

# **Agroecology in Canada:** Food Sovereignty in Action



lational Farmers Union Jnion Nationale des Fermiers



## **Agroecology and Food Sovereignty**

""Agroecology is much more than a set of technologies; it is a political and social system, a way of life, a form of resistance against corporate control of the food system, and quite simply the best means of achieving food sovereignty."

### -Ayla Fenton, NFU Youth Vice-President

Agroecology is a holistic approach to food production that uses—and creates—social, cultural, economic and environmental knowledge to promote food sovereignty, social justice, economic sustainability, and healthy agricultural ecosystems.

Ultimately, agroecology means bringing agriculture back into harmony with human ecology, including our biology, our environment, and our cultural and political structures.

In the fight against the corporate control of our food system, there is an opportunity and a need—to establish agroecology as an essential component of food sovereignty. In doing so, we will be part of a coherent and unified movement with our allies around the world in La Via Campesina.



### LA VÍA CAMPESINA

The NFU is a founding member of La Via Campesina (LVC), a global social movement that connects farmers and workers in rural communities around the world that are working for change. Collectively, we are challenging the corporate industrial food system and building an alternative: sustainable agroecological food production.

Around the world, agroecology schools initiated by La Via Campesina member organizations carry out political and technical farmer-to-farmer education. These schools are striving to highlight the value of small-scale farmers' work, and to share the skills and wisdom needed to scale-up agroecology. www.viacampesina.org/en



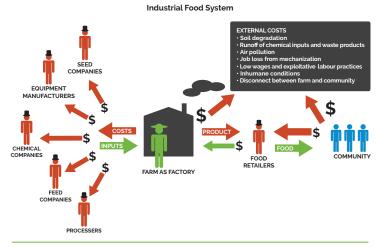
## **Common Pillars of Agroecology**

#### BASED ON LA VIA CAMPESINA'S DECLARATION OF THE INTERNATIONAL FORUM ON AGROECOLOGY (2015)\*

- 1. Agroecology is a way of life, not just a set of technologies or production practices, and must be adapted to local contexts.
- 2. Production practices should be based on ecological principles and an understanding that life cannot be commodified.
- 3. Reduction of externally purchased inputs, and increased farm and community self-sufficiency will allow for greater farmer autonomy and strengthened rural economies.
- 4. Peoples and communities who feed the world need their collective rights protected in order to secure their access and control over the commons (seeds, land, waters, knowledge, and culture).
- 5. Knowledge sharing for food producers must be horizontal, peer-to-peer and intergenerational.
- 6. Direct, fair distribution chains, transparent relationships, and solidarity between producers and consumers are needed to displace corporate control of global markets and generate self-governance by communities.
- 7. Agroecology is political and requires us to transform the structures of power in society.
- 8. Youth and women are the principal social bases for the evolution of agroecology. Territorial and social dynamics must allow for leadership and control of land and resources by women and youth.



## **Agroecological Practices**



Agroecological Food System



#### **INCREASE FARMER AUTONOMY**

Farmer autonomy is about farmers being able to make decisions for themselves. As corporatization of the food system has increased, agriculture has become more industrialized, and decision making in the food system has moved from farmers, citizens and governments to corporate boardrooms.

Transnational energy and agribusiness corporations seek to maximize their own profits by selling inputs (inflows) and promoting production of monoculture crops (outflows) which are purchased at low prices from farmers to resell to consumers at high prices. As a result, total operating costs of Canadian farms have risen by over 1300% since 1971\*. In the same period (1971–2014), the Consumer Price Index has gone up 496%\*. Clearly, the cost of farm inputs has risen faster than other costs; meanwhile the realized net farm income has not increased much at all, and its purchasing power has diminished by nearly 5 times. So the disconnect between the cost of farming and the rewards of farming is quite dramatic.

In contrast, agroecological systems strive to minimize or eliminate costly inflows and unnecessary outflows. Farmers can utilize a range of techniques that work with nature, including biocontrols—methods of controlling pests and other problems with raw materials from the local environment (e.g. weeds and microorganisms).

#### **INCREASE PRODUCTIVITY**

"Although conventional wisdom claims that small family farms are backward and unproductive, research shows that small farms are much more productive than large farms if total output is considered rather than yield from a single crop" —Miguel Altieri, an expert in agroecology based at the University of California, Berkeley

Agroecology's overarching principle is to shift from linear one-way flows to continuous cycles. With agroecology, farmers strive to minimize losses of energy, water, nutrients and genetic resources while optimizing organic matter and nutrient cycling. Enhancing biodiversity and soil health promotes ecological processes and services that work for the farmer. Thus, productivity is no longer associated solely with yield. Other measures include food produced per hectare of land, efficient resource use, long-term ecosystem sustainability, and economic development.

#### **INCREASE RESILIENCE**

In agroecology, the seed is a commons—the collective heritage of humanity to be saved, shared and reused without the restrictions of private property rights such as patents. When growers can share seeds, they enhance biodiversity and build the resilience necessary to adapt to new conditions created by climate change.

"Agroecology continues to grow, both in science and in policies. It is an approach that will help to address the challenge of ending hunger and malnutrition in all its forms, in the context of the climate change adaptation needed." —FAO Director-General José Graziano da Silva

#### SUPPORT INDIGENOUS AND TRADITIONAL KNOWLEDGE

Biopiracy is the process whereby private entities including transnational corporations (TNCs) claim intellectual property rights on genetic resources that have traditionally belonged to the commons. These resources have been managed, developed and shared for generations by Indigenous communities and peasants. Farmers who practice agroecology seek to develop mutually beneficial human relationships by duly acknowledging the peoples who have sustained essential resources and traditional knowledge. When farmers source and help to preserve production inputs such as heritage seeds, they contribute to the expansion of Indigenous and ancestral knowledge.



Photos by Shannon Jon

## **Broadfork Farm: Agroecology in Action**

NFU members Shannon Jones and Bryan Dyck operate Broadfork Farm in Cumberland County, Nova Scotia. They make their living producing organic vegetables and cut flowers for the local community.

No pesticides are ever sprayed at Broadfork Farm—not even organic ones. "If you spray, there's not much you can hope for except that you'll need to do it again," Shannon explains. "We focus on protecting crops with physical barriers, and providing habitat that will attract predators of pests. A big reason we started producing cut flowers is that they create amazing habitat while still generating income." Weeds are allies of the farmers here, and grow freely in pathways between permanent beds. "The weeds act as a living mulch," says Shannon. "They attract beetles, which eat pests, and their roots provide lots of organic matter and habitat for beneficial soil organisms."

Cover crop "cocktails" of many species provide more habitat while building healthy soils. For added fertility, they are able to source locally produced seafood waste compost, crab meal and seaweeds instead of the costly, factory-farmed chicken manure and other popular products. This saves them money and supports their local economy.

Shannon and Bryan also save seeds to exchange with other members of a local seed co-op. "Commercially available seed comes from all over the world," says Shannon. "The climate in eastern Canada is difficult and very little seed production happens here, so we are developing more resilient varieties for ourselves. We are trying to breed arugula that has better heat and cold tolerance - if we can produce arugula when no one else is able to, we'll sell a lot more of it!"



Participating in their community has helped make Broadfork Farm successful. They attend as many farm events and workshops as possible, and have developed a huge network of farmers to draw on for support. "The department of agriculture rarely has answers that are relevant to me—I get much better answers from other local producers," says Shannon. "They have helped us avoid many mistakes and we are certainly more profitable because of this."



Shannon and Bryan work with the NFU and many other organizations, recognizing that government policy impacts their farm success, and that fighting for a more just and sustainable food system will support their farm in the long term.

Photo by Dean Harder

## **National New Farmer Coalition and Agroecology**

The number of farmers is dropping, while their average age is increasing. To support new Canadian farmers and address the demographic crisis in Canadian agriculture, the NFU Youth, together with our partners, launched the National New Farmer Coalition (NNFC) in 2014. Our aim is to help shape Canadian government policies to advance the next generation of farmers under the banner of Food Sovereignty. In recent decades, there has been a shift that has seen the replacement of small-and medium-scale family farms by large-scale agribusiness operations. This is an obvious result of Canada's aggressive export-oriented agricultural policies. These policies do not reflect the needs of new farmers as seen in the results of the NNFC's 2015 Canada-wide survey.

The NNFC's 2015 survey of over 1,000 farmers found that 70% of new farmers did not grow up on a farm, and therefore are not inheriting land, resources or knowledge from their families. The survey also found that 58% of survey respondents identifying as new farmers were women, and the vast majority of new farmers are practicing agroecology through small-scale ecological production, and direct marketing that is growing solidarity between urban and rural populations.

This new style of agriculture is not currently addressed by Canadian agricultural policy, but it needs to be. The NNFC seeks to promote policies that will support new farmers in gaining access to the resources required to produce food: land, knowledge, income and capital. This means reducing corporate control over these resources and returning them to the commons.

Survey respondents identified policies and programs consistent with the pillars of agroecology as being highly effective and in need of expansion. These include:

- Farmer-to-farmer learning opportunities
- Shared initiatives (i.e. cooperatives and shared infrastructures)
- Promotion of direct marketing
- Prohibitions on foreign, corporate, investor and absentee ownership of farmland
- Incentives for farmer-held, long-term tenure of farmland

## Strong Communities. Sound Policies. Sustainable Farms.

The National Farmers Union is a direct member organization of farmers and supporters that has advocated for farm families across Canada since 1969. Members work together to achieve agricultural policies that ensure dignity and income security for farm families while protecting and enhancing rural environments for future generations. The NFU collaborates locally, nationally and internationally to research, educate and share effective solutions that lead to a better world for farm families and their local communities.

YES, I WANT TO JOIN THE NATIONAL FARMERS UNION!
Name(s):
Address:
City: Prov: Postal Code:
Tel:
Email:
Agriculture Related Interests:
Farm Type:
I/we would also like to receive info on:
□ Women's Activities □ Youth Activities
Membership
$\Box$ Farm Family (\$195) or \$18/month <sup>*</sup>
□ Associate (\$65) or \$6/month <sup>*</sup>
☐ Youth (14-25) (\$98) or \$9/month <sup>+</sup>
One time Donation or Monthly Sustainer*: \$1000 \$500 \$100 \$50 \$25 other *For monthly payments send credit card information or a cheque marked "void"
Payment: 🔲 Cash 🔲 Cheque 🗌 Mastercard 🔲 Visa Card
Number: Expiry (month/year):
Signature:
Please mail your payment, along with this form to:
<b>National Farmers Union</b> 2717 Wentz Avenue, Saskatoon SK S7K 4B6 OR You can also join online at <b>www.nfu.ca</b>





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This booklet has been produced with the support of Interpares \* For list of references please visit: http://www.nfu.ca/issues/agroecology-canada