Archive or Storage: A case study of GB soil samples

Wright, K., Lord, C., Widdicks, K.

Problem: How can we reduce waste in physical data samples?

Method: 11 interviews and 3 archive tours; focusing on a long-term national (GB) vegetation and soil monitoring project

Themes: What are the **limits** experienced with physical data? How is **value** determined? **Enough** for what?

Concept: Can sufficiency be applied to this problem? This aims to avoid excess by considering how much is 'just enough' and ways to make a resource sustainable.

"we don't have a budget to send samples...and they need to stay frozen"

Money?

"we're starting to hit capacity of the frozen archives"

Space?

"the main barrier to...using this data...is we can't tell them the accurate location"

Metadata?

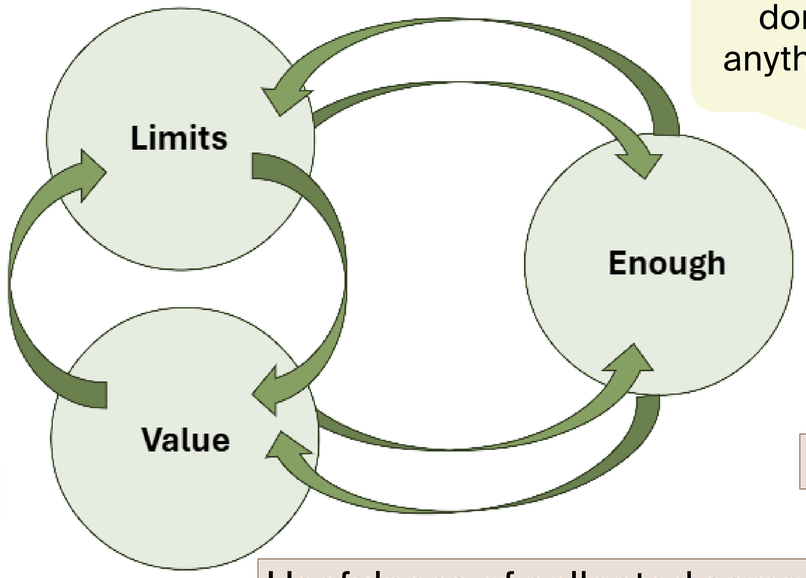


"we certainly don't dispose of anything in the short term"

Less?

More?

"if you are going to a square to survey it for vegetation, it's very easy to take a soil core"



"we want to preferentially support work that is going to add real value to the national resource"

Adding value?

Future needs?

"we don't know what policy makers want to ask in the future"

"what you're looking at is change over time. So obviously the further back you can go the more valuable that is"

Long-term value?

Usefulness of collected samples?

"there's no guarantee that if you have a question, a very specific question in the future, that retrospectively you've got sufficient data, or the right data for that"



One sufficiency measure would be to share some of these resources (Sandberg, 2021); aiding in the reduction in volume of samples to make space for future collections and reducing waste. This also provides opportunity to add further research value, turning stored soils into a usable archive.

However, there are various barriers and tensions associated with sharing a physical resource, which encourages increased storage for the future rather than providing a sharable archive:

- Time and money for curation, finding, sending and resource administration
- Quality of preservation
- Availability and Quality of metadata
- Communication of resource availability
- Resource use that adds value
- Opinion on sharing by decision maker/s
- Keeping enough for future research

References

Sandberg, M. (2021). Sufficiency transitions: A review of consumption changes for environmental sustainability, Journal of Cleaner Production, 293. 126097

NetDRIVE2: UKRI910
SDRI: EP/Z533774/1