Resource Recovery and Reuse (RRR): The Role of Research

Pay Drechsel
To bring RRR to scale, it needs ‘political will’, stakeholder support and an enabling financial and regulatory environment...

... and education to create awareness.
Many of us work on exciting new technologies, service chains, or behavior change, and agree that research has an important role.

Yet, we could ask us:

• Do we investigate the right issues?
• Is the research focus shifting?
• And are we game to fit changing needs?

Some reflections with my own bias
SDG 6.3 ..... and substantially increasing recycling and safe reuse globally

Planning “treatment for reuse” to expand the area (or volume) of water reuse
How to turn already existing reuse safe?

How to incentivize farmers to adopt on-farm ‘safety measures’ despite limited risk awareness or tangible benefits?
Many research needs around the RRR loop

Co-composting in Ghana
Example:

- Large variations in design, use and management of OSS systems and the variations in sludge quality influence treatment options and challenge the optimization of the FS reuse value.
Changing purpose = Shifting research emphasis
Pilots are research playgrounds. You go commercial, you survive or die!
Research questions more implementation oriented

• What kind of PPP contract and business model will be the most sustainable (e.g. waste reduction and/or compost sale based)?
• What is in the local context the best mix of finance?
• How to reduce transaction costs in accessing carbon credits?
• How to manage the compost certification and approval process?
• What do we know about (i) different market segments (size, location, perceptions, demand), and (ii) competing products & providers?
• Which hook to use in a competitive marketing strategy?
• How, when, and how much enriched compost to apply on crop A, B, C, on soil X, Y, Z, under climate 1, 2, 3?
• What is our economic impact to lobby for support?
• How to increase cost recovery and when will we break even?
Are we fit for the game: do we have the right research capacity?

- How many (i) engineers, (ii) social scientists, and (iii) economists do we have in the room?
- How many soil fertility specialists?
- How many institutional and PPP experts?
- How many business developers and finance experts?
New research output

Dec. 2017
980 pages

Thank you