

From activity analysis to innovation:

Learning processes foster 'localized' innovation
in food and farming systems



Photo: Nelson/Canger



Photo: Hülsebusch

A. Christinck / C. Hülsebusch / B. Kaufmann

‘Localizing’ innovations —

What makes an innovation relevant for a specific context?

Are there context-specific...



Photo: Lelea

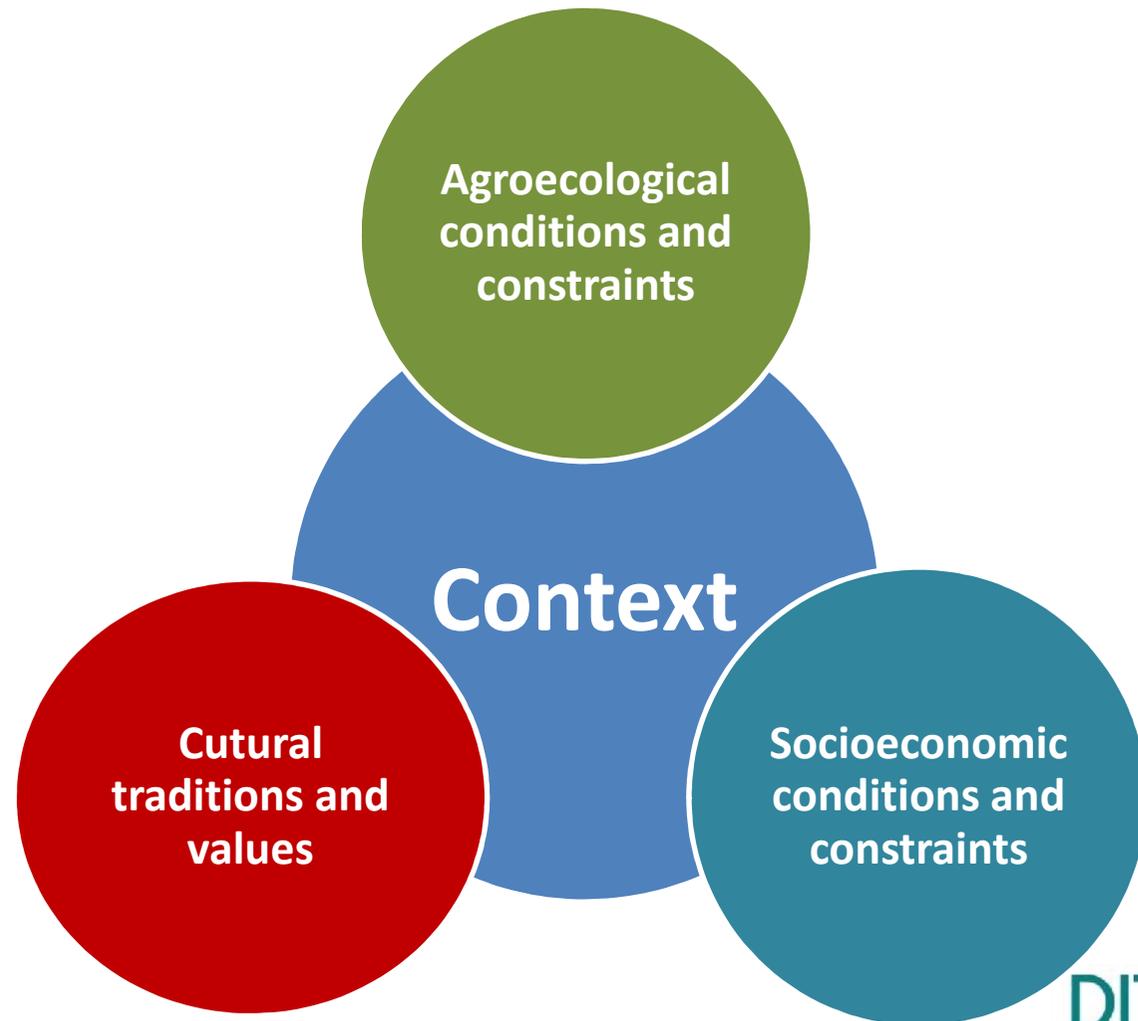
... and
context- independent
innovations?

?

'Localizing' innovations —

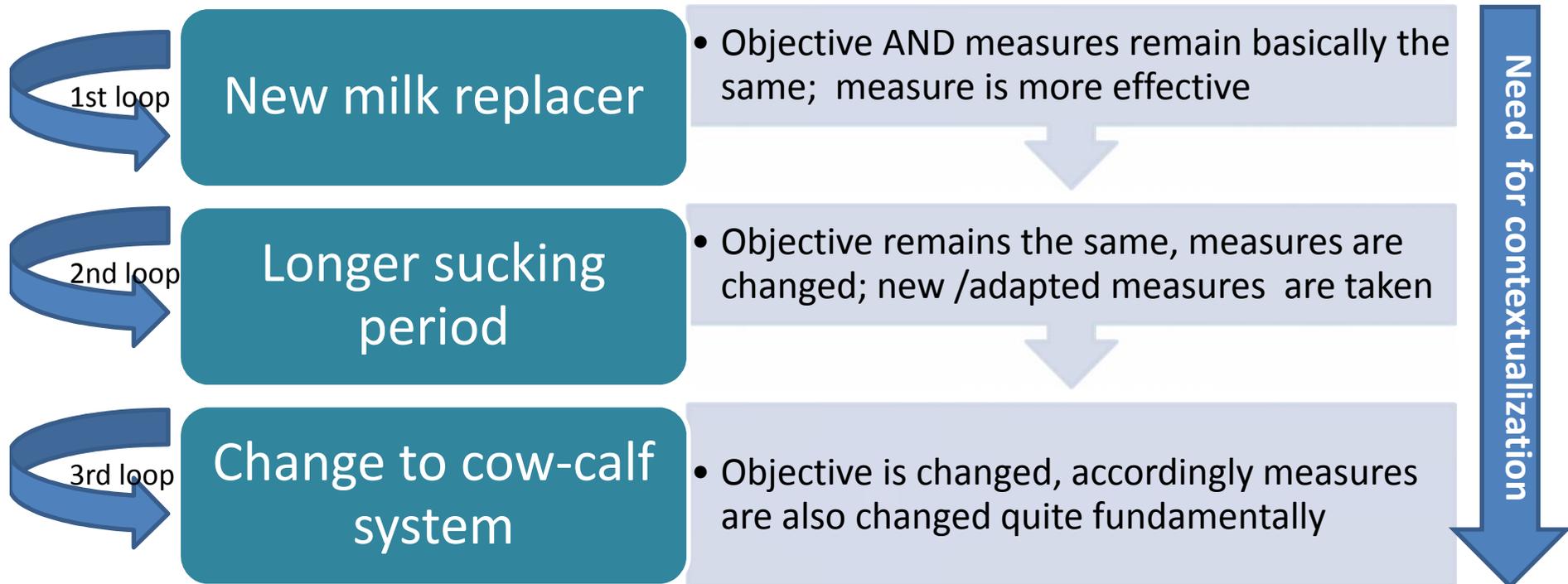
why the local actors' understanding matters

Local actors take their decisions and actions based on their understanding of the context



Different types of innovations...

...differ in their degree of context-relatedness and associated learning requirements



Based on Argyris and Schön, 1974

Example:

Pastoralists' perceptions of local innovations in northern Kenya

'Pastoralist-to pastoralist' extension (PtoP) as an approach to assessing contextual knowledge

Based on DITSL's BMZ funded project: "Mutual learning of livestock keepers and scientists for adaptation to climate change in pastoral areas " and results published in Canger (2013) and Canger et al. (2013)

Advantages of local innovations...

...for learning about context:

- ✓ They are already contextual ('localized')
- ✓ Related contextual knowledge /experience exists already
- ✓ They are easier for other pastoralists to assess
- ✓ They reveal objectives and strategies pursued by innovators

1. 'Localizing' local innovations

Innovation identification tours

Call via local radio station

Visit suggested innovators

Select innovations for PtoP-extension

2. KnowlEx Sessions

1. Local innovator prepares the presentation

Key components of the innovation

Effects and benefits

Visualization
(photos, videos)

2. 'Innovator Tour' or 'Innovation Field Day'

Presentation by the innovator

Questions of participants

Discussion and reflection

3. Example: Chain-linked boma

Boma: a traditional structure for keeping animals over night

Usually consists of acacia branches that are (1) difficult to get; (2) require regular replacement; (3) are not safe against hyena

The chain-linked boma uses plastic-coated fence material instead



Photo: Nelson/Canger



Photo: Nelson/Canger

The fence material is tied around wooden posts made from local trees

Digging the posts deep into the soil is important for the durability

4. Contextualized assessment...

... of the local innovation

Achievements

- ✓ Safe against hyena (→ reduce losses)
- ✓ No need to guard animals at night (→ reduce labour)
- ✓ Improved durability (→ reduce labor)
- ✓ Less need for acacia branches (reduce labour, protect resources)

Constraints

- ✓ Useful mainly as a permanent structure (→ mobility)
- ✓ Not safe against leopards (→ losses)

Improvements

- ✓ Use additional chain-link to construct a roof against leopards
- ✓ Use a padlock to stop thieves from entering the boma

Advantages of the approach

- ✓ Presentation is based on contextual knowledge
- ✓ Participants ask targeted questions about context
- ✓ Participants learn from each other
- ✓ Reflection on options to adapt or improve the innovation
- ✓ Scientists understand what makes an innovation relevant

→ Results in a 'win-win-win' situation for the innovator, the participants and the scientists.

Conclusion

PtoP extension as part of a learning process facilitating innovation

- **Helps scientists access contextual knowledge and integrate it into the research**
- **Facilitates knowledge exchange and integration**
 - Among pastoralists
 - Between pastoralists, researchers and 'officials'
- **Facilitates adaptation and dissemination of 'localized' innovations**

Thank you!

More information:

Kaufmann, B., Nelson, W., Gudere, R., Canger, V., Golicha, D., Frank, M., Roba, H., Mwai, O. and C. Hülsebusch (2012): Identifying local innovations in pastoral areas in Marsabit County, Kenya. German Institute for Tropical and Subtropical Agriculture (DITSL), Witzenhausen, Germany. ISBN: 978-3-9801686-9-4.

Canger, V. (2013): Pastoralists' perspectives on local innovations for improved livelihoods in Northern Kenya: A second-order cybernetics analysis. MSc thesis, Universities of Kassel and Göttingen, Germany.

Canger, V., A. Christinck and B. Kaufmann (2013): Pastoralists' Perceptions on Local Innovations. Book of abstracts. Tropentag, September 17 - 19, 2013 in Stuttgart-Hohenheim, Germany.

And at www.ditsl.org