

# Land-CRAFT annual report 2022

## 1. Annual highlights

At the beginning of June 2022, a launch event marked the opening of the Center for Landscape Research in Sustainable Agricultural Futures (Land-CRAFT). Representatives from several funding organizations, including Novo Nordisk and the Danish National Research Foundation, and members of Aarhus University (AU) and the University of Copenhagen (UCPH) were in attendance. According to the research plan, 2022 marks Stage 1 of Land-CRAFT's trajectory. The activities identified in this stage are framework development, experimental facility setup, kick-off conference(s), defining priorities, and staff scouting.

A primary focus has been forming the team required to undertake and support Land-CRAFT's research. In this context, the Land-CRAFT Scientific Steering Committee (SSC), currently composed of the Head of Center and the co-PIs from AU and UCPH, has been highly active, meeting in person every other month, as well as touching base online weekly. Prof. Berit Hasler entered the SSC as Co-PI in 2022, strengthening the socioeconomic theme of Land-CRAFT in the SSC. This has allowed for effective communication and streamlined research planning and recruitment from the start-up phase onwards. The Center has hired - or is hiring - additional staff members, including the theme lead roles. There has been a strong focus on creating a stimulating and supportive research environment for Danish and international scientists. The Center already welcomed two guest researchers from China Agriculture University who will stay for one year.

Framework development and defining priorities have started and will continue in collaboration with the new staff members. This year saw great strides in understanding the systems and processes involved in establishing a pioneer center. Our webpage was built; a preliminary location was set up, with scouting ongoing for a permanent location. Over the past year, a Land-CRAFT workshop and laboratory space has been constructed and is now used for, e.g., developing and testing new sensors to allow for spatial mapping of soil greenhouse gas (GHG) emission hot-and cold spots.

Regarding scientific output, Land-CRAFT has published 14 peer-reviewed academic articles. 11 of these publications adhere to open-access principles. The associated journals have impact factors ranging from 2.6 to 21.0, and several in highly esteemed journals such as Nature. The published articles have all promoted international collaboration.

In October, Land-CRAFT hosted the workshop, *Peatlands for climate change mitigation in agriculture*, with a specific focus on the effects of re-wetting organic soils on the GHG balance. Supported by OECD-CRP, the event was attended by over 50 international participants and will result in a special issue in the journal, *Biogeochemistry*.

This year also saw Land-CRAFT coordinating and contributing to various project proposals for third-party funding. Several European academic institutions have approached Land-CRAFT inviting participation in project proposals, indicating that the Center has already developed a decent reputation and is getting recognized. At the time of writing, four of our proposals were successful, with another two passing to the second stage.