

INFORMATION SHEET about RESEARCH PROJECT on FARMERS' VIEWS on DIGITAL TECHNOLOGIES

Version: 1; 17 January 2023

This research is led by Sebastian Prost and a team of researchers from the School of Design at Northumbria University. We research digital technologies in sustainable agriculture. This sheet gives you information about our aims and invites you to join our project.

Aim of this research: This project is part of the Centre for Digital Citizens (CDC) at Northumbria and Newcastle Universities. It has two aims: 1) To learn from farmers which digital tools (hardware and software) they use on and off their farms. 2) To understand farmers views on emerging and future digital tools, who may completely change how we farm today (for example, using internet-connected sensors on fields and animals, collecting large amounts of data, using artificial intelligence to analyse this data and recommend or prescribe actions, and automate farm operations using robots). Many of these tools are not in line with the ways sustainable farmers work, as they are designed for large-scale monocultural farming. This research will inform future research, in which we want to collaborate with farmers to design new tools that match their values and ways of working better.

What will happen? There are three steps to this project: 1) You're invited to a phone or video interview to speak about your farm, your role there, and which technologies you use. 2) Sebastian would like to visit your farm to get a tour during which we will further discuss the current use of digital technologies and potentials and risks of future technologies. 3) You'll be invited to join a discussion group with other farmers to share your views on what kind of future technologies you would like to see developed for your farm.

What happens afterwards? We will use your data, together with data from other participants, to write an academic publication and a proposal for a larger research project to design new digital tools with farmers. You will be invited separately to join this proposal. You do not need to take part in the follow-up project.

What data is being collected? With your permission, we will record the phone/video interview, the walking tour of your farm, and the discussion group. We will also take pictures during the farm visit and the discussion group. This data is used for our analysis and writing up reports and publications. For any publications related to this research you will have the choice to have your name and other identifiable information omitted.

Are there any risks? We will ask you to share your thoughts and opinions about digital technology in relation to your work. You don't have to share anything confidential or things you are uncomfortable talking about.

What are the benefits? There will be no direct benefit to you, but we hope that the interview will be interesting for you to consider the potential positive as well as negative impacts of digital technologies on your farm. As this project informs the follow-up design project, a future benefit may be better designed technologies.

Voluntary Participation: We kindly ask for your consent to take part in this research. Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate, or chose to stop participating at any point, you don't need to give reasons and there will be no negative consequences for you.

Contact: If you have any questions, please contact Sebastian on **+44 7565 0387892** or **sebastian.prost@northumbria.ac.uk**.

This research is funded by UK Research and Innovation (Project Ref. 33256).

This research activity has received full ethical approval from the Northumbria University School of Design Ethics Committee.