













SIMPSONCENTRE.CA



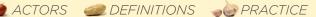


* There's no consensus on a single, unifying definition of Regenerative Agriculture (RA) and its practices. This poses challenge for effective government policy, public action and research activity, and makes RA vulnerable to greenwashing.



♥HISTORY





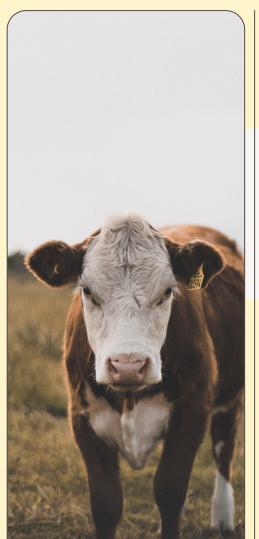




☆ VALUES

O FUTURE

HISTORY.







READ THE **FIELD** NOTES.





BACK TO **OVERVIEWS**



GET IN TOUCH WITH THE SIMPSON CENTRE







Well-known for centuries.

Many of today's RA practices have been wellknown to Indigenous cultures for centuries, including pre-colonial knowledge systems worldwide.

The term 'Regenerative Agriculture' appeared in the late 1970s, adopted by the US-based Rodale Institute in the 1980s as something beyond the concept of sustainable. It was a form of agriculture.



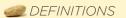


Increasing levels of productivity, increases our land and soil biological production base... has a high level of built-in economic and biological stability... has minimal to no impact on the environment beyond the farm or field boundaries [and] produces foodstuffs free from biocides [providing] for the productive contribution of increasingly large numbers of people during a transition to minimal reliance on non-renewable resources."

- ROBERT RODALE

♥HISTORY





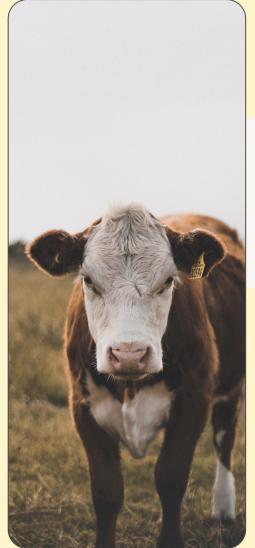




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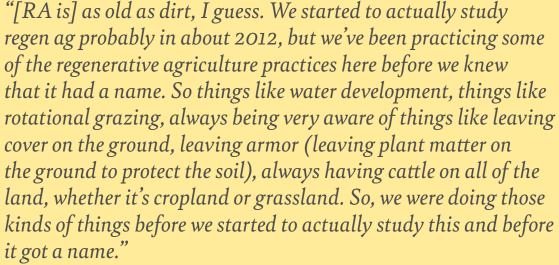
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READ THE

FIELD NOTES.

FIELD NOTES

(producer perspective)



- CANADIAN PRODUCER



BACK TO OVERVIEWS



GET IN TOUCH
WITH THE
SIMPSON CENTRE

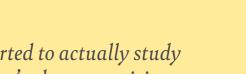
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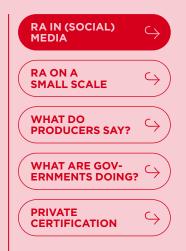
O FUTURE

ACTORS.

What do producers say?

What does the government say?

What's being said on social media?



RA in (social) media.



Despite regenerative agriculture's popularity and its focus on sustainable food production, it fails to tackle systemic social and political issues. As a result, the movement may perpetuate business-as-usual in the food system, rather than transform it."

- THE CONVERSATION



By purchasing from regenerative farms, you are voting for better nutrition, healthier people, healthier animals, a healthier environment, and ultimately, a better way to grow the food that nourishes us all."

- DAVID COLLINS, RA PRODUCER



I'm all for the market, but [an RA supply chain's] demand for sustainability and the checkboxes it dreams up to satisfy it may not present the most rigorous and coherent approach for a significant sector of agriculture."

- GRAEME WILSON IN FARMER'S WEEKLY



Regenerative agriculture is an ancient concept that originated with Indigenous peoples around the world more than a thousand years ago. In many Indigenous world views, humans and nature are not separate forces, but parts of a whole that need each other to thrive."

- RAINFOREST ALLIANCE





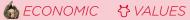


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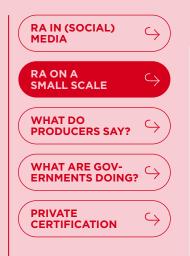
OFUTURE

ACTORS.

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Regenerative agriculture on a small scale — what it looks like.

- NO-TILL GROWERS



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SIMPSON CENTRE

What do producers say?





I am in favour of the outcomes because regenerative is the outcome, but the outcome is not just a product of doing a set of processes because all of these various practices have to be context specific and there's always, always read and react. We are not imposing our will on a closed system. We are participating with a partner, Mother Nature and all her creatures. And it's very iterative. And so you can't just say we'll do this one thing."







Part of [RA] is a responsibility to the stewardship. Part of it is improved sustainability for our farm. Part of it is also improved community. We live in a small rural community and the connections that we can make and learn from our neighbors, from partners, from organizations, is very important to us. And part of it is financial as well, if our dirt stays where it's supposed to, if our soil is able to grow crops and doesn't erode, that's profit."

- CANADIAN PRODUCER





I believe that regenerative agriculture is colonial nations of non-indigenous farmers trying to understand how to observe landscapes for the first time in a new place that they had not really paid attention to before ... So when it comes to what is the definition of regenerative agriculture? I feel like that's a very western colonial thing to do is, let's put it in a box."

- CANADIAN PRODUCER





...But I think it really does tie you to kind of these holistic concepts and the whole community piece, the social piece, the lifestyle like family, that all really rooted in. Yeah, those values,"

- CANADIAN PRODUCER





Unlike a set of standards where a farm can have achieved it and then maintain it, regeneration is a never-ending process of always learning, always adjusting and improving."

- CANADIAN ORGANIC GROWERS

♥*HISTORY*









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SIMPSON CENTRE



The Government of Canada is **investing** \$21 million in 14 projects to build Alberta's value-added agricultural sector, including \$250,000 for the Stettler Adult Learning Council to establish a Regenerative Agricultural Lab.

02.

01.

The Dutch government announced its €129 million Re-Ge-NL innovation program in 2023, designed to bring about the transition to a regenerative, profitable and socially supported agricultural sector.

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What are governments doing?

Targeted public policy on RA is difficult without consensus on a definition. However, its potential value is seen in research investment: 03.

The US Department of Agriculture's Natural Resources Conservation Service offers **grants** to farmers, ranchers NGOs and tribal groups to experiment with alternative methods of crop production, including RA practices.

04.

The EU's European Institute of
Innovation and Technology (EIT)
will deploy €30m million to support
its <u>RA portfolio</u> with a landscape-level,
collaborative approach across sectors.







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SIMPSON CENTRE



Private certification.

Lack of consensus makes regulation problematic so certain bodies have introduced their own certification programs.

Regenerative Organic Certified (ROC)

for food, textiles and personal care ingredients developed by the Regenerative Organic Alliance (ROA), founded in 2017 by the Rodale Institute, Dr. Bronner's and Patagonia.

FoodChain ID providing "supply chain transparency with chain of custody principles... applicable to any agricultural system and either organic or conventional farming."

A Greener World Certified Regenerative status in which, "the farmer and their regenerative experts develop a plan for the operation of the land being farmed" allowing "for true regional and local flexibility while adhering to regenerative principles."







DEFINITIONS.

How do we define regenerative agriculture?

An RA definition that doesn't account for existing systems of politics, power, and equity is unlikely to result in widespread change. However, a definition that doesn't recognize diverse real-world farming contexts is unlikely to produce genuinely effective results.



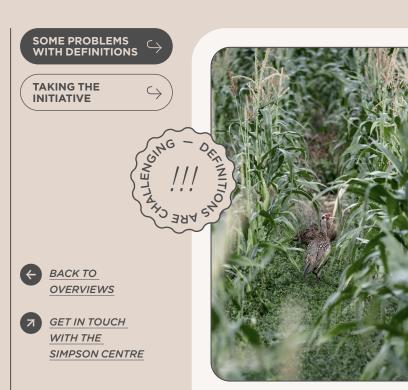
READ THE

FIELD

NOTES.







Some problems with definitions:

- O1. Defining can freeze a term as an inflexible catch-all or an empty buzzword.
- *Socio-political, technical and economic dimensions are constantly changing.*
- *Farm conditions and climate variations are diverse.*
- How does RA exist alongside conventional, organic, conservation, and circular definitions? Is there compatibility and crossover? Is there a hierarchy?

 Is there redundancy among terms?
- O5. Output or outcome? Should metrics or long-term results lead definitions?
- O6. Do 'best practices' become a checklist rather than a solution?
- *O7.* Does a process-based definition omit value-based and holistic elements?

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FIELD NOTES

READ THE

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(producer perspective)

"[R]egenerative is the outcome that we're looking for. It's not the method indeed."

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- CANADIAN PRODUCER

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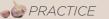
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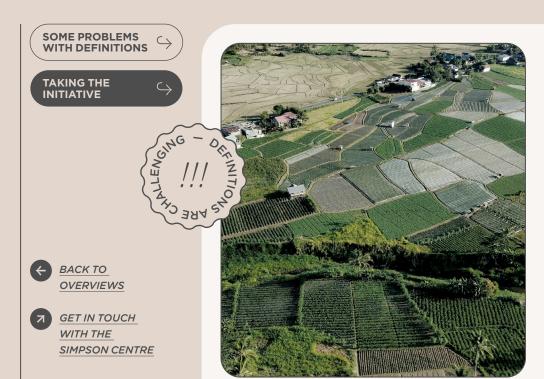
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READ THE **FIELD** NOTES.





GENERAL MILLS "a holistic, principles-based approach to farming and ranching that delivers positive environmental, social and economic outcomes... relevant to all types of farms - large and small, conventional and organic."

Taking the initiative.

In the absence of consensus, stakeholders are creating their own definitions:



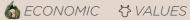
BAYER "an outcomebased production model which has improving soil health at its core and strengthening resilience as a key objective... mitigating climate change, maintaining or restoring biodiversity, conserving water as well as increasing yields and improving the economic and social well-being of farmers and their communities."

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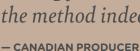
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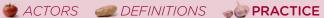
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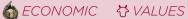


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PRACTICE.







Farmers, environmentalists and conservationists broadly agree on *RA* as an approach of not negatively affecting the environment, working reciprocally with it and, if possible, enhancing it. Current practices and principles include:



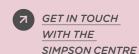
KEEPING LIVE PLANTS/ROOTS IN THE SOIL FOR AS LONG **AS POSSIBLE**



MULTISPECIES COVER CROPS + INTERCROPPING **REDUCING OR ELIMINATING SYNTHETIC INPUTS SUCH AS PESTICIDES**









KEEPING THE SOIL COVERED YEAR-ROUND



DIVERSIFYING CROP ROTATIONS



COMPOSTING + USE OF











INCORPORATING BIODIVERSITY

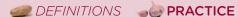
INTEGRATING ANIMALS

GRAZING)

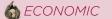
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♥HISTORY









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PRACTICE.



CAN RA FEED THE WORLD?



THERE'S **BROAD CONSENSUS** THAT RA PRACTICES ARE GOOD FOR SOIL HEALTH:

work?

No-tillage **lowers** soil erosion and encourages water to infiltrate soils.

Cover crops have the same effect and can reduce water pollution.

Diverse crop rotations, meanwhile, can lower pesticide use.

Moving cattle around, adding legumes or fertilizers, and avoiding overgrazing. can increase vegetation and protect water sources.

NO-TILLAGE'S ROLE IN AIDING CARBON **SEQUESTRATION** IS LESS CLEAR.

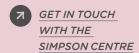
Does it merely redistribute carbon from deeper to shallower zones rather than increasing the overall stock of soil carbon?















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PRACTICE.



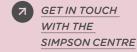
DOES RA WORK?



CAN RA FEED THE WORLD?



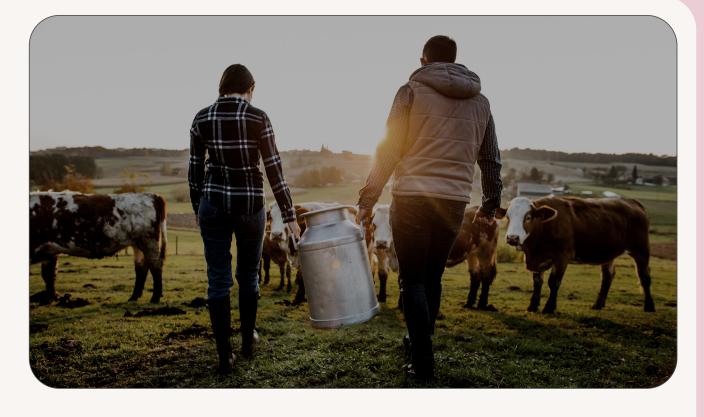












SOME SAY THAT RA ALONE COULD NOT PRODUCE THE SAME AMOUNTS OF DAIRY AND MEAT.

A 2022 <u>report</u> suggested that RA-dedicated land would have to triple to 40 percent of global farmland by 2030 to meet demand an impossible goal
without deforesting and
destroying wild landscapes.

However, RA makes better use of available land rather than necessarily increasing the amount of land. Resilience to global climate change is one way to address food security. For example, improved soil health and quality increases its water-holding capacity to build drought resistance, while mulching and cover cropping plants require less irrigation to thrive. Improved soil health creates a thriving microbiome.

RA's flexibility aids farmers in creating plants better adapted to their climates and growing seasons, ensuring better yield controls and availability.

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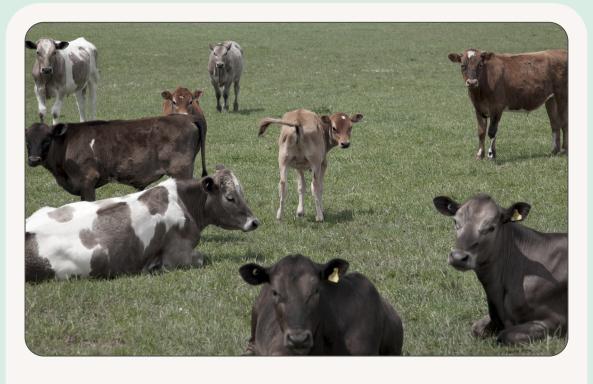


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ECONOMIC.





Is RA commercially supported?

Governments may require a firmer definition of RA for funding but industrial agriculture is embracing RA in the same way it adopted organic. For example:

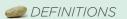
Nestlé has set a goal of 20% of key ingredients being sourced from farmers adopting regenerative agricultural practices by 2025 and 50% by 2030. Their policy focuses on biodiversity, water security, soil health, diverse cropping, livestock integration and landscape action.

In 2019, **General Mills** committed to advancing RA on a million acres of farmland by 2030, aiming to reduce greenhouse gas emissions by 30% across the full value chain by 2030, reaching net zero greenhouse gas emissions by 2050, and championing the regeneration of water resources in priority watersheds.



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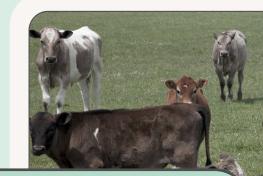
ECONOMIC.



COMMERCIALLY SUPPORTED?

***READ THE SMALL PRINT

WHAT'S MISSING?



(X)

FIELD NOTES

(producer perspective)

"I believe [RA] is more financially and ecologically sustainable over the long term. True wealth comes from the land and from the health and vibrancy of the land, and what it produces for society."

- CANADIAN PRODUCER

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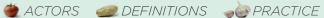




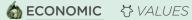


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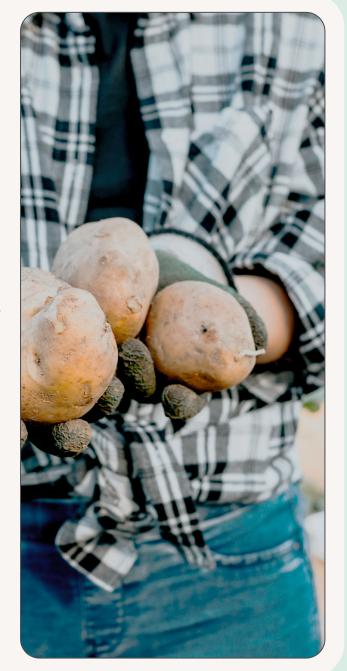
ECONOMIC.



***Read the small print.

McCains published an RA framework committed to implementing regenerative agriculture practices across 100% of their potato acreage worldwide by the end of 2030. However, this 100% actually means that 100% of McCains farmers should be onboarded with RA training and a soil health assessment by 2030.

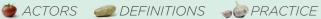
Friends of the Earth has suggested that certain aspects of RA could keep farmers reliant on the pesticides and other chemicals produced by Big Ag, noting that, "the majority of no-till farmers rely on herbicides such as glyphosate, the active ingredient in Roundup."



***did you read this? good spotting!

₩ HISTORY





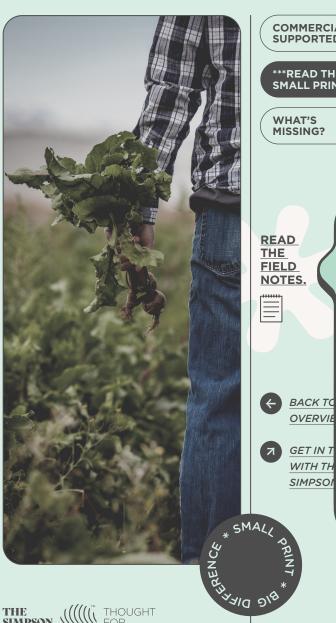




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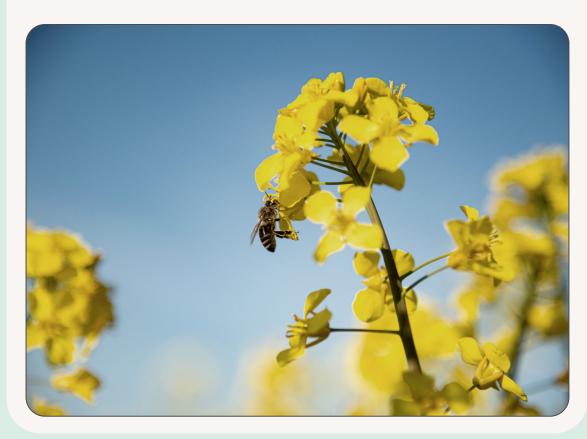
ECONOMIC.



What's missing?

Investment Specialist AlTi Tiedemann Global reported hearing from producers at the 2023 Regenerative Food Systems Investment Forum that access to capital was the primary challenge in the transition to RA.

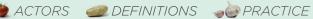
Change on a global scale requires making RA practices available to millions of small and mid-scale farms.





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VALUES.

What about people?

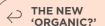
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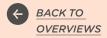
The Natural Resources Defense
Council, an international non-profit
environmental advocacy group
conduced a <u>survey</u> of 100 RA farmers
which found that RA success goes
beyond yield and farm size to "things
like joy and happiness, the number
of families they feed, watching how
the land regenerates and flourishes,
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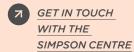


RA has evolved out of narratives dominated by industrial agriculture and by the Global North. Such an influence tends to focus on economics, production methods and agronomy while marginalizing or omitting non-material aspects such as spirituality, values, cultural beliefs and reciprocity – inseparable from agricultural practices for many Indigenous peoples.



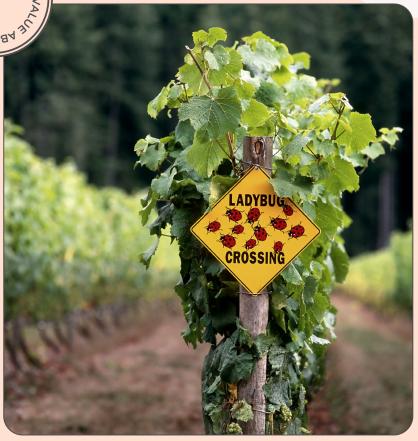






READ THE FIELD NOTES.



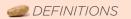






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ACTORS







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FIELD NOTES

(producer perspective)

"...it is about knowledge, understanding and attitude around the relationship and a philosophy and symbiosis with the land and the people and the economic and ecological relationships that link them all."

- CANADIAN PRODUCER

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WHAT ABOUT



"I guess my personal way
of thinking about regenerative
agriculture is that it is a system
of growing food that is based
on values and principles rather
than on prescriptions. And so,
the values behind it drive people
into regenerative agriculture to
use practices that are beneficial
to soil plants and animals."

- CANADIAN PRODUCER

















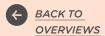
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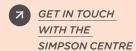
VALUES.



WHAT ABOUT PEOPLE?







READ THE **FIELD** NOTES.



The new 'organic?'

RA may follow the trajectory of Organic Agriculture, whose founding counterculture philosophical values were similar but whose eventual USDA definition hardened and reduced the concept into the elimination of certain chemicals.



If so, RA may fail to tackle systemic social and political issues beyond the scope and interests of its corporate stakeholders, perpetuating a businessas-usual approach to the food system rather than a transformation of its principles and outcomes.

The northern-hemisphere, agri-industrial foundations of RA tends not to credit Indigenous practices and knowledge whose roots are fundamentally regenerative in principle, are landscape-specific, and tied to wider social wellbeing. It is also a bias that tends to overlook the needs of farmers in the Global South and power inequalities in the food system.







READ

NOTES.

THE FIELD

VALUES.



The new 'organic?'

RA may follow the trajectory of Organic Agriculture, whose founding counterculture philosophical values were similar but whose eventual USDA definition hardened and reduced the concept into the elimination of certain chemicals.

FIELD NOTES

(producer perspective)

"...it is about knowledge, understanding and attitude around the relationship and a philosophy and symbiosis with the land and the people and the economic and ecological relationships that link them all."

- CANADIAN PRODUCER

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WHAT ABOUT



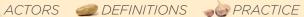
"I guess my personal way
of thinking about regenerative
agriculture is that it is a system
of growing food that is based
on values and principles rather
than on prescriptions. And so,
the values behind it drive people
into regenerative agriculture to
use practices that are beneficial
to soil plants and animals."

- CANADIAN PRODUCER















O FUTURE

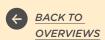
FUTURE.

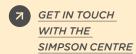




INCLUDE CONSUMERS













Making it work.

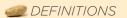
Collaborative networks could further stimulate the sharing of knowledge between farmers and aid the adoption of sustainable land management. Such real-word practices generate higher adoption rates among farmers.

Moreover, collaboration builds resilience by reenriching, strengthening, and revitalizing rural communities. The producers and consumers in such a model are closer together with more shared interests when compared to the industrial food system.

One example of such an approach could be agroecology: a sustainable farming movement that advocates for Indigenous knowledge and land rights while supporting small-scale farmers. It seeks to challenge neoliberalism, corporate dominance, and globalisation of food systems. The movement is associated with the world's largest smallholder farmer organisation, La Via Campesina, and has been endorsed by the United Nations.

\$\vert HISTORY











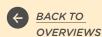
OFUTURE

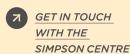
FUTURE.

MAKING IT WORK



INCLUDE CONSUMERS







Include consumers.

Consumers, too, can participate in these collaborative networks, improving knowledge of where food comes from and the challenges of producing it.

Regenerative agroecosystems work with the natural cycle of variability, so consumers become more flexible and adjust their choices among a diversity of products.

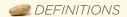
THIS RESILIENCY COULD BE FURTHER ENABLED BY SHORTENING VALUE CHAINS AND SIMPLIFYING MARKETS, TRANSFORMING THE FOCUS FROM AGROECOSYSTEM TO BIOREGION.

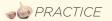
The supply chain itself could be transformed into supply webs, in which suppliers and buyers would produce value for each other and collaborate to regenerate the agriculture system. The interconnections between enterprises in the bioregions could empower the community to become more resilient in the face of climate variability.















O FUTURE





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SIMPSONCENTRE.CA



* Check out more of our work around Regenerative Agriculture

