



Enclosing Agriculture's Messy Natures

PARTICIPANT INFORMATION SHEET v.2021-10-15

Central University Research Ethics Committee (CUREC) Approval Reference: **SOGE 1A2020-125**

1. Why is this research being conducted?

The aim of this study is to give new insight into Controlled Environment Agriculture (CEA), focusing on key people behind the rapidly growing Vertical Farming (VF) sector. With rapid climate change in the background, agriculture faces the dual challenge of increasing the supply of healthy food while simultaneously reducing its impact upon the environment. VF positions itself as a technology that can help to meet this dual challenge. By learning more about the backgrounds, theories of change, and distinct approaches taken by leaders in the VF sector, this research will shed light on how new agricultural technologies emerge, change, and spread, and how they affect their local ecologies and communities, in ways that may be both intentionally planned or entirely surprising.

2. Why have I been invited to take part?

You have been invited because of the important contributions you have made to Vertical Farming (VF) or the field of Controlled Environment Agriculture (CEA), in theory or in practice.

3. Do I have to take part?

No. You can ask questions about the research before deciding whether or not to take part. If you do agree to take part, you may withdraw yourself from the study, without giving a reason, by advising me of this decision. You may also decide to withdraw your data from the study at any time, without giving a reason and without negative consequences, until Dec 31, 2022.

4. What will happen to me if I take part in the research?

If you provide your consent to take part in the research, you will be asked to participate in an interview by video or by phone, and to participate in a survey online. While COVID-19 travel restrictions remain in effect, all interviews will be held remotely. Once travel restrictions are eased, interviews can be conducted in-person when possible.

I will send you an email to arrange a time, date, and platform (for example, Zoom, skype, or a voice call) or location best suited to your schedule. Interviews will be scheduled to last 50 minutes but can be shorter or longer depending upon your interest and availability. The interview will be open-ended and conversational. You will be able to ask any clarifying questions as the interview proceeds. I will be conducting pilot interviews—test sessions with trusted colleagues that will not form part of the research data—in advance of your interview to help in preparing a base question set and a format that will make the best use of your time. The interview will begin by you stating your name and re-affirming your consent to participate.

The interview will be recorded. In the case of remote video interviews, video and audio as seen through my computer screen will be captured. In the case of in-person or phone interviews, only audio will be recorded. I will clearly let you know when recording has begun and when it has concluded.

After the interview is complete, or if we cannot find a suitable time or venue to conduct an interview, I will invite you to take an online survey. The online survey will contain a number of questions with both multiple-choice and text responses. It will be designed to take approximately 25 minutes to complete. Your participation in the survey is voluntary.

If you are currently associated with a working CEA operation, I will ask after the interview is finished and recording has stopped if it is possible for me to visit a facility in person once COVID-19 travel restrictions allow. If a site visit is possible, I will comply with any terms, conditions, or non-disclosure agreements that are already established for visitors, provided they are consistent with the principles of informed consent detailed here.



5. Are there any potential risks in taking part?

There is a risk that, in the course of an open-ended conversational interview, you could share information that might be proprietary or otherwise best kept in confidence.

To reduce any potential risks, you will be given the opportunity to review the full transcript of the audio interview before any parts of it are used for writing up. Within a clearly defined timeline, you may correct transcription errors and request that portions of the transcript not be included in the research data. You will also be given the opportunity to either partially anonymize (using a pseudonym) or fully anonymize (using a random participant number) your identity in the research data.

If other participants in the study wish to be fully anonymized, I may have to fully anonymize all participants so that no personal data can be deduced by association.

6. Are there any benefits in taking part?

Beyond the opportunity to share your views, participating in this project is not anticipated to have any immediate personal benefits for you.

In the longer term, I hope this research will identify new opportunities or limitations for the CEA sector, especially pertaining to larger social and environmental processes. Because you have been identified as somebody with an interest in the long-term environmental and social benefits associated with developing CEA concepts and technologies, the findings of this research may provide some beneficial new perspectives to you as you pursue these larger goals.

This research does not intend to advocate for any specific approach or technology, and under no circumstances should be considered business advice or objective market research. No information shared in the course of participating in this research is intended to be investment advice. The researcher is not a licensed investment advising professional.

7. Expenses and payments

There will be no payment for taking part in this study. Your participation is voluntary.

8. What happens to the data provided?

The information you provide during the study is the *research data*. Any research data from which you can be identified, such as your real name or an un-altered audio recording of your voice, is known as *personal data*.

Personal data in digital form will be stored in encrypted files on my personal computer, which remains in my exclusive possession at all times. This data will be backed up to Microsoft OneDrive for Business secure cloud storage licensed to Oxford University. Data will only be transmitted when my computer is on Oxford University's Virtual Private Network (VPN). Data shall not be stored or backed up to any other third-party cloud services at any time. Data that is captured temporarily in portable digital recording devices will be securely deleted once it is safely transmitted to my personal computer and backed up.

Personal data in hard copy form will be stored in a locked filing cabinet in my primary office in a Yale University building: 202–300R Prospect Street, New Haven, CT 06511 USA. This office is not shared with anybody else. In the event that my primary office changes during the course of this research, hard copy data will be moved to the most secure office facility available to me.

Because this research is based in the United States, your personal data may be transferred to, and stored at, a destination outside the UK and the European Economic Area. Identifiable data will be removed whenever possible and any data transfer will be done securely and with a similar level of data protection as required under UK law.

Other research data (including consent forms) will be securely stored for at least three years after publication or public release of the work of the research, after which point any personal data shall be destroyed.

Responsible members of the University of Oxford, including my doctoral supervisors, may be given temporary access to data for monitoring, audit, or as part of their consultation and mentorship duties. As the project proceeds, paid contract researchers may be given temporary access to the data for assisting me with transcription or coding. The terms of any contracts for research assistance will be carefully reviewed to ensure full compliance with the principles of informed consent and the need for confidentiality.

I would like your permission to use direct quotes from our interviews in any research outputs. Direct quotes will be anonymized according to your preference.

I would like your permission to use anonymised data in future studies, and to share data with other researchers after the study is complete. All personal information that could identify you will be removed or changed before information is shared with other researchers or results are made public.



9. Will the research be published?

The research will be written up as a Doctoral thesis. Upon successful submission of the thesis, it will be deposited both in print and online in the University archives to facilitate its use in future research. If so, the thesis will be openly accessible.

The University of Oxford is committed to the dissemination of its research for the benefit of society and the economy and, in support of this commitment, has established an online archive of research materials. This archive includes digital copies of student theses successfully submitted as part of a University of Oxford postgraduate degree programme. Holding the archive online gives easy access for researchers to the full text of freely available theses, thereby increasing the likely impact and use of that research.

It is anticipated that portions of this research will be written up in articles to be submitted to academic journals and in submissions to academic conferences.

Some of the research findings may be written up in articles for submission to online journals of more general interest. Any dissemination activities will fully adhere to the principles of informed consent and confidentiality described in this document and in the accompanying Participant Consent document.

10. Who is funding the research?

This research is funded primarily through my own personal savings. In the event that the travel restrictions related to the COVID-19 pandemic are lifted, some of my travel expenses will be funded by the Yale Sustainable Food Program at Yale University in New Haven, Connecticut, USA. Additional external funds may be sought as the research proceeds so long as they do not undermine the independence of the project or its findings.

11. Who has reviewed this study?

This study has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee, reference number SOGE 1A2020-125.

12. Who do I contact if I have a concern about the study or I wish to complain?

If you have a concern about any aspect of this study, please contact me at mark.bomford@ouce.ox.ac.uk, and I will do my best to answer your query. I will acknowledge your concern within ten working days and give you an indication of how it will be dealt with. If you remain unhappy or wish to make a formal complaint, please contact the Chair of the Departmental Research Ethics Committee at the University of Oxford who will seek to resolve the matter as soon as possible:

Professor Jim Hall
Chair, School of Geography and the Environment Departmental Research Ethics Committee
c/o Gillian Willis (curec@ouce.ox.ac.uk)
OUCE, South Parks Road, Oxford OX1 3QY
T: +44 (0)1865 285084

13. Data Protection

The University of Oxford is the data controller with respect to your personal data, and as such will determine how your personal data is used in the study.

The University will process your personal data for the purpose of the research outlined above. Research is a task that is performed in the public interest.

Further information about your rights with respect to your personal data is available from http://www.admin.ox.ac.uk/councilsec/compliance/gdpr/individualrights/.

14. Further Information and Contact Details

If you would like to discuss the research with someone beforehand (or if you have questions afterwards), please contact:

Mark Bomford c/o University of Oxford School of Geography and the Environment OUCE, South Parks Road, Oxford OX1 3QY T: +44 (0)1865 285070 (departmental contact) mark.bomford@ouce.ox.ac.uk