

**Irrigation technology at the service of smallholder farmers**  
**A sociotechnical approach to exploring sustainable business strategies**

Intriago Zambrano, J.C.

**DOI**

[10.4233/uuid:3d072301-2b5d-4fa5-a95e-691995cd2862](https://doi.org/10.4233/uuid:3d072301-2b5d-4fa5-a95e-691995cd2862)

**Publication date**

2024

**Document Version**

Final published version

**Citation (APA)**

Intriago Zambrano, J. C. (2024). *Irrigation technology at the service of smallholder farmers: A sociotechnical approach to exploring sustainable business strategies*. [Dissertation (TU Delft), Delft University of Technology]. <https://doi.org/10.4233/uuid:3d072301-2b5d-4fa5-a95e-691995cd2862>

**Important note**

To cite this publication, please use the final published version (if applicable).  
Please check the document version above.

**Copyright**

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

**Takedown policy**

Please contact us and provide details if you believe this document breaches copyrights.  
We will remove access to the work immediately and investigate your claim.

# Propositions

Accompanying the thesis

## **Irrigation technology at the service of smallholder farmers: A sociotechnical approach to exploring sustainable business strategies**

by Juan Carlo Intriago Zambrano

1. As technologies are inextricably connected to ideas and choices made by human beings, Q methodology should be used more often in engineering disciplines (*This proposition pertains to this dissertation.*)
2. Technologies intended to serve smallholder farmers in the Global South ought to be iteratively envisioned, designed, piloted, and commercialized in their respective contexts (*This proposition pertains to this dissertation.*)
3. Business models are central to uplift smallholder farmers' livelihoods, yet development actors do not fully recognize the role of the private sector in this endeavor (*This proposition pertains to this dissertation.*)
4. Smallholder farmers are recognized as key stakeholders for sustainable development, yet development actors barely acknowledge them as partners with commercial viability potential (*This proposition pertains to this dissertation.*)
5. We should have solid perspectives of our future legacy by the time our beloved ones start passing away
6. A doctoral journey is like climbing an eight-thousander mountain: needs comprehensive planning, deals with uncertainty, requires both individual skillsets and team efforts, and may result in triumph and tragedy
7. Ice cream shops should not close during winter season
8. Q methodology can be useful to reconcile highly polarized societies as it transparently contrasts extremes while revealing coincidence points
9. Achieving success comes with the moral imperative of helping others
10. Reading books throughout our lives is like shooting bullets during wartime. Both are limited and we must select them carefully

These propositions are regarded as opposable and defendable, and have been approved as such by the promoters Prof. Dr. ir. Jan Carel Diehl, and Dr.ir. Maurits Willem Ertsen.