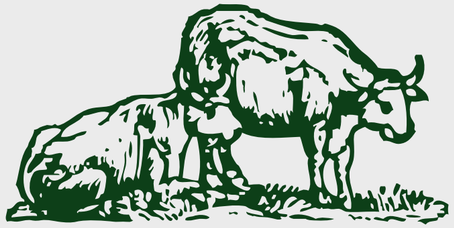
THE POLITICS OF SUSTAINABILITY

PRESENTATION BY ANDREA KOBETIC



This module is intended to give you a broad understanding of how sustainable agriculture has been presented in Canadian politics.

If any of the topics discussed pique your interest and you would like to explore them more thoroughly, you can refer to the number in the top right-hand corner that corresponds with a journal article cited in the final ‘References’ slide. There is a lot of interesting and useful information in these articles that is not presented here for the sake of concision.

Happy learning!

There is substantial evidence that the nexus between scientific agricultural research and its application to farms is a crucial element in determining how effectively these studies can be applied.

By seeking greater collaboration in academic studies and empowering farm workers in this sphere, the potential for sustainable solutions increases as both kinds of agricultural experts apply their respective wisdom and experience.

However, as Kröbel et al. (2021) argue, “Scientific solutions are never applied in a political vacuum. Thus, agro-environmental policies often represent not just science-based solutions, but also political bargaining between stakeholders.” Therefore, the research that is conducted on this subject must also seek to inform and persuade key decision-makers.

Canadian agricultural research really began to gain prominence after the end of the Second World War.

At first, the federal government was focused on finding solutions to local environmental challenges facing farms during this era.

Agricultural research by the government eventually began focusing on streamlining production and supporting private research efforts conducted by the industry.

As such, the scale of the research subject broadened from the farm-level to the national or industrial-level.

That being said, direct farmer involvement in research has been a priority for the Canadian government since the Second World War.

According to Kröbel et al. (2021),“Over time, the objective of Canadian public investment in agricultural science has changed, from early 20th century emphasis on scientific advancement to improve agricultural yields, to today’s broader mandate to promote sustainable intensification of agriculture.”

It is important to recognize that this sustainable intensification goal is not applied equally to every crop.

Certain crops (such as lentils and wheat) are much more important in big industry and in securing Canada’s position in the global market: as such, sustainable agricultural practices will be much more difficult to implement in these cases.

Another important factor to consider when discussing agricultural scientific research is its environmental impact: as technology has improved, so have farming practices generally become increasingly dependent on mechanization and artificial products.

This phenomenon reflects the continuation of colonial practices (e.g., cash crop farming) that carry their history and ideology with them to a certain degree.

This is not to say that scientific experimentation is bad, however the contrast between innovative agriculture and traditional Indigenous farming is certainly worth discussing.

TAKE A MOMENT TO REFLECT ON THE CONTRAST BETWEEN INDIGENOUS AND MODERN AGRICULTURE IN RELATION TO THEIR DEPENDENCE ON TECHNOLOGY. FURTHER, IS IT POSSIBLE TO RECONCILE BIG INDUSTRY AGRICULTURE WITH SUSTAINABILITY? WHAT MIGHT THIS ENTAIL?

PAUSE

As we saw in the first three modules, although the policy system is resistant to change, it has changed significantly in the last century.

In the context of sustainability, there are important considerations (e.g., the effects of microplastics) which have not yet been formalized in agricultural policy.

This is partially due to a lack of research.

Sustainability in agricultural policy faces a barrier due to policy's historical focus on the economic concerns of the industry.

This cannot be disregarded due to the interventionist approach the Canadian government adopted and justified through agricultural sectionalism rhetoric.

In fact, environmental concerns could be portrayed as yet another risk that farm workers are exposed to with this then serving as justification for further intervention without necessarily targeting the root cause.

There are generally two types of sustainability policy approaches that are used in Canadian agriculture: 1) imposing regulations, and 2) creating incentivized programs.

Each approach has its pros and cons, though both require farms to take on additional costs in order to comply with the new requirements.

However, these costs are related to investing in improving the infrastructure on their farm.

Farmer participation is especially important to develop effective sustainability policies that reflect the reality of adopting regulatory or incentivized policy, and that are able to successfully navigate complex dynamics at the farm-level (including resource-sharing).

Genetically Modified Organisms (GMOs) inevitably enter the sustainability discussion, therefore crop breeding is yet another related practice that must be considered.

According to Kröbel et al. (2021), “Since one of the ways in which the success of public crop breeding programs becomes apparent is in the rate of adoption of new varieties, it will be of the utmost importance going forward for a substantial proportion of breeding priorities to be guided by the needs and preferences of farmers themselves.”

This argument is exemplary of the increasing consideration in academic circles of farmers as agricultural experts whose wisdom should be guiding the formal agenda.

As far as agriculture-specific policy goes, sustainability is mostly considered on a production basis (e.g., regenerative agriculture, pesticide biobeds, etc.).

A key tool which has become instrumental in empowering farmers and facilitating collaborative sustainability initiatives is sustainability indicators such as Indicateurs de Durabilité des Entreprises Agricoles Quebec (IDEA).

PAUSE

Click on the icon above and to the right or copy-paste the URL below, and take a few minutes to explore the IDEA website on your own. Take extra time going through their ‘Tools and Resources’ page.

https://methode-idea.org/en/

According to Kröbel et al. (2021), there are 3 distinct advantages to farmer-participatory (collaborative) research that align with sustainable innovation goals:

a) “providing opportunities for researchers to gain different perspectives including information that has been passed down from generations of farmers or indigenous knowledge”

b) “generating local relevant solutions and adaptation capacity to enhance environmental performance”

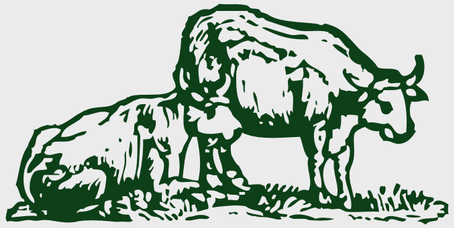
c) “finding efficient solutions to problems by testing out alternative on farm techniques and empowering farmers to innovate and adapt”

Bearing in mind the methodology put forth in the previous slide, sustainable agriculture is linked with a paradigmatic shift in political and academic spheres.

The sustainable paradigm supports a bottom-up organization of power wherein farmers are key decision-makers whom transnational corporations and governmental bodies heed.

This potential paradigm of the future starkly contrasts with the state assistance and neoliberal paradigms covered in previous modules.

For all the experimentation spearheaded by the government, sustainable agriculture has always primarily been a farmers’ movement.



You've reached the end of Module 4!

We will continue with our discussion by tackling food insecurity in Module 5.

Please make sure to complete the Module 4 Quiz before moving forward in your learning.

Thank you!

REFERENCES

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KRÖBEL, R., STEPHENS, E.C., GORZELAK, M.A., THIVIERGE, M.-N., AKHTER, F., NYIRANEZA, J., SINGER, S.D., GEDDES, C.M., GLENN, A.J., DEVILLERS, N., ALEMU, A.W., ST. LUCE, M., & GIARDETTI, D. (2021). MAKING FARMING MORE SUSTAINABLE BY HELPING FARMERS TO DECIDE RATHER THAN TELLING THEM WHAT TO DO. ENVIRONMENTAL RESEARCH LETTERS, 16(1), 1-15. HTTPS://DOI.ORG/10.1088/1748-9326/ABEF30