

Project title: Exploring the role of climate-conscious ‘regenerative’ food and farming choices using serious games.

(Ref: OP2177)

Keywords: *Climate Change; gamification; co-creation; families, farming, food choice*

One Planet Research Theme:

Climate & Climate Change | Earth System Processes | Anthropocene | Environmental Informatics

Lead Supervisor:

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Key Research Gaps and Questions:

- What are the affordances of using serious games to understand the impact of food choices and farming on climate change?
- How can researchers and families use games to prompt effective social and local policy responses to the climate change impact of food and farming?



Project Description:

Activists such as Greta Thunberg show that young people can be significant agents for change. Families are an important predictor of climate change concern amongst adolescents¹ and working inter-generationally with children and families could act to facilitate both understanding and actions to make changes². Food choices and farming methods are important inter-linked aspects of climate change that will need to be addressed if the UK is to achieve the target of net zero carbon³.

Gamification has been identified as an effective method to engage different audiences in complex topics, including climate change (e.g. Ice Flows⁴) and co-creation of games can act as a catalyst for change in local areas⁵ enabling environmental data at a global level to be translated into matters of concern at a local level. The project will bring together research, communities and farmers to explore the relationship between food choice, farming practice and climate change using intergenerational co-creation of games (based on an existing *Participology* model⁶). The data generated will be used to contribute to models and local policy on food choice, farming and reaching net zero at a local level.

The project will use quantitative and qualitative methods including observations, surveys, interviews, and modelling. Skills developed will include data collection and analysis, game design, and community facilitation techniques.

References:

- 1 Stevenson, K.T., Peterson, N & Bondell H.D. (2019) *Env.Ed.Research*, 25:6, 832-845,
2. Lawson, D, et al., (2018) *Global Environmental Change*, 53, 204-208
3. Aleksandrowicz, L et al. (2016) *PLoS ONE* 11(11): e0165797
4. <http://www.iceflowsgame.com/>
5. Ampatzidou C. (2020) https://doi.org/10.1007/978-3-030-36048-1_13
6. <http://www.participology.com/>

Prerequisites:

Experience in social sciences, land-use change and/or consumer dietary behaviours and their impact are desirable, as is an understanding of qualitative methods.

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