



— AUG 2021 —

THE **AGRI**DIVERSITY PILOT PROJECT

Report on Findings Related to Best Practices &
Investment Opportunities for Indigenous Women



NATIVE WOMEN'S
ASSOCIATION OF CANADA

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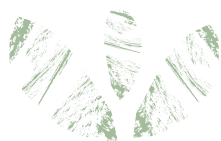
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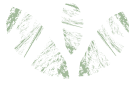
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THE AGRIDIVERSITY PILOT PROJECT

Report on Findings Related to Best Practices and Investment Opportunities for Indigenous Women



Introduction

With funding from Agriculture and Agri-food Canada, the Native Women's Association of Canada (NWAC) undertook a pilot project on participation in the agricultural and agri-food sector by Indigenous women, Two-Spirit, and gender-diverse people. A national survey was conducted to help identify their involvement in the sector by geographical region, as well as to highlight best practices—with the intention to inspire, motivate, and encourage broader participation in agricultural practice using Indigenous knowledge.

Goal

THE GOAL OF THIS PROJECT WAS TO IDENTIFY THE MAJOR SUB-GROUPS OF INDIGENOUS FOOD SYSTEMS TO REVEAL:

- more specific needs of women depending on which Indigenous food system they participate in;
- how communities are combining, adopting, or preserving traditional food production and distribution methods (for example, hunting, sharing, trading); and,
- newer agri-food methods (for example, industrial farming, greenhouses, export markets, grocery stores).

Introduction (continued)

Since living off the land depends much more on geography than identity, this distinctions-based approach will be organized by geographic zones.

Overall, this pilot project has helped to build awareness of the importance of Indigenous women in agriculture across Canada, the role of women in harvesting and processing a few major agri-products from the region, and their regionally specific barriers, needs, and opportunities for improving their food security and generating income through their agri-food activities.

During this time of a global pandemic, there has been a shortage of seeds, specifically heirloom varieties. This project has created a foundation of knowledge for the process of seed harvesting as well as new opportunities for potential economic development, including seed sharing and how to prepare them to ensure viability for the marketplace. Through engagement sessions involving Indigenous women, Two-Spirit, and gender-diverse people from across the country, NWAC has gathered a wealth of knowledge on gardening in general, best practices, heirloom seeds, gardening spaces, Indigenous plants and medicines, and food sovereignty (access to fresh produce for individual households and communities).

Specific achievements that have come out of this pilot project include:

- new partnerships across Canada (for example, NWAC–Clearwater Farm)
- a new branch of jobs in the sector, known as agripreneurs, who learn about Indigenous plants as foods and how to garden to achieve positive results while being employed
- a new Indigenous organization that is helping community gardeners engaged in growing food for the community—thus, promoting food sovereignty

Furthermore, with the guidance and engagement of videographers, graphic designers, marketing people, Elders, horticulture experts, and Knowledge Holders, NWAC has both promoted and developed educational materials that focus on the important role of agriculture in the economy. By describing best practices, the goal is to highlight areas of opportunity for investment and support for Indigenous women's participation in the agricultural and agri-food sector in their respective regions of the country.

This pilot project is just the beginning. Through engagement and new, inclusive partnerships, NWAC will help to increase educational opportunities and employment in this promising sector.

NATIONAL SURVEY

Rollout and Findings

NWAC created and rolled out a national survey to help identify major geographic zones where Indigenous people are living off the land in similar ways (for example, coastal fishing, inland hunting and trapping, southern crop harvesting). The survey also identified notable regional features and products.

Additionally, through the survey, we were able to engage with local Knowledge Keepers, Elders, and food organizations.

The information gleaned from the survey and the local contacts we made proved extremely useful and beneficial when it came time to roll out local engagement sessions.

SURVEY DETAILS:

The 20-question online survey was designed and tested to ensure participation from only Indigenous women and gender-diverse people (refer to Annex 1).

We released the survey on March 19, 2020, and ran the survey for three months. The survey was promoted through our social media channels and platforms, with the following results (as of March 31, 2020):

Facebook and Twitter advertisements—**141,797 impressions**

Direct emails—**13**

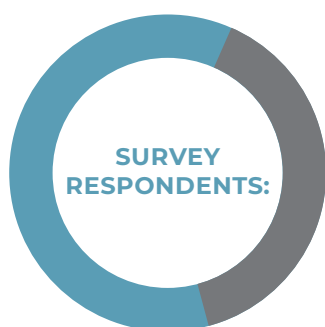
Direct mailing of print survey—**80**

Facebook and Twitter posts—**1,000 impressions** (with 8,000 individuals reached through each medium)

Facebook: **79,601 impressions; 49,425 reach; 1,125 unique clicks**

Twitter: **62,196 impressions; 311 link clicks**

First Nations women and gender-diverse people comprised the largest percentage of respondents:



● **66%**
living off reserve

● **45%**
between the ages of
50 and 64 years

BY MARCH 31, 2020,

we had received 451 eligible submissions—indicating a highly successful campaign that generated far more than the 150 responses we had pegged to receive.



SURVEY RESPONDENTS

01

GENDER IDENTIFICATION

OF THE RESPONDENTS:

- **96.62%** identified as female
- **6.38%** identified as LGBTQ
- **0.21%** identified as male
- **2.75%** identified as Two-Spirit
- **0.42%** identified as other

02

AGE

OF THE RESPONDENTS,
MOST WERE BETWEEN THE
AGES OF 50 TO 64:

- **0.22%** were under the age of 18
- **6.36%** were 18 to 29
- **37.5 %** were 30 to 49
- **44.74%** were 50 to 64
- **11.18%** were 65 or older

03

PROVINCE/TERRITORY

WE RECEIVED RESPONSES
FROM ACROSS CANADA,
EXCEPT FOR MANITOBA. THE
MAJORITY OF RESPONDENTS
RESIDE IN ONTARIO,
FOLLOWED BY BRITISH
COLUMBIA AND ALBERTA:

- British Columbia **20.62%**
- Alberta **14.69%**
- Saskatchewan **12.56%**
- Manitoba (no respondents)
- Ontario **30.33%**
- Quebec **6.87%**
- New Brunswick **2.61%**
- Nova Scotia **4.74%**
- Prince Edward Island **1.18%**
- Newfoundland and Labrador **1.66%**
- Yukon **1.9%**
- Northwest Territories **2.13%**
- Nunavut **0.71%**

04

INDIGENOUS STATUS

ALMOST 2 OUT OF 3 RESPONDENTS LIVE OFF RESERVE:

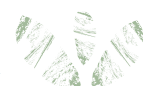
- On reserve **34.15%**
- Off reserve **65.85%**

05

EMPLOYMENT STATUS

CLOSE TO 2 OUT OF 3 RESPONDENTS ARE EMPLOYED:

- Employed **64.56%**
- Unemployed **35.44%**

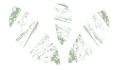


SURVEY RESULTS:

Overall, survey results revealed that many engage in gathering foods (berries/medicines), fishing, hunting, and growing plants. Participants expressed a desire to learn how to harvest food and medicines, growing food (gardening), community sharing and traditional harvesting, and want access to the teachings of Elders and Knowledge Holders.

"The area is too urban; difficult to get to harvesting, pollution from vehicles on berries; not enough harvesting to be able to trade or sell; not enough knowledge of harvesting practices. Also I don't know how to garden to harvest and grow my own food in a sustainable way."

"I WANT TO GROW AND PRESERVE FOOD BUT I DON'T KNOW HOW."

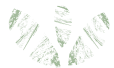


1) Examples of “living off the land”:

The majority of respondents live off the land by fishing, gathering plant foods, hunting, and growing plants foods. Specifically, in order:

- Fishing 63.56%
- Gathering plant foods (foraging) 63.11%
- Hunting 61.33%
- Growing plant foods (on farms or in gardens) 60%
- Trapping 26.22%
- Farming animals 15.78%
- Other 10.22%

Sixty-two respondents (13.78%) do not live off the land. However, their participation in the survey suggests an interest in doing so.

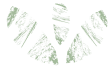


2) Types of agricultural activities:

Agricultural and agri-food activities cover a wide range of activities, such as:

- Gathering traditional medicines (tobacco, herbs, sage)
- Hunting wild meat (moose, elk, deer, bear, goose, caribou, partridge, grouse, beaver, duck)
- Gathering berries (huckleberry, gooseberry, blueberry, soap berry)
- Engaging in beekeeping
- Fishing, canning, and/or smoking the meat (crab, trout, salmon, lake trout, char)
- Snaring rabbit
- Harvesting wild rice
- Growing vegetables and herbs
- Foraging (fiddleheads, traditional medicines such as burdock and cedar, berries, muskrat root, plantains, dandelion leaves, mushrooms tree fungus, chaga, tree bark, nettle, leeks, puffballs)

“I am in school right now to learn how to open a greenhouse. I’m upgrading to get into commerce. I need mentorship and learning resources and possible partnerships.”

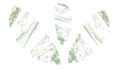


Ron was taught through stories his grandfather told him and he shared the following teaching:

Our people became very sick and wasteful and were not respectful of food or the medicines that grow. Children, women, and elders were dying. An old man who was ill and lived by himself in his wigwam was visited by a tiny old man who knew about this lack of respect and told him that he would save his people if the old man followed him. With difficulty, the old man followed the tiny old man to a swamp where he began to dig for medicine to save the people. The leaves of the root were 3 feet tall, and the tiny man explained that he must wait for the leaves to fall. When the old man asked how he'd know what the medicine looked like, the tiny man showed himself, as he was shaped exactly like the root of the medicine. He said, "My name is Kiwhosuwask" which means muskrat root. The old man began to dig to take the medicine back to the village where he dried it for people to put in tea or use raw. Everyone was thankful.

To this day, the main medicine is the muskrat root, and it is always picked in the fall. Ron's grandfather chewed muskrat root every day of his life, despite having no teeth in older age. His friend has told him that all the plants in the forest are medicine, but they have to be used in the right way.

RON TREMBLAY, GRAND CHIEF OF THE WOLASTOQ NATION

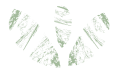


3) Outcomes of the harvest:

Approximately half of the respondents (51.09%) indicate they barter and/or trade for goods. The majority of respondents share their harvest with members of their community:

- Share 81.23%
- Do not share 18.77%

Almost everyone who took part in the survey eats food from the land (99.08%), indicating the importance of agricultural activities in their day-to-day lives.



4) Role of women:

The survey results underscore the important role that Indigenous women have played, and continue to play, in food gathering, harvesting, and preserving.

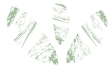
Responses:

- “keepers of medicine and knowing when and where to harvest”
- “help harvest game [and] teach our children on how to harvest, what plants are good to eat, and what plants can be used as medicines”
- “we are the natural leaders to show by example how important it is to return to food self-sufficiency”
- “play a critical role encouraging the people and our children to live off the land”
- “actively involved in harvest, preservation, and sharing”
- “I am the only woman [in my community of 5 doing this] ... planting fruit trees, expanding gardens, and working towards permaculture planting”

Other responses indicate that the traditional knowledge and agricultural practices are dying out due to lack of knowledge and/or difficulty in living off the land if you're alone:

- “we take care of the land, but it is dying out because we do not have a lot of resources”
- I am trying to inform my community about the importance of food sovereignty; we have become too dependent on an imported food system that is making us sick”
- “it is extremely difficult to live off the land alone; you need a community to harvest plant foods”

“I would like to have an organic market that only sells what it grows.”

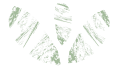


"My gardening experience started as a child with my family. Along with growing food, I hunted, fished, and gathered wild edibles with my family. My mother and Auntie taught me how to preserve, freeze, and dry all of the foods the family grew and gathered.

In 1976 I bought land to start a farm and grew fruits, berries, and vegetables for my family and to sell. I started keeping honeybees at this time also.

I now live in Eel River Bar, New Brunswick with my husband Earl LaBillois. We work together growing vegetables, gathering berries, fishing, and hunting to provide most of what we eat. I encourage people to understand the plants and animals they share this land with, and I enjoy teaching others about the relationship they can have with them and how to receive their teachings."

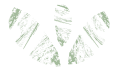
KAREN THURLOW



5) Food as a business:

NWAC asked in the survey how many were engaged in a food-related business (restaurant, grocery store, farming, for example). Less than one fifth (15.11%) were engaged in such an activity. Of those who don't, there was interest expressed in doing so. Impediments included not having resources; no knowledge of how to get started; lack of finances and time.

About a third of respondents (36.63%) have tried non-traditional ways (for example, greenhouses) to harvest food. Those who would like to start a greenhouse cited a lack of finances, knowledge, tools, and equipment as barriers to doing so.



6) Interest in eating more food from the land:

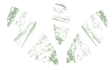
Almost every respondent (97.69%) wants to eat more food from the land. A few indicated having received a federal grant for ethnobotany training.

There is an appetite in Indigenous communities to sell or trade more food from the land, with 60.35% expressing an interest.

Again, major impediments were lack of resources (land, money, transportation), time, and insufficient knowledge (harvesting capability) on how to begin. Restrictions on hunting and fishing, land contamination, and land availability were cited as barriers for many respondents.

These findings were used to inform the topics, themes, and presentations for our community engagement sessions on agricultural practice and Indigenous women's knowledge.

"Many women are primary hunters, fishers, and medicine gatherers. I know there is also an effort from women leaders to establish a community garden in my community."



"In the beginning there was not many volunteers or community helping in the garden, and it could have been because it was on a slope. We moved the garden off of the slope so Elders and grandparents could participate. We added new soil and compost to the garden and progressed from a gravel lot to flourishing gardens.

With the shorter season we have begun building a greenhouse and using recycled materials. There's a black wall on the north side to absorb the heat from the earth and windows on the south side to receive the light and heat from the sun. I would like to learn more about how to do this, so it is economical and sustainable. I purchased repurposed building materials and will be working on this in the spring as it gets warmer."

JUDY GOOGOO BERNARD

ENGAGEMENT SESSIONS ROLLOUT AND FINDINGS

NWAC held engagement sessions and workshops, beginning in May 2020, with 25 First Nations communities (urban and rural) from across Turtle Island (Ongewehongwe, Anishinaabe, Algonquin, Wabanaking) who are interested in or currently engaged in Indigenous food sovereignty and seed sharing practices.

Outreach across Turtle Island included Ontario, the Northern U.S. (Great Lakes region), Eastern U.S. (New England), and Maritime provinces.

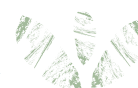
To date, over 150 participants took part in the sessions, which were offered online through the Zoom platform. Most of the engagement sessions had well over 20 participants. The sessions held on March 11, 2021, (topic was traditional medicines and foods) drew well over 100 participants.

We also held weekly meetings with Knowledge Keepers and Elders.

DETAILS ON SESSIONS:

In addition to a session on NWAC and project highlights, the topics included:

- Urban Gardener
- Two Worldviews
- Beginner Gardener
- Cedar Harvesting (Mashkikiwaboo—YouTube)
- Composting
- Glyphosate and Soils
- Transplanting Indigenous Squash (Gete Okosomin—YouTube)
- Companion Planting
- Be the Medicine (Mashkikimin—YouTube)



ENGAGEMENT SESSIONS ROLLOUT AND FINDINGS (CONT.)

In addition to the knowledge of Elders and the Knowledge Keepers, the sessions were informed by many available resources listed in Annex 2.

The sessions were promoted and marketed through our social media channels and platforms, with the following results (as of March 31, 2020):

FACEBOOK AND TWITTER POSTS

**80,000 IMPRESSIONS (WITH 50,000 INDIVIDUALS REACHED),
AND 1,500 UNIQUE CLICKS**

A website called Gitigan was rebranded as “Indigenous Women in Agriculture” and turned into an open format site to encourage an even larger reach by year-end.

Session dates were as follows:

- | | |
|----------------------|---------------------|
| • May 23, 2020 | • November 30, 2020 |
| • June 21, 2020 | • March 11, 2021 |
| • August 6, 2020 | • March 22, 2021 |
| • September 22, 2020 | |

“The first year we planted right on the ground and bought all our plants to be transplanted. The ground was kind of slanted and our garden was better at one end, then it was at the other end. We had water (flooding) issues. Eventually we learned to build our raised beds and build up our soil. We ordered topsoil and added compost made from manure and a seafood compost mixture.

We harvest in the fall, around September. Some things are earlier than others. The things I grow from seeds are carrots, lettuce, cucumbers, zucchini, yellow and green beans, beets, green peppers, hot peppers, and broccoli. I start my seedlings in early March. I usually put a few herbs in around the edge of my garden. They are planted in shallow soil, or else they will grow too large.

I place a fan to blow air onto the plants that will help them to grow sturdy stems, and I set them outside to climatize them for about a week before transplanting into the garden. I have never encountered any problems with pollination. I do plant wildflowers and several bushes especially for the bees and butterflies in my yard.

At harvest time my partner makes salsa, chow-chow, pickles, preserves, and other good things from our garden, and I give away to community members what we don’t use ourselves.”

- TANYA, WHO LEARNED TO GARDEN FROM HER GRAMPY

ENGAGEMENT SESSIONS ROLLOUT AND FINDINGS (CONT.)

Best practices learned from each session included the following (not an exhaustive list):

May 23, 2020

URBAN BACKYARD GARDENER

- Build up soil using compost made from manure and a seafood compost mixture (don't use dog, cat, or human manure)
- Ground up egg shells and put in the soil to feed the plants, along with liquid fish fertilizer every 2 weeks

BEGINNERS GUIDE TO GARDENING

- Know your area's hardiness zone and keep a garden calendar to record frost dates
- Don't put broccoli, tomatoes, or cucumbers in same spot every year as these need more nutrients
- Raised garden beds can accommodate plants closer together

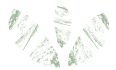
PREPARATION OF CEDAR

- Keep only the green part
- Boil for 12 minutes to give you a tea of a nice golden colour

June 21, 2020

COMPOSTING

- Alter brown and green layers to help materials break down (25 parts brown to 1 part green)
- Let manure age in the compost heap until next year



ENGAGEMENT SESSIONS ROLLOUT AND FINDINGS (CONT.)

August 6, 2020

MULCHING

- Makes a big difference for aeration, encouraging worms to populate the soil
 - Suppresses weeds, keeps roots cool, helps prevent rot on long-growing vegetables
 - Work organic mulch into the soil at the beginning of the new growing season to enrich the bed
 - Extend the growing season by covering your beds with plastic
-

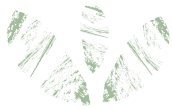
September 22, 2020

HOW DOES YOUR GARDEN GROW?

- Water carrots, beets, corn, and potato plants frequently
- Use a “tea” to nurture tomato plants: soak banana peels in water for 3 days outside and then pour on tomatoes

“I had just taken part in a beautiful ceremony that was hopeful, with a promise of good things to come. I am very pleased with my garden boxes and have found creative ways of seeding. I have a few varieties of heirloom corn that can handle the rocky soil better. It has been challenging to build up soil during lockdown but I was able to get some help with this.”

- MIIGAM’AGAN FROM ESGENOÔPETITJ



CONCLUSION: OVERALL FINDINGS

A MAJOR BARRIER FOR INDIGENOUS PARTICIPATION IN OR DISCUSSION OF AGRICULTURE IS SIMPLY THE TERM: THEY MOSTLY ASSOCIATE THE TERM 'AGRICULTURE' AS WESTERN INDUSTRIAL FARMING, WHICH IS NOT SEEN POSITIVELY, AND IT TENDS TO SHUT DOWN DISCUSSION RATHER THAN OPEN IT UP.

Forcing Indigenous people into farming, away from their traditional food harvesting, was a major part of the colonialism and Canada's genocidal project to 'civilize the Indian.' Only a few First Nations in Canada practise crop farming traditionally, and mainly only those in the Prairies have adopted Industrial-style agriculture.

But this does not mean that Indigenous people are not active in agri-foods. On the contrary, they are highly active in and enthusiastic about their traditional food harvesting activities, including hunting, trapping, fishing, wild plant harvesting, and community gardens (where weather permits). Even when not putting crops in a field or animals in cages, Indigenous communities traditionally do many things to actively support the propagation of the species they rely on for food. We have found that the phrases 'living off the land' or 'food from the land' are much more successful at opening conversations about food harvesting with Indigenous communities, and that conversation is very enthusiastically positive.

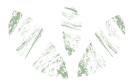
Indigenous women overwhelmingly want to eat more food from the land and increase their harvesting activities. Indigenous women living in cities are eager to be able to acquire traditional foods while away from home. They do not need to be convinced of its value.

Instead it is Canada that must be convinced that Indigenous food systems are a valuable form of agriculture and our food system.

This is one of the important byproducts of this pilot project—highlighting this fact that Indigenous food systems are agriculture and are valuable to Indigenous Peoples.

This pilot project has also created awareness of the importance of Indigenous women in agriculture across Canada. Through the project, we have helped to launch an Indigenous organization assisting community gardeners engaged in growing food for the community. We have promoted partnerships (Clearwater Farm and Ontario Water Corporation to plant and harvest Indigenous squash seeds. These seeds will be shared with participants and gardeners enrolled in the AgriDiversity Program at NWAC.

The project has led to the creation of a new branch of jobs in agriculture (agripreneurs), who learn about farming and agriculture while being employed; about Indigenous plants as foods; and the types of gardens that generate successful results. It is important to create full-time positions for agriculture programs and establish partnerships with organizations across Canada.



CONCLUSION: OVERALL FINDINGS (CONT.)

HERE IS A QUOTE FROM ONE OF THE AGRIPRENEURS WHO ALSO LEARNED HOW TO BUILD A PERMACULTURE GARDEN:

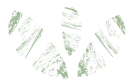
"Last season was my first time ever growing squash so it was an honour and intimidating to be growing such valuable seeds without the know-how ... The project greatly enhanced my knowledge of growing squash! But what has struck me most is the feeling of deepening connection to the land, the importance of food sovereignty and of saving your own seeds."

IN ADDITION, THIS PILOT PROJECT HAS CONTRIBUTED TO THE:

- creation of a national network of gardeners and agricultural resources
- engagement of Elders and Knowledge Holders in giving teachings on the land
- engagement of horticulture experts and intergenerational families in sharing their agricultural practices

"I think as our community builds economically, we can create greenhouses, sustainable practices in harvesting, and strengthening our traditional practices in contemporary times."

The work we have been doing is a good beginning in promoting awareness of agriculture and its role in the economy while building networks and access to information for Indigenous women, families, and communities.



CONCLUSION: PARTICULAR LEARNINGS

HOWEVER, A SIGNIFICANT WAY IN WHICH THIS PROJECT WILL BE ASSISTING INDIGENOUS WOMEN TO PARTICIPATE IN THE AGRICULTURAL SECTOR IS BY LEARNING ABOUT THEIR BARRIERS TO TRADITIONAL AND NON-TRADITIONAL FOOD PRODUCTION AND RAISING PUBLIC AWARENESS OF THE VALUE OF TRADITIONAL INDIGENOUS FOOD SYSTEMS SO THAT IT CAN BE INCORPORATED INTO CANADA'S UNDERSTANDING OF ITS AGRICULTURE INDUSTRY.

The analysis is ongoing, but two streams of advocacy are emerging:

1. A number of Indigenous food systems are vibrant, and it is Canada's focus on agri-business that makes their food systems invisible and limits policy that can enhance it in communities struggling with food insecurity.
2. Where they are eager to participate in the for-profit agribusiness, Indigenous people face significant barriers due to past and ongoing colonial policies.

INDIGENOUS women and gender-diverse people are much more active and interested in sharing and trading the food they harvest than the money-based sales and exports that Agriculture Canada promotes. It is very common for women to exchange the food they are harvesting with family, friends, nearby communities, or relatives living in a far-off city. Sharing the harvest with others, especially Elders, is incredibly important. A number of them even describe selling as violating the sacredness of food from the land.

This should not be seen as a failure. These distribution relationships are incredibly versatile and help improve the food security in remote places that lack access to the mainstream food system.

Agri-business does not need to be brought to Indigenous communities for their survival; before agri-business, Indigenous communities had vibrant trade relations among each other. Some communities are rebuilding these old trade relations by establishing trade agreements for their food products with each other.

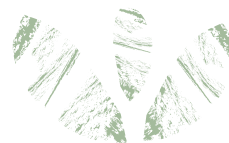
Communities need support to rebuild these food systems and find new ways to exchange with community members in cities, not simply be integrated into Canada's mainstream agri-business. These food systems can be supported not simply by supporting producers and trade relationships, but also the Knowledge Keepers who pass on the knowledge. In many communities, these are women.

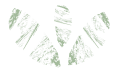
Supporting Indigenous women in their knowledge-keeping roles will be crucial to revitalizing traditional Indigenous food systems. Indigenous women are also often responsible for harvesting medicines and processing animals after the hunt. To include Indigenous women in the agriculture system will require including medicines and animal by-products. Indigenous women see all these products as part of living off the land.

Indigenous communities are not all the same, and limitations to agri-business are not only cultural. Some communities are eager to establish personal or community-owned businesses to help bring money to the community or are excited to have

established one. But given colonization, the lack of access to land, capital for investments, transportation infrastructure, and so on severely limits their ability to establish industrial or export facilities.

Furthermore, many hunters, trappers, and fishers have had their harvesting lands disrupted or are not able to sell their products in the for-profit businesses promoted by Agriculture Canada due the fundamentally different legal situation of Indigenous people from other food producers. Many harvesting rights in treaty and land claim agreements across the country include only subsistence harvesting, not for-profit sale. Many Indigenous people living on Indigenous land are not legally allowed to harvest for profit.





AGRICULTURE SURVEY

WELCOME MESSAGE:

The purpose of this survey is to learn more about Indigenous women's and gender diverse peoples' experiences living off the land. Your responses will be kept confidential, and you can skip any question. Thank you for your help.

ALL:

1) What is your Indigenous identity?

- a) First Nations: Status
 - i) What is your Nation? [open ended]
- b) First Nations: Non- Status
 - i) What is your Nation? [open ended]
- c) Métis
- d) Inuit
- e) I am not Indigenous (not eligible to participate in the survey)

2) Gender identity:

- a) Woman
- b) Man (not eligible to participate in the survey)
- c) Two Spirit
- d) Other:
 - i) please specify: [Open ended]

3) Do you identify as LGBTQ (Lesbian Gay Bisexual Trans Queer)?

- a) Yes
- b) No
- c) Other:
 - i) please specify: [Open ended]

4) How old are you?

- a) under 18
- b) 18-29
- c) 30-49
- d) 50-64
- e) 65+

5) What province or territory do you live in?

- a) Alberta
- b) British Columbia
- c) Manitoba
- d) New Brunswick
- e) Newfoundland & Labrador
- f) Nova Scotia
- g) Northwest Territories
- h) Nunavut
- i) Ontario
- j) Prince Edward Island
- k) Québec
- l) Saskatchewan
- m) Yukon

6) What city do you live in?

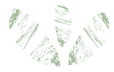
[Open ended]

7) Do you live on-reserve?

- a) Yes
- b) No

8) Are you employed or self-employed?

- a) Employed
- b) Self-employed
- b) Not employed



AGRICULTURE SURVEY

ALL:

9) How do you live off the land? (select all that apply):

- a) hunting
- b) trapping
- c) fishing
- d) farming animals
- e) gathering plant foods
- f) growing plant foods (farms or gardens)
- g) Other, please specify: [Open Ended]
- h) None: I do not live off the land [\[Skip to Q13\]](#)

FOR LIVING OFF THE LAND RESPONDENTS AT Q9 ONLY:

10) What animals or plants do you get from the land?

[Open ended]

11) How often do you do the following activities (Daily, weekly, monthly, annually, don't do this activity):

- a) hunting
- b) trapping
- c) fishing
- e) gathering plant foods

12) Do you share the food you harvest with others?

- a) Yes
- b) No

Continue to Question 13

13) Does your community share the food you harvest with each other?

- a) Yes
- b) No
- c) My community does not live off the land

14) In a normal week, how much of the food that you eat is food from the land?

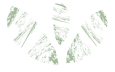
- a) None: all the food I eat is from the store
- b) less than 20%
- c) Between 20% and 40%
- d) Between 40% and 60%
- e) Between 60% and 80%
- f) More than 80%

15) Do you trade or sell food from the land?

- a) Yes
 - i) How? [Open ended]
- b) No
 - i) Why not? [Open ended]

16) Do you own or operate any kind of food business? (ex: restaurant, grocery store, preserving, hunting, trapping, fishing, preserving, farming, etc.)

- a) Yes.
 - i) What is it? [Open ended]
- b) No.
 - ii) Do you want to? [Open Ended]



AGRICULTURE SURVEY

ALL:

17) Has your community tried non-traditional ways to harvest food (ex: greenhouses, chemical sprays, machinery, etc.)?

- a) Yes.
 - i) What have you tried? [Open ended]
- b) No.
 - ii) Do you want to? What is stopping you? [Open ended]

18) Do you want to eat more food from the land?

- b) Yes.
 - i) What is stopping you? [Open Ended]
- a) No.
 - i) Why not? [Open ended]

19) Do you want to sell or trade more food from the land?

- a) Yes.
 - i) What is stopping you? [Open Ended]
- b) No.
 - i) Why not? [Open ended]

20) Do you know any Elders, Knowledge Keepers, or organizations who could help us learn more about living off the land in your region?

- a) Yes,
 - i) Please list it below [Open Ended]
- b) No

21) What do women and gender diverse people in your community need to live off the land more?

[Open Ended]

END OF SURVEY MESSAGE:

Thank you for your input.

Can we contact you for the second part of this survey?

- a) Yes
 - i) please provide us your email [open ended]
- b) No, thank you



FOOD SOVEREIGNTY

La Via Campesina: History and development of the concept of food sovereignty as it was introduced at the World Food Summit in 1996.

Ojibiikaan: Ontario-based community project working to address Indigenous food sovereignty with traditional practices and knowledge.

National Farmers Union: Canada-wide farmer's union focused on empowering family farming with specific mandates on food sovereignty.

What Indigenous Farmers Taught Me About Building Seed and Food Sovereignty: Speech by Susan Walsh at the Organic Seed Growers Conference.

NAFSA (Native American Food Sovereignty Alliance): Group focusing on advocacy, education, and networking in Indigenous food systems.



FOOD SECURITY

Household Food Insecurity in Canada: Statistics relating to food security across Canada in the last few decades and how it relates to and impacts the material and physical/mental status of Canadians.

Food insecurity during the COVID-19 pandemic, May 2020: Study on the impact of COVID-19 on food security in Canadian households. Webinar version

Atlantic First Nations building geothermal greenhouses to address food insecurity: Article in Halifax Today.

Inuvik Community Greenhouse: Community gardening in northern climates used to help address food security.

Sundance Harvest Farm: Small urban farming in Toronto focusing on education with mentorships for BIPOC, LGBTQ2S, and youth with disabilities.



SEED SAVING, EXCHANGES, AND PRODUCERS NETWORKS

Ancient Seeds: Elder Shelley Charles entrusts thousand-year-old Gete Okosomin seeds to young farmers/earthkeepers at ClearWater Farm, Willow Beach, Georgina. A story of hope and anticipation.

Foodtank Podcast: Rowen White Talks Indigenous Seed Sovereignty: Interview with Rowen White, founder and director of Sierra Seeds.



SEED SAVING, EXCHANGES, AND PRODUCERS NETWORKS (CONT.)

Sierra Seeds Indigenous Seedkeepers Network: In conjunction with NAFSA, helping to build and network seed sharing across Turtle Island.

Seeds of Diversity: Canadian non-profit organization dedicated to the conservation of agricultural and horticultural biodiversity through rare and endangered seed banking, sharing, and sourcing. Maintains a network and online forum for Canadian seed sharing resources and education.

Grassroots Seed Network: Democratic seed sharing and preservation organization.

Carolina Gold Rice Foundation: Advances the sustainable restoration and preservation of endangered and heirloom grains and raises public awareness of the importance of historic ricelands and heirloom agriculture.

Community Seed Network: Network and online forum for Canadian seed sharing resources and education.

Toronto Seed Library: Resources about Toronto regional seed libraries and sharing networks; includes resources on how to join or start your own branch.

Alderville Black Oak Savannah: Source for Ontario native plants, and advice on Indigenous gardening and restoration practices by Alderville First Nation. Focus is on Rice Lake Plains species, including tallgrass prairie, wild rice aquatic ecosystems, and other local Indigenous species.

Baker Creek Heirloom Seed: Rare seed retailer and publisher of the popular and informative annual Whole Seed Catalog. Works with rare edible plant growers to procure and distribute seed and propagules, including support for and donations to non-profits, communities, and educational groups working toward sustainable gardening and food security in the U.S. and around the globe.

Bass Lake Seeds: Ontario farm that offers CSA, seed sharing, farmer's market, and seed sales.

Annapolis Seeds: Rare and heirloom open-pollinated seed suppliers sourced from and for the Atlantic Canadian region.

Eagle Ridge Seeds: Salt Spring Island grower and supplier of endangered heirloom seeds, including beans.

Dream of Wild Health: Minneapolis-based Indigenous seed sharing, medicine, and food network.

Richmond Seed Libraries: California-based network of local seed sharing, horticulture, and silviculture advocates. Many resources available for new and seasoned gardeners.

The Bauta Family Initiative on Canadian Seed Security: Initiative focused on Canada-wide seed sharing and crop diversity in partnership with Community Seed Network and Seeds of Diversity.



SEED SAVING, EXCHANGES, AND PRODUCERS NETWORKS (CONT.)

Campaign aims to help people diversify away from imported seeds: Article discussing Canadian seed imports and the importance of seed sovereignty, including how the COVID-19 pandemic has affected seed supply.

Native Seeds/SEARCH: Tucson-based seed exchange, saving, and repatriation programs in southwestern U.S.

Heirloom Vegetable Gardener's Assistant: Links to heirloom vegetable seed exchange networks, public display gardens, and historic plant information from the 19th and 20th centuries throughout North America, the U.K., and Australia.

North American Native Plant Society (NANPS): Member-based and volunteer-run organization that has been operating a large continent-wide native plant seed exchange since 1988. Runs native plant sales and provide growing information for North American species, with a mission to protect wild areas and restore lands that have been disturbed using ethically sourced Indigenous plants.

Salt Spring Seed Sanctuary: Canadian seed library, bank, and sanctuary located on the Pacific coastal Salt Spring Island. In addition to being a local seed resource, provides resources for communities to set up their own local seed banks and sanctuaries across the continent.



INDIGENOUS AGRICULTURE

Indigenous Food Systems Network: Resources for Indigenous plant knowledge, including agriculture.

Iskatewizaagegan (Shoal Lake) Plant Knowledge: An Anishinaabe (Ojibwe) ethnobotany of Northwestern Ontario.

Hopi Agriculture | Natwani Coalition | U.S.: Preservation of traditional practices in Southwest U.S.

Forum explores how to revitalize Indigenous agriculture: Article by N.C. Raine in Eagle Feather News on efforts to revitalize Indigenous agriculture.

Through the Lens of Indigenous Agriculture • Slow Food USA: Article on the importance of global Indigenous knowledge and agriculture.

Walking through the Indigenous Urban Agriculture Garden: Article showcasing urban growers in Toronto using traditional growing methods and plants.

Our Sustenance: Haudenosaunee knowledge centre on Iroquois planting and agriculture systems managed by the Six Nations Grand River community in Southern Ontario.

10 Traditional Native American Gardening Techniques | The Old Farmer's Almanac



INDIGENOUS AGRICULTURE AND CLIMATE CHANGE

The Great Laws of Nature: Indigenous Organic Agriculture Documentary: Presented by Muskoday Organic Growers Co-op, Saskatchewan.

In Mexico City, the Coronavirus Is Bringing Back Aztec-Era 'Floating Gardens': Article in Atlas Obscura

Scientists Find Strong Potential in Indigenous Agriculture Under Climate Chang: Article including link to audio on a story by Kuūwehi Hiraishi.

Dibaginjigaadeg Anishinaabe Ezhitwaad: A Tribal Climate Adaptation Menu: Great Lakes Indian Fish and Wildlife Commission 2019 guide to agriculture and land stewardship during climate change through collaboration with First Nation communities.

"G-WOW" Gikinoowizhiwe Onji Waaban (Guiding for Tomorrow) Initiative: Northern Great Lakes education program bringing Native perspectives, tribal knowledge, and involvement to bring awareness of how climate change is affecting the environment, people, cultures, and economies.

Indigenous seed banks are helping to preserve culture, boost nutrition and protect the environment: Article on Ensia.



REINTRODUCTION OF INDIGENOUS CROPS

Anishinaabe Agriculture Institute: Minnesota organization focused on repatriation of traditional Indigenous seed and regenerative and sustainable agriculture. Non-profit sister organization to Winona's Hemp run by Winona LaDuke; includes the Horse Nation Program and Tribal Hemp Initiative.

The Iroquois White Corn Project is reintroducing traditional ingredients to New York: Article by Matthew Meltzer on the efforts of Dr. John Mohawk to restore Iroquois white corn to the Seneca Nation.

The Mission Garden Project: Re-creation of historic San Agustin Mission garden in Tucson, Arizona. Features plantings and education on heirloom Sonoran Desert-adapted fruit orchards and vegetable garden plants dating to the Spanish colonial era, and Indigenous food crops cultivated in the region for thousands of years.

Secrets of the Lost Crops Revealed Where Bison Roam: Article by Talia Ogliore on ties between bison and Indigenous crops of the Tallgrass prairies, including Maygrass and Little Barley.



INDIGENOUS SOIL PREPARATION

Five Indigenous Farming Practices Enhancing Food Security: Article on global Indigenous farming techniques, including crop rotation and agroforestry.

Living with Boreal Forest Fires: Anishinaabe Perspectives on Disturbance and Collaborative Forestry Planning: Pikangikum First Nation, Northwestern Ontario, University of Manitoba PhD thesis by Andrew Martin Miller.

American Prehistory: 8000 Years of Forest Management: Quick history of Indigenous North American land management by the Forest History Society.



COMPOSTING

Tribal Composting Nourishes Land and Tradition: Issue 4 of the Tribal Waste Journal published by the U.S. Environmental Protection Agency.

Canadian Compost Council: National organization supporting composting throughout Canada.

Composting's Colonial Roots and Microbial Offshoots: Essay by Michelle Niemann on the history, methods, and principles of composting.

Sagamok Anishnawbek First Nation Composting: Composting advice from Sagamok Anishnawbek in Massey, Ontario.



COMPANION PLANTING

Companion Planting Guide & Plant List | The Old Farmer's Almanac: Guide to companion planting.

Companion Planting: Basic Concepts & Resources: List of traditional and Indigenous companion plants, techniques, and resources by the USDA's Rural Business Cooperative Service.

How to Plant Insectary Strips and Which Plants to Use: Rodale Institute quick guide by Dr. Gladis Zinati on how to include companion plants to attract beneficial insects and insect diversity to your garden.

Insectary Plants: Guide to insectary and companion planting for integrated pest management by University of California Agriculture and Natural Resources.



HISTORY OF VEGETABLES

Potagers d'antans: Discover kitchen gardening techniques and heirloom varieties of fruits, vegetables, and grains from Québec (in French).

History of Traditional Tribal Foods: From the American Indian Health & Diet Project.

Foods Indigenous to the Western Hemisphere: Lengthy list of Native food plants with links to in-depth information from the American Indian Health & Diet Project.

Vegetable history, nomenclature, and classification: Article by G. Welbaum, published by CABI/Semantic Scholar.

Heirloom Seeds Our Cultural Past: Short guide on history and uses of plants in Indigenous communities of North America.



THREE SISTERS: CORN, BEANS, AND SQUASH

How to Grow a Three Sisters Garden- Native Seeds/SEARCH: Guide to Three Sisters planting.

Three Sisters Garden: How to Plant Corn, Squash & Beans Together: Article by Brian Barth in Modern Farmer.

Appreciating The Three Sisters: Video by Jose Barreiro and Rich Brotman.

Ancient Companion Planting: The Three Sisters: Guide to Three Sisters planting from Mother Earth News.



MANDAMIN (CORN)

Growing Rare & Ancient Varieties of Heirloom Corn: Video by Shawn Woods.

Mon-Daw-Min or the Origin of Indian Corn: Ojibwe story of corn.

An Indigenous Corn Makes a Comeback: Article on the Iroquois White Corn Project.



MASHKODESIMIN (BEANS)

Growing Ancient Heirloom Native American Varieties of Beans: Video by Shawn Woods.

Heirloom Beans: Information on beans of North America by the Heritage Food Crops Research Trust.



MANOMIN (WILD RICE)

Native Wild Rice Coalition: Seeds and supplies for Manomin and ricing in North America.

Alderville Black Oak Savanna: Information on Anishinaabe wild rice recovery projects in Southern Ontario.

Wild Rice — Mahnoomin: Anishinaabe writer and historian Paula Giese's webpage on wild rice. Paula passed away in 1997 but her extensive documentation of Minnesota Ojibwe and Dakota traditions is still online.

The Taming of Wild Rice in the Great Lakes Region: Article by Kaitlin Stack Whitney in Arcadia.



OKOSIMAAN (SQUASH)

The Real Story of That Giant Squash: Separating Myth from Reality



INDIGENOUS PLANTS FOR HEALING

Teaching by the Medicine Wheel: Article by Dr Nicole Bell from Education Canada magazine.

Aboriginal traditional healing: Article on traditional healing from the Canadian Cancer society.

Traditional use of medicinal plants in the boreal forest of Canada: review and perspectives

Traditional Ojibwe Plants, Herbs, and Teas: Audio series covering many specific uses of plants for medicine and healing.



WISDOM OF THE TREES AND PLANTS

Plants Have So Much to Give Us, All We Have to Do Is Ask: Anishinaabe botanical teachings compiled, edited, and written by Wendy Geniusz of University of Minnesota, Minneapolis (2015).



INDIGENOUS PLANTS FOR HEALING (CONT.)

Plant Identification & Maintenance Guide: Guide to identification and maintenance of Gitigaan Mashkiki (medicine wheel garden).

Ojibwa Medicine: Website with teachings and resources based in Michigan.

Medicinal Plant Guide: Website list from Kay-Nah-Chi-Wah-Nung Historical Centre in Ontario.

Indigenous Plants & Native Uses in the Northeast: From NativeTech website.

An introduction to Tamarack Trees & Traditions: From NativeTech website.



NUTRITION AND PREPARATION

The Sioux Chef: A team of Anishinaabe, Mdewakanton Dakota, Navajo, Northern Cheyenne, Oglala Lakota, Wahpeton-Sisseton Dakota chefs and Indigenous food specialists are re-identifying North American cuisine and reclaiming Indigenous culinary culture. Started the non-profit North American Traditional Indigenous Food Systems: NATIFS.

American Indian Health and Diet Project: Website with lots of resources and information on health, diet, and food preparation.

Native American Foods: History, Culture, and Influence on Modern Diets: Article by Park et al. in Journal of Ethnic Foods.



BOOKS

Traditional Plant Foods of Canadian Indigenous Peoples: by Harriet V. Kuhnlein and Nancy Turner (1991)

Eating NAFTA: by Alyshia Gálvez (2018)

Straw Bale Gardens Complete: by Joel Karsten (2015)

Braiding Sweetgrass: by Robin Wall Kimmerer (2020)

Gathering Moss: A Natural and Cultural History of Mosses: by Robin Wall Kimmerer (2003)

Seed Libraries and Other Means of Keeping Seeds in the Hands of the People: by Cindy Conner (2015)