

# Citizen-led water quality data collection: Experiences from the Santa River basin, Peru

**Sally Rangecroft**, Rosa Maria Dextre,  
Isabel Richter, Claire Kelly, Cecilia Turin,  
Beatriz Fuentealba, Claudia V. Grados  
Bueno, Mirtha Camacho Hernández,  
Sergio Morera, John Martin, Adam  
Guy, and Caroline Clason

*Contact: [s.rangecroft@exeter.ac.uk](mailto:s.rangecroft@exeter.ac.uk)*







## Intro

**Water quality** is important for socio-economic & environmental sustainability. Physical water measurements (e.g. pH) do not include **human perspectives, lived experiences,** reliance and use of **water**

**Aim:** to gain insights into **water quality perspectives** across the Santa River Basin, Peru. Results aimed at **improving** our understanding, science communication practice within the region & future research

Rio Negro: low pH, poor water quality perceived due to high mineral contamination, unusable water for drinking, crops



# How?

We designed & launched a citizen science app for the Santa River basin to **assess participants perceptions and emotions**, and collect their **images** of water quality

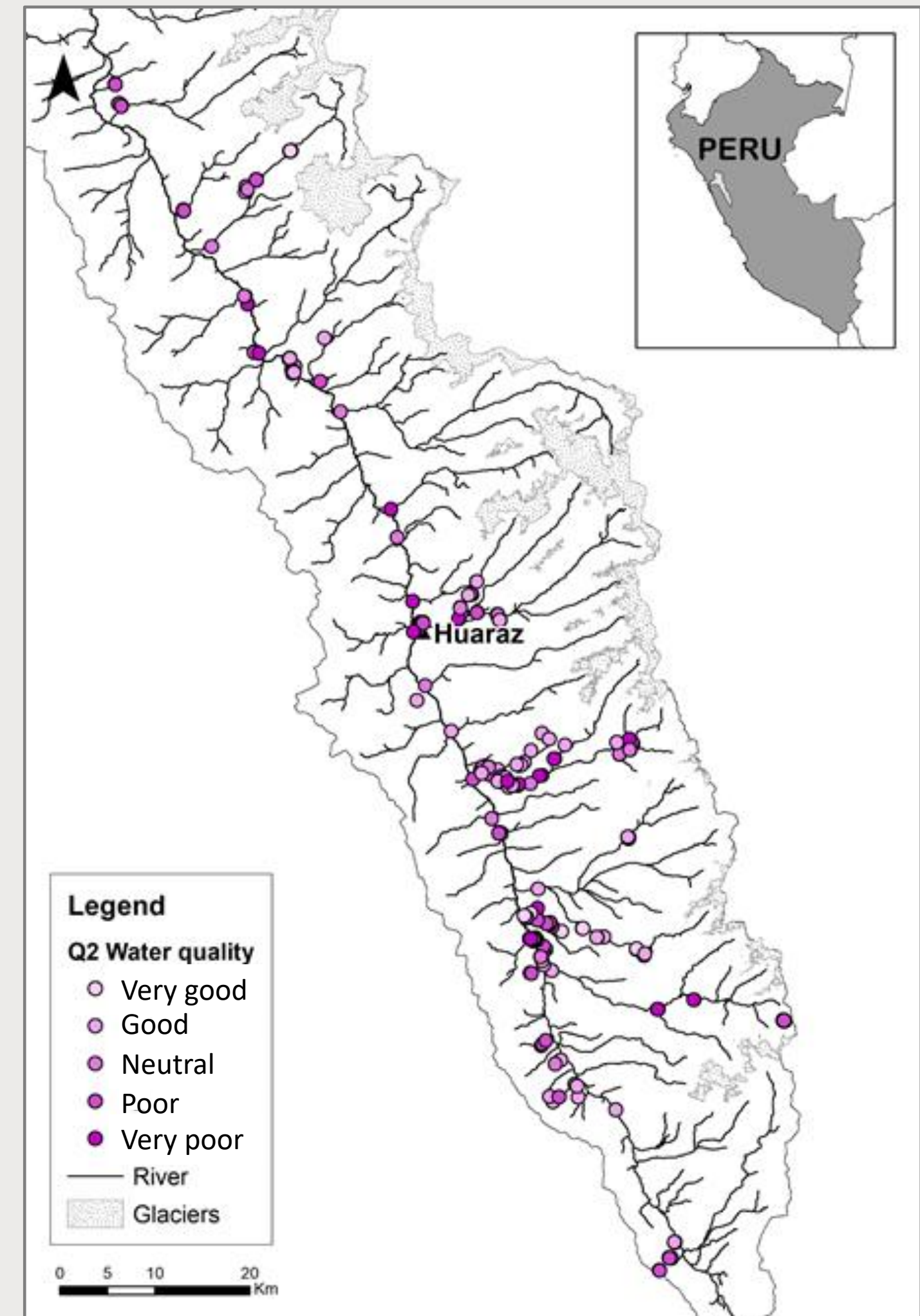




Fieldwork was conducted in 18 rural & urban communities to engage participants (Summer 2021)  
= **349 entries recorded & analysed**



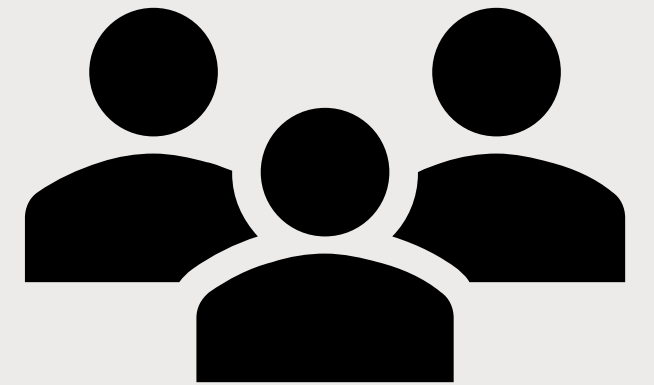
For insights into our results: **Thursday 26th May 11:36** Room 3.29/30 **HS1.1.4 Rangecroft et al.**, Exploring local perceptions of water quality in the upper Santa River, Peru





# Three key lessons learnt

- 1 Importance of direct interactions with local participants





## Three key lessons learnt

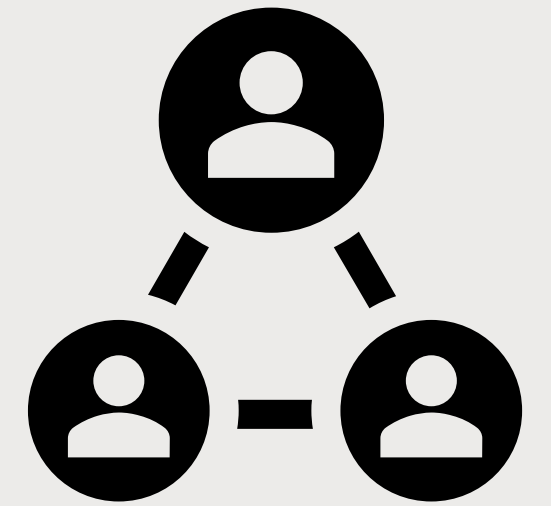
- 1 Importance of direct interactions with local participants
- 2 Water quality is a complex concept to gather perceptions on





## Three key lessons learnt

- 1 Importance of direct interactions with local participants
- 2 Water quality is a complex concept to gather perceptions on
- 3 Community desire for co-design of solutions





# Summary reflections

- Importance of fieldwork
- The term “water quality” was interpreted differently by respondents, and often needed clarification
- Key role of exploring emotions, although interviews allowed for a deeper analysis of these
- Good reception of the project because of its different approach
- Participants appreciated an opportunity to be heard, to express their opinion and knowledge
- High expectations on the results – importance of dissemination (often difficult in the timeframe of smaller projects)
- Community desire for engagement and openness to the co-design of solutions
- Local guides & gatekeepers are incredibly important for data collection directly with people
- When thinking about the approach as a whole, why did people not use the app by themselves?





# Thank you!

Any questions?

Dr Sally Rangelcroft: [s.rangelcroft@exeter.ac.uk](mailto:s.rangelcroft@exeter.ac.uk)

@srangecroft

@NuestroRioPeru

<https://nuestrorio.wixsite.com/proyecto>