CMPA | Climate Mitigation Potential in Agriculture

What challenge or problem are you addressing? What is the need for the project?

The carbon cycle is intrinsic to farming, which is a large source of greenhouse gas (GHG) emissions. However, farming is unique in having a potential for negative emissions that might go hand in hand with farm practices, thus providing valuable contributions to reaching the targets of the Paris agreement. Decision makers at farm level and at national level urgently request comprehensive assessments of sector relevant climate measures within current or alternative framework of economic policy and regulations.

Objective of the project: What your project wants to achieve/change

Assess the impact on the economy of measures prioritized by decision makers in agriculture marching into low carbon society.

Why do you need transnational cooperation?

This project will adapt the novel integrated assessment model (Glomsrød et al. 2016) to study the economic and climate impact of relevant agricultural mitigation and adaption measures. Well-designed climate policy can promote economic growth and income equality while mitigating global warming. The nature of global climate issues and globalisation of economics determine the needs of international cooperation.

What kind or partners are you looking for?

Wide but close collaborations are seeking from social, economic, agricultural and climate scientists and industrial partners who is interested in climate measures in agriculture to sustain economic growth, enhance food security, and mitigate global warming.

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A warmer policy for a colder climate: Can China both reduce poverty and cap carbon emissions?

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HIGHLIGHTS

- China can cap CO_2-emissions at 2015 level without harming economic growth.
- Poverty reduction is compatible with policy to cap CO_2 emissions.
- Rural poverty reduction financed by CO_2 tax revenue increases domestic consumption.
- One year of the global emissions is avoided.
- The global mean temperature is reduced by 0.03 (±0.02) °C.

GRAPHICAL ABSTRACT

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