

REDUCING GHG EMISSIONS IN THE AGRICULTURAL SECTOR: RECOMMENDATIONS FOR THE GOVERNMENT OF SASKATCHEWAN

Agriculture accounts for **24%** of Saskatchewan greenhouse gas emissions.

1. Establish financial incentives to encourage the purchase of highly **fuel-efficient farm machinery**.
2. **Support precision farming technologies** that reduce farm machinery use and enable better fertilizer application.
3. Conduct **extension work** with farmers across Saskatchewan to support the reduction or better management of application of fertilizers which emit nitrous oxide into the atmosphere. Environmentally sustainable, ecological agriculture practices such as soil building, water conservation and increased biodiversity could also be supported.
4. **Discourage overgrazing** of prairie pastures. Overgrazing substantially reduces the capacity of pasture grasslands to sequester carbon dioxide. By moving from heavy grazing on grasslands to lighter grazing, 20% more carbon can be sequestered by plant roots. Rotational grazing practices which allow grasslands to rejuvenate should be encouraged.
5. Support the use of manure for **biogas production**.
6. Promote the establishment of dozens of **new tree plantations** in Saskatchewan. A mature tree can absorb about 4 kilograms of carbon dioxide per year depending on climate, soil and precipitation. If rates of payment for carbon sequestration through tree planting were competitive to the revenue stream farmers receive from selling trees, these plantations could offer Saskatchewan farmers options to grow and sustain tree plantations for the purpose of sequestering carbon dioxide and/or to sell trees to be planted elsewhere to sequester carbon dioxide.
7. Work with Ottawa to **stop** the process of **rail line abandonment** and grain elevator consolidation in Saskatchewan. That process is forcing farmers to haul grain longer distances by truck, adding to the rise in greenhouse gas emissions.
8. Promote widespread **adoption of solar power** by Saskatchewan's farm community.
9. Invest in measures to carefully monitor and measure **changes in soil carbon**.

Source: "Prairie Resilience" is Not Enough, Peter Prebble, Margret Asmuss, Ann Coxworth and Bob Halliday, Saskatchewan Environmental Society, December 2018.

Read the **Saskatchewan Environmental Society's** other recommendations for the Government of Saskatchewan at:
www.environmentalsociety.ca

