

Future Regions Research Centre
Ararat Jobs and Technology Precinct (AJPT)
Federation University Australia

PROJECT TITLE:	Smart Farms: Using Big Data to Quantify Environmental, Social and Governance (ESG) Impacts in Agriculture
CHIEF INVESTIGATOR:	Professor Harpinder Sandhu
STUDENT RESEARCHERS:	Bhola Paudel
OTHER RESEARCHERS	Prof. Shyh Wei Teng, Dr. Shoaib Riaz, Dr. Ramchandra Rao Kolluri

Dear prospective survey participants,

My name is Bhola Paudel, a PhD candidate/researcher from Federation University, Australia. I would like to invite you to participate in an online survey as part of my PhD research study “Smart Farms: Using Big Data to Quantify Environmental, Social and Governance (ESG) Impacts in Agriculture”. This study aims to develop a farm-level ESG framework and tool, that can be used by farmers to quantify the ESG impact at farm. As a part of the project, this survey will capture farmers’ perceptions on agriculture sustainability and ESG and understand the availability of farm level data from the Australian farmers.

What does this research involve?

This research requires you to complete an online questionnaire. It will take you about 20 minutes to complete it. In the questionnaire, the questions will be asked about your perceptions regarding agricultural sustainability, ESG, smart farming, existing farm data collection management, and utilisation practices at the farm level.

Why are you chosen for this research?

You are chosen for this research because you are identified as farmer, or farm manager or member of farming group in Australia. You may be receiving this request through individual contact, farming group/association or from city council.

Consenting to participate in the project and withdrawing from the research

Consent to participate in this research is assumed when you commence the survey. Your participation is voluntary; you are under no obligation to consent to participate. You are free to choose not to answer any questions, without consequences. However, if you wish to withdraw your data after the data from all the surveys from this research has been analysed, it would not be possible for us to do so as the results will not be identifiable.

Confidentiality

The data collected will be for this research project and for subsequent academic publications. Data will be analysed at an aggregate level and reported in summary form only. Your individual details will not be disclosed anywhere in the results.

Storage of data

Data collected will be stored in accordance with Federation University Australia’s regulations. Data will be stored on a secure Federation University database system/computer for 5 years and will then be destroyed

in a secure and irreversible manner. Only the above-mentioned researchers will have access to the data during this time.

Research result

Research results will be published through suitable academic outlets (PhD thesis, academic journals, books, and conferences) by means of aggregate analysis where no individual can be readily identified. As a respondent, if you would like to receive a copy of summarised results, please let us know through the contact details provided.

Possible benefits of this research and risk to participants

By reflecting on your own sustainability practices and data management approaches, you might identify areas for improvement or new opportunities to enhance your farm level operations. Additionally, data gathered through this research will help develop a tool that can be used by farmers to quantify the ESG impact at their farms. Subsequently, this will influence future agricultural policies and sustainability programs, ultimately benefiting the farming community on the whole. Participants who express interest in the next phase of the project may also have the opportunity to receive a farm-level ESG (Environmental, Social, and Governance) assessment, which could provide valuable insights into how their practices align with sustainability and ESG standards.

Funding associated with the research

The PhD candidate received a scholarship funded by the Destination Australia and Department of Education and tuition fee scholarship by Federation University Australia.

Risk to participants

It is not anticipated that answering the survey questions will cause any discomfort. You may skip any question, or withdraw from the survey at any stage of the process. If you experience any discomfort resulting from participation in this study and you may contact BeyondBlue on 1300224636.

This research study has been approved by the Human Research Ethics Committee (HREC) of Federation University Australia. The approval number is 2024/228.

Link to survey: https://federation.sydney1.qualtrics.com/jfe/form/SV_6Mqz9Vzs9m7kdNk

If you have any questions, or you would like further information regarding the project titled **Smart Farms: Using Big Data to Quantify Environmental, Social and Governance (ESG) Impacts in Agriculture**, please contact the Chief Investigator, **Professor Harpinder Sandhu** of the **Ararat Jobs and Technology Precinct**:

EMAIL: harpinder.sandhu@federation.edu.au

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Should you (i.e. the participant) have any concerns about the ethical conduct of this research project, please contact the coordinator - Research Ethics, Research Services, Federation University Australia,

P O Box 663 Mt Helen Vic 3353

Telephone: (03) 5327 9765

Email: research.ethics@federation.edu.au

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