest challenges to livestock producers in terms of successful entry into the local meat market is the processing capacity of the local abattoir and other meat processors:
        - Farmers have expressed that investments in the processing equipment of local abattoir/processors would greatly impact the volumes handled as

well as the uniformity and quality of the products making local meat more attractive to butchers, grocers and other consumers in Algoma;
        - Increases in volumes of meat processed in Algoma would also require investments in cooler and/or freezer capacity to store additional carcasses;
        - More communication and collaboration between producers and processors would be helpful in ensuring that capacity is adequate so that the meat processing requirements do not adversely affect the sales or timely delivery of products.
    - Investments in a fibre processing mill, particularly for local alpaca and sheep producers, has also been identified as need for the area that would make fibre processing a more profitable business activity;
        - Marketing fibre and producing finished goods locally would help to stimulate further growth in the sector;
    - Stakeholders have also indicated that high speed internet as well as cell phone reception in some cases are not available in many areas in rural Algoma;
        - Internet in particular can be an important resource for farmers to improve business practices and reduce costs, should they have access to it;
        - For farmers internet is used for searching equipment, researching livestock/crop health issues, as well as for information on funding opportunities and other ways to diversify their businesses;
        - In addition, consumers today are tech-savvy and prefer online methods of marketing and communication such as through email, websites and other social media such as Facebook and Twitter;
        - With inadequate access to high speed internet, farmers feel that they are limiting their ability to use this technology as a resource to grow their businesses.
    - Local farmers markets are expanding in Algoma as consumer change and local marketing efforts are increasing the buy local mentality:
        - The demand for a more diverse product offering (such as for meats, cheeses, dairy and eggs) is developing locally however the markets oftentimes lack the storage and cooler infrastructure to be able to safely supplies these products;
        - In addition, one stakeholder indicated that should egg grading equipment be accessible to them they would be able to bring fresh eggs to the market.
    - Woodlot owners, particularly on St. Joseph's Island, have been very successful in building a strong maple syrup industry for Algoma. However, as capacity increases, so does the demand for a consistent quality of product:
        - Future changes to Canada's food safety requirements for maple syrup may result in the enforcement of stricter processing standards; a requirement that smaller facilities may not be able to meet;

        - Local producers have discussed the possibility of one central processing facility that could process the raw materials of many local taps into maple syrup thus resulting in a consistent product each time. ;
        - Investments in food safety regulation compliant processing equipment could be achieved at a larger scale using a co-operative or similar business approach that combines the inputs and resources of many smaller and larger scale producers in the area;
    - It was also discussed that in general, the regulatory environment governing agriculture needs a shift towards supporting smaller-scale, more flexible, regionally based processing;
    - The renewable energy sector has also opened the door to opportunities for farmers to diversify their crops to meet the feedstock requirements of biodiesel and biomass energy producers:
        - Biomass crops for example can be grown in the area but require pelletizing equipment locally;
        - A local biodiesel producer has expressed interest in using local oilseed crops for biodiesel feedstock, however local crushing, processing and storage capacity for oilseed crops are needed to make the venture viable for both the biodiesel producer and crop growers.
    - More effective programs and supports for farmers to increase crop land in production (such as through tile drainage) was also expressed as a factor limiting growth in the area;
        - Related are the barriers that exist to investment and capitalization when matching funds are required from business owners to access funding and grant programs.
        - For First Nation's in particular, Indian Act policies that govern reserve lands sometimes create barriers for First Nation businesses as often there is an inability to use assets located on reserve including land, as security for loans to improve reserve infrastructure (i.e. irrigation) and getting into or expanding agriculture businesses on-reserve.
    - Stakeholders also revealed that while additional processing infrastructure is needed, Ontario needs to recognize the importance of small and medium scale facilities to rural and northern communities;
        - Some existing and future regulatory regimes tend to be responsive to large-scale centralized models of food production (such as for maple syrup producers and meat processors);
        - Ontario's structural, legislative, economic and regulatory frameworks have led to a food processing infrastructure that is inadequate for many small- and medium-scale farmers that are present in the North;
        - Northern producers need processing regulations that are flexible, so that they can adequately meet regional and sustainable labelling and certification regulations but at smaller-scales;

        - There needs to be a move from large-scale, centralized food processing towards smaller-scale, more flexible, regionally based processing.
- Stakeholder consultations revealed that increased agricultural research for new crops and livestock diversification from a Northern perspective is critical in maintaining sustainability of the industry in Algoma:
    - Algoma's variable climate and location on the Canadian shield make it challenging for local farmers who have access only to research that is applicable to Southern Ontario;
    - It is felt that Algoma has limited Northern-based research and technical support and that continued agricultural research for new crops and livestock diversification needs to occur from a Northern perspective;
    - Farmers have expressed interest in diversifying their businesses to include vegetable, fruit, grain, grass and other crops that are not traditionally grown in Algoma should information be provided to them that supports the viability of these crops;
        - There currently exists a disincentive to grow fruit, vegetables and non-traditional livestock for regional markets when there is little data and risk management programs for these types of sectors;
    - Interest from the Aboriginal community also supports the need to include research focused on food sources traditionally harvested and grown by Aboriginal people such as non-timber forest products, sweetgrass, rice and teas which have the potential to become new revenue generators for these communities.
- On-farm capacity building was also pointed out as being an area for development for local agriculture such as continued education and training for new technologies, knowledge and skills, technology transfer and awareness:
    - Local abattoirs for example could benefit from the addition of more skilled individuals in the trade;
        - Abattoirs are only allotted a certain number of 'kill days' per week where an inspector is on-site to fulfill regulations required for slaughter:
            - Increasing the number of available Provincial inspectors will increase the number of 'kill days' per week allowing abattoirs to increase the volume of products processed each week;
        - Further, specialized skills and experienced meat-cutters are needed to meet demand for consistency and quality of products;
        - As such an opportunity exists to train local individuals to administer inspections and/or provide training opportunities for local meat-cutters to improve their skills;
    - Further capacity building was identified by Aboriginal stakeholders who participated in the consultation:
        - In order for Aboriginal people to participate in agriculture, market and product opportunities unique to the Aboriginal community must be identified along with support for Aboriginal producers' access to them;

        - Awareness and knowledge of the available programs and services is required to enable First Nation communities and Aboriginal people to understand the assistance available to support agriculture planning, start-up and operations;
            - The RAIN could potentially assist First Nations by offering services that assist with completing applications, and ensuring program language is clear and free of jargon.
        - A better understanding of Aboriginal community development is also needed in order to engage Aboriginal people in agriculture. Any development needs to reflect the overall community needs, and affect cultural, social and environmental interests not just an economic interest;
        - There is also a need for Band leadership to encourage agriculture within their community and incorporate it into land use plans and management.
    - For the Mennonite and Amish communities as well as for other farmers that have difficulties in accessing information, additional on-farm support for pest and disease management was identified as critical in sustaining some of these farms:
        - Having on-farm assistance with soil testing, disease and pest identification and management would result in greater communication between producers/suppliers of pests and diseases threatening the area, and increased protection against pests and disease resulting in fewer losses to yields.
- Access to information in a variety of forms (i.e. print, web, face-to-face) and on a timely basis, was also determined as being a necessary component to foster innovation and bring best practices into the region.
- Farmers and agriculture support organizations have expressed that increased efforts to improve public awareness of local food production as well as better connection of local food networks is needed to take advantage of an increasing 'buy local' mentality;
    - Stakeholders have indicated that value added opportunities exist (such as for goat meat, milk and cheese) but they need to be networked with local food and agri-product initiatives to improve market access and public awareness;
    - More initiatives that focus on agri-tourism as a means to market products are also needed;
    - Stakeholders have also expressed that consumers and policy makers need to be more aware of the health and environmental benefits of sourcing food locally rather than transporting it from other areas in Ontario and Canada;
    - Specific marketing strategies should also be developed to distinguish Aboriginal products (such as NTFPs) and promote them to the proper consumer markets.

- Stakeholders felt that improvements to local agriculture requires an approach that is community driven yet flexible for the scale of agriculture deemed appropriate, supporting both large and small producers.
- Farmers also communicated that support is needed to protect agriculture land in Algoma from foreign ownership and conversion to non-farm uses (such as what is happening to farmland in Southern Ontario).
- While initiatives are currently underway, many agricultural stakeholders feel that a greater presence is needed to network the existing activities and share this knowledge with the greater agriculture community.

In sum, the prefeasibility consultations confirmed a sufficient interest and support, in principle, of the development of a networking entity in Algoma, and potentially in other farming jurisdictions in Northern Ontario. Participants in the consultation process agreed that the types of programs and supports that could be leveraged as a result of developing a local agriculture network would help agriculture in Algoma to reach its full potential without leaving anyone behind. Among the goals that were expressed was a desire to match services, supports and programs to those that need them in the most expedient and efficient manner possible. Algoma RAIN activities that have been identified as being beneficial include initiatives focused on research and development, business development, networking and marketing, public outreach and communications, data collection and sharing, and facilitating access to other supports and service providers on both the agriculture and business spectrums.

## Discussion: Turning a Regional Disadvantage into a Regional Collaborative Advantage

It is important that the stakeholders consider the experience of and research undertaken by other jurisdictions with respect to agriculture, collaboration and networking. There is a growing base of research that is available to decision makers and their stakeholders that can be referred to in order to identify options, benefits, best practices and potential challenges and obstacles in this type of approach.

According to a report by the Metcalf Foundation (2010)[10] agriculture can have a variety of implications on the social, cultural, environmental and economic problems that Ontarians face. Agriculture is very multi-functional in that its activity produces not only products (food, feed, fuel, medicinal products), but also non-food outputs such as employment, environmental services, landscape amenities, and cultural heritage. Local food production and distribution can be a major asset to rural communities as it lowers the cost of food, fosters healthy eating practices, and reduces dependency on outside food sources. A successfully implemented regionally based system has the potential to reduce economic inefficiencies, environmental pollution and waste, create more jobs and community capacity, and retain the positive benefits

[10] Metcalf Food Solutions. Menu 2020: Ten Good Food Ideas for Ontario. June 2010.

of economic activity in the participating communities[11]. In addition, there are many benefits to eating locally and paying farmers directly for the real costs they incur to grow food. Buying directly from farmers keeps the dollars locally and makes it possible for consumers to have a say in the kind of farm practises they want to support.

However, in many cases (and not unlike the circumstances in Algoma) the role that food and agriculture play in strengthening rural communities, improving human health, and contributing to sustainable social, environmental, and economic development is often not fully valued[12]. Indeed increasing food choices and access to food can be one way that agriculture producers can take the lead in strengthening the region, however in a society where the value chain that connects farmers to consumers is incomplete, using agriculture as a tool for societal change can be a challenging task.

The Metcalf report provides some insight into the causes of the imbalance of the food chain[13]. They state that this imbalance is caused by a number of reasons including:

- A greater proportion of the food dollar that consumers spend is going to those in the middle of the chain — mostly large-scale processors and distributors — and is not reaching the original producers of food;
- Ontario's agriculture policy is skewed towards large-scale production and exporting food, not producing food for local consumption;
- The fastest-growing local markets are underserviced such as markets for products from local and organic or sustainable producers, as well as processed food created by small and medium-sized enterprises. These businesses represent potential jobs and other economic opportunities that are not being realize.

This research reflects the challenges currently facing Algoma where ongoing efforts exist to penetrate local food markets and bring new vitality to agriculture in the region through innovation and value added production. From the stakeholder consultations it can be inferred that in Algoma the imbalance of the food chain stems from a lack of infrastructure and research capacity, consumer spending habits that do not support local producers and a government that favours the outputs of larger producers and research centres. However, what can be taken from the Metcalf report is that this balance can be rebuilt through collaboration at every level and aspect of the food economy: from policy to legislation to marketing to agricultural training and support.

The idea of collaboration as a mechanism for economic development and innovation is explored in a report by the United States Council on Competitiveness: "Collaborate. Leading Regional Innovation Clusters"[14].The research in this report demonstrates that the key to creating collaboration is effective regional leadership that can turn a regional competitive disadvantage

[11] Metcalf Food Solutions. Menu 2020: Ten Good Food Ideas for Ontario. June 2010.
[12] Ibid.
[13] Ibid.
[14] United States Council on Competitiveness. Collaborate. Leading Regional Innovation Clusters. 2010.

into a regional collaborative advantage. It describes the concept of developing more agile organizations that have the ability to respond to market opportunities. Much like in the agriculture industry of Algoma, businesses and organizations need to build the capacity to respond quickly and completely to market opportunities. This requires both an economic support system and the flexibility to create partnerships based on available supports, resources and initiatives already existing in the area. For Algoma, developing a new agriculture-based economic system requires more collaboration and a holistic approach to maintaining the future sustainability of agriculture in the region.

The United States Council on Competitiveness report cites several critical components necessary for creating collaboration within an industry. Collaboration means being able to draw separate organizations, groups, institutions and individuals into productive dialogue and effective action in order to grow and innovate. Collaboration requires leveraging assets such as existing partnerships that tie companies to professional service providers and to universities and researchers that are linked in turn to sources of capital in the region. Collaboration also requires community support and spirit. Building regional awareness through celebrations of regional successes, articles and studies about the region published in local media, citizen forums, visioning sessions and the active promotion of local projects and organizations by elected officials.

Networks as a form of collaboration bring together all the elements that successful economies need – people with the right talent, training and attitudes, access to programs that provide strategic support and policies that allow growth to happen. When people are given opportunities to develop their skills, when they have access to sufficient infrastructure and research support, they are better positioned to create and take advantage of competitive business environments. This is a key component to building and diversifying rural economies[15]. Communities that are successful in leveraging these components attract and retain investment and provide a range of employment opportunities and a higher quality of life. These, in turn, attract new residents with new skills.

The Algoma Rural Agriculture Innovation Network serves to develop the components necessary for successful collaboration. The Algoma RAINs success will be measured by its ability to maximize local human, capital and natural resources to create and sustain change within the agriculture industry. New opportunities are created when people work together for the benefit of their communities; for Algoma, these opportunities will be created through collaboration across all sectors, groups and industries that are affected by the region's ability to sustainably produce food and agri-based products.

[15] United States Council on Competitiveness. Collaborate. Leading Regional Innovation Clusters. 2010.

## Conclusions

There is a growing sentiment among agricultural stakeholders that Northern Ontario requires a comprehensive made in the north strategy in order to be able to compete on an equal footing with other regions in the province or the Country. The SSMIC and its partners believe that this strategy could potentially take shape as a network of RAINs across Northern Ontario.

The stakeholder consultation that has occurred to date supports moving forward with implementation of a 3-year pilot project in Algoma to investigate the RAIN concept as a foundation for a 'made in the north' strategy for agriculture. The benefit of creating a regional network such as an Algoma RAIN is that it acts as a facilitator between agriculture producers, the government and other agricultural agencies to coordinate information flow and respond to the industry's needs. The stakeholder consultation process has further revealed that:

- The participants indicated some awareness of the Provincial policy direction of developing a Northern Grown Strategy, although it appears that the full implications of the strategy on agriculture or its implementation path are not clearly defined.
- There is clearly a comfort level within the agriculture community to work together to address common concerns and opportunities. This will likely facilitate the entry of others who wish to collaborate on projects and/or expand their service delivery to include agriculture-based programming.
- The participants believe that past and current collaborative efforts on the delivery of programs and services have been successful, yielding benefits to the agriculture community of Algoma; however, these efforts need to be better networked with other initiatives in order to maximize their impact.
- Stakeholder organizations are particularly concerned with the potential for overlap and duplication of roles and accountabilities between their staff and the Algoma RAIN, however this process and the resulting terms of reference provides an opportunity for them to better understand the roles and capacities of the proposed network.
    - Further, farmers and agri-related business owners emphasized that future implementation of an Algoma RAIN will need to clearly demonstrate the resulting benefits to the agriculture community.
- SSMIC has clearly developed a strong, positive working relationship the NORDIK Institute, OMAFRA and other agriculture support organizations in Algoma. This suggests that SSMIC is an appropriate agency to act as a lead in implementing the Algoma RAIN Pilot project.

Once implemented the RAIN can position itself as a mechanism for change in the agriculture industry; a project that can have implications for agriculture far beyond the geographical boundaries of Algoma. While the support for the Algoma RAIN pilot exists within the agriculture community, in order to be fully successful, the Algoma RAIN requires an openness on the part of people to new ways of thinking and doing that bring about improvements, whether to an

individual business, an industry, government, the economy or society as a whole. Change may not come easy, but the leadership within each of the participating organizations have clearly built mutual respect and trust which provides an excellent opportunity to maintain and build on the momentum for collaboration that is already in place.

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