2060 Carbon Neutrality and China's Food Systems

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Carbon Emissions in China's Food Systems

Carbon emissions from **agricultural activities**

- 710 million tons in 2018, accounting for 5.4% of all carbon emission
- Main emission sources: rice (26%) and beef (17%) in 2017

Carbon emissions from **energy use in food systems**

- 680 million tons in 2018
  - Energy in food processing industry (420 million tons, 62%)
  - Agricultural energy (170 million tons, 25%)
- The total amount is 1.39 billion tons in 2018, accounting for 10.5% of total greenhouse gas emissions.

Forest carbon sequestration is 480 million tons in 2020 and will increase to 1.6 billion tons by 2050 (Energy Foundation China, 2020).

Assessing Options to Achieve 2060 Carbon Neutrality while Ensuring Food Security

- Improving crop technologies (increasing yields, paddy rice field, and increasing fertilizer use efficiency)
- Improving livestock technologies (reduced emissions from livestock production and forage use efficiency)
- Reducing food waste and loss
- Adjusting dietary structure (reducing meat consumption)
- Combined approach (combination of the above)

Forthcoming Report in April, 2021

2021 China Food Policy Report under Global Lens: Rethinking of Food Systems after COVID-19

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