



# The WEEP project: Water-security in Ethiopia & the Emotional-response of Pastoralists



 @pt\_hutch



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[www.cranfield.ac.uk](http://www.cranfield.ac.uk)



# Introducing WEEP

## ESRC-DFID Development Frontiers Fund (2017-2019)

- Poverty, conflict and environmental change
- Exploratory research, new thinking, results that challenge the status quo, uncertain success
- Cranfield University, IRC Ethiopia, Oxfam in Ethiopia, International Water Management Institute





“The underlying hypothesis is that **conventional ways of measuring water access poorly align with pastoralist livelihood patterns and water use.** This not only leads to misleading data but also contributes to public policy and development interventions that **damage pastoralists’ resilience to overcome the stresses of poverty, environmental change and conflict.**”

# Can we do better than this?

## Shortcomings of conventional water access indicators for pastoralists:

- 1) the distinction they make between domestic and productive water does not correspond with pastoralists' ***multiple-uses of water***;
- 2) the emphasis on measuring service quality from single-water points does not capture pastoralists' ***customary approach of sharing numerous water sources***;
- 3) the household-level unit of analysis can mask ***inequalities*** between household members (incl. ***gender*** but also those travelling to seasonal grazing lands)
- 4) Pastoralist resilience to conflict and environmental change has been linked with ***mobility*** – this is not recognised in conventional ways of measuring water access



# Alternative thinking

- Measuring pastoralist water use in practice is very complex
- A radical solution is to focus on a proxy measure instead – to measure something that is affected by water use
- Cross-cultural studies have shown that water security risks has detrimental impact on emotional wellbeing (e.g. Wutich and Ragsdale, 2008; Sultana, 2011; Stevenson et al., 2012; Jepson, 2014; Sahoo et al., 2015; Bisung and Elliot, 2017, White, 2017)

## WEEP research agenda:

- Can we better understand the relationship between emotional wellbeing and water use in pastoralist communities?
- Could that relationship be the basis for a new form of experience-based water indicator for these populations?

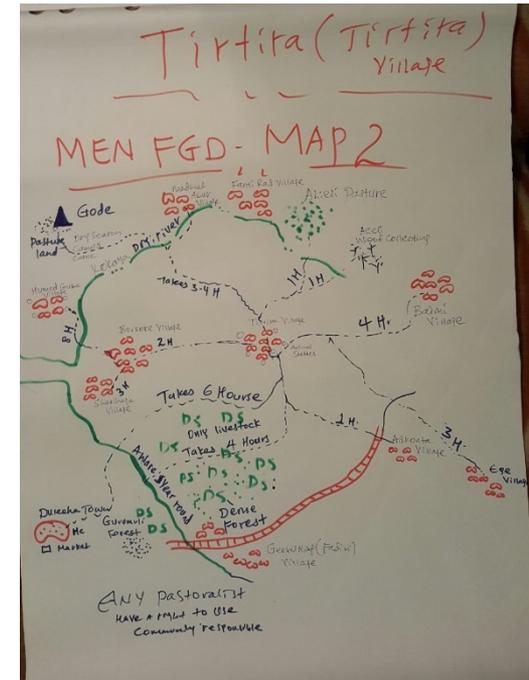


Fig 1. Picture of community drawn map of water and other environmental resource locations

# Analytical power of a focus on emotional wellbeing

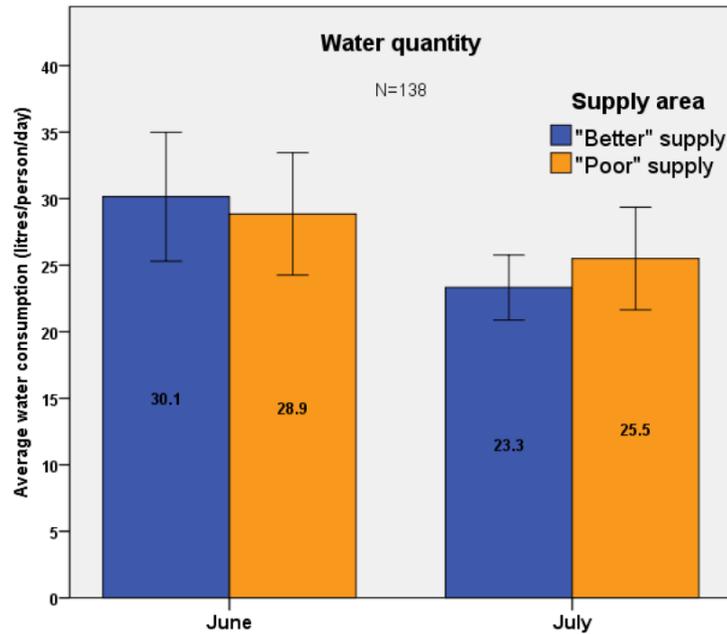


Fig 2 – Average quantity of water consumed across supply areas

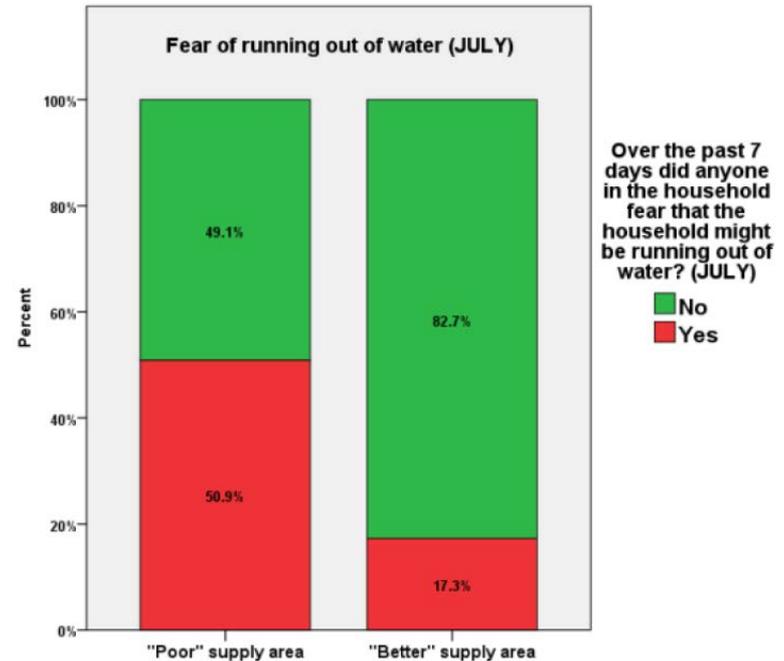


Fig 3 – Reported fear of running out of water across supply areas

- Data from Welenchiti, Oromia, Ethiopia (Thomas et al. 2017)
- Compared the better and poor supply areas of a small town
- Household coping mechanism have a toll on emotional wellbeing – this is not always apparent when focusing on conventional parameters

# Overview of WEEP research

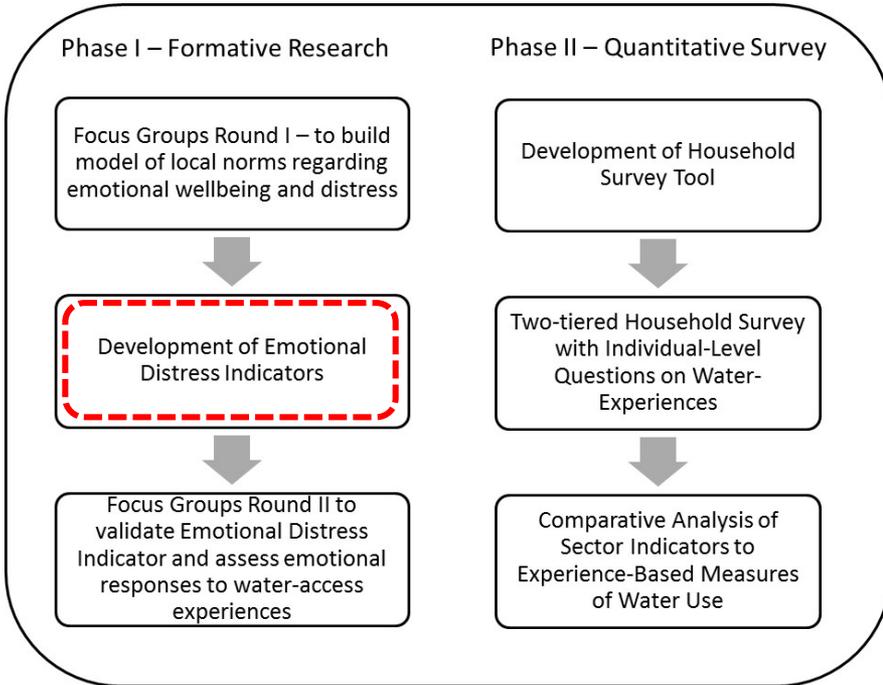


Figure 4 - Overview of Research Design

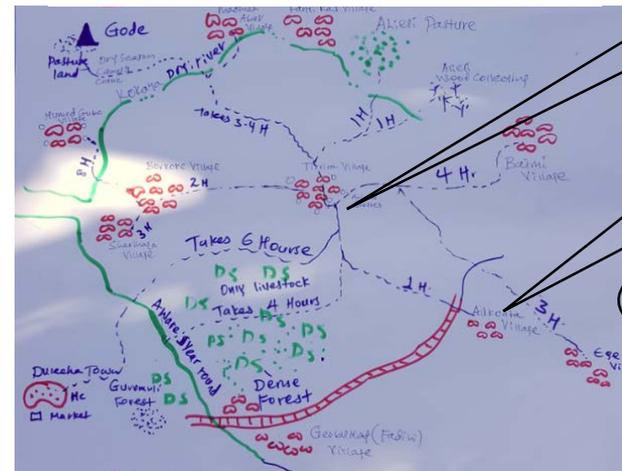
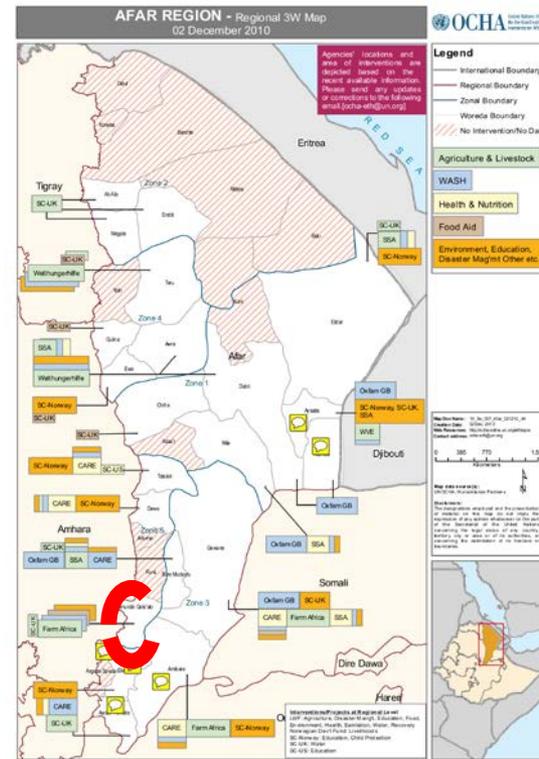
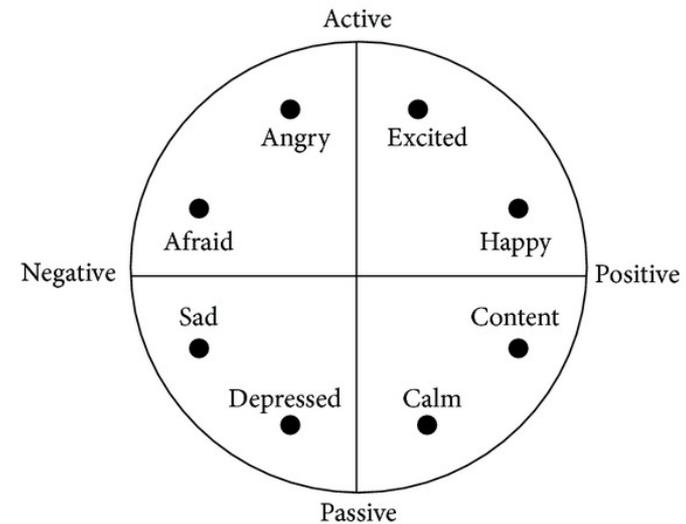


Figure 5 & 6 – Selected maps of study sites

# Vision for an “emotional distress” indicator

- Adds value to the sector by:
  - Providing new analytical capability (sub-household)
  - Being robust but simple to use
  - Having additional diagnostic functions
  - Has wider application beyond pastoralism



*Fig 7. Example of emotion classification axis (Source: Jirayucharoensak et al. 2014)*



# Emerging ideas for the emotional distress indicator

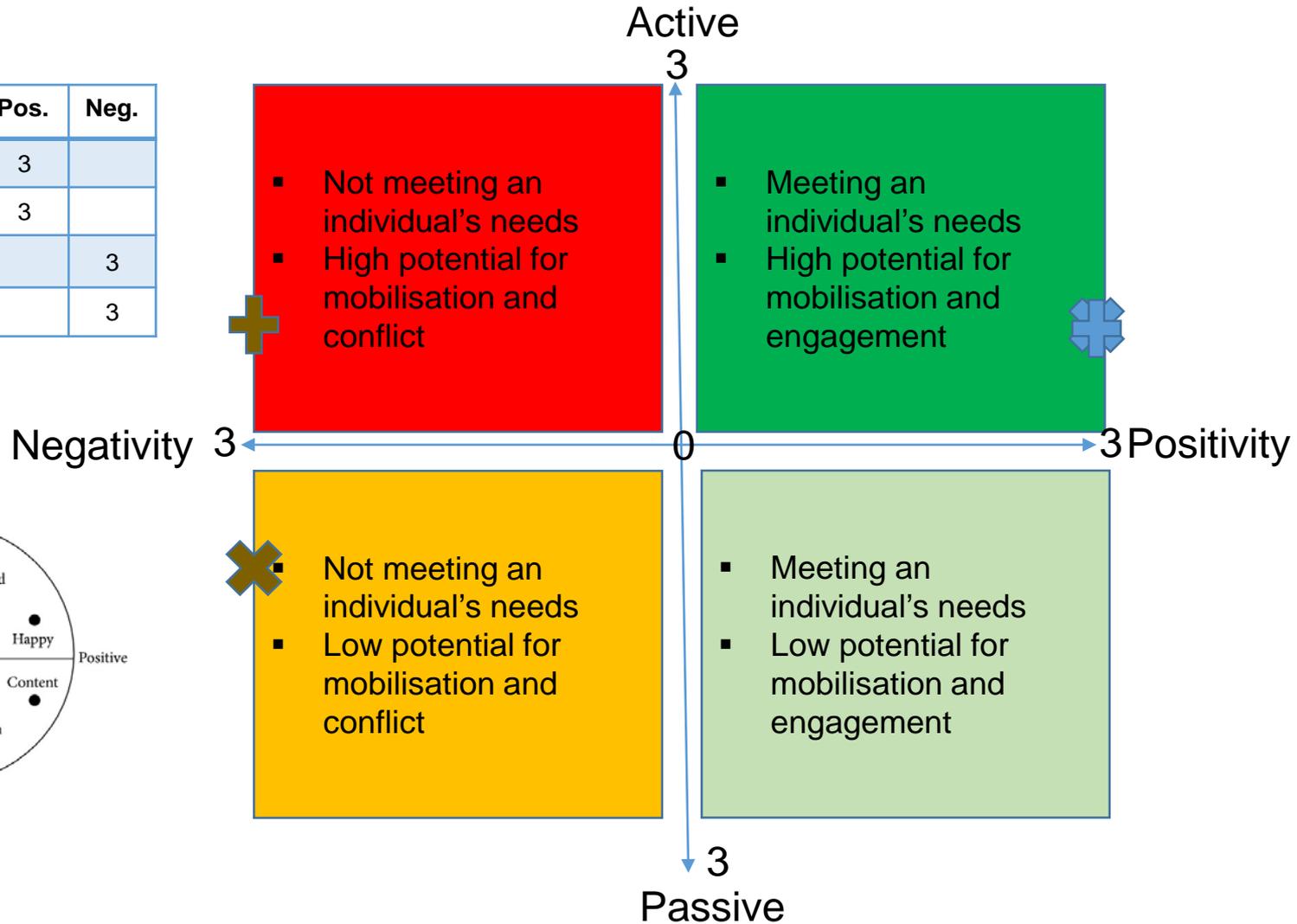
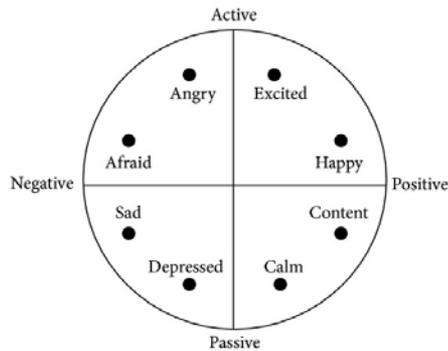
<i>*Emotions and Statements are being refined through next stage of formative fieldwork</i>	<b>Active-Positive</b>		<b>Passive-Positive</b>		<b>Passive-Negative</b>		<b>Active-Negative</b>	
	<i>Happy</i>	<i>Excited</i>	<i>Content</i>	<i>Calm</i>	<i>Depressed</i>	<i>Sad</i>	<i>Afraid</i>	<i>Angry</i>
<i>The water situation for livestock in the rainy season makes me feel:</i>	X		X	X				
<i>The water situation for people in the rainy season makes me feel:</i>		X	X	X				
<i>The water situation for livestock in the dry season makes me feel:</i>					X	X		X
<i>The water situation for people in the dry season makes me feel:</i>						X	X	X

*\* Survey respondents to select up to three emotions per statement.*

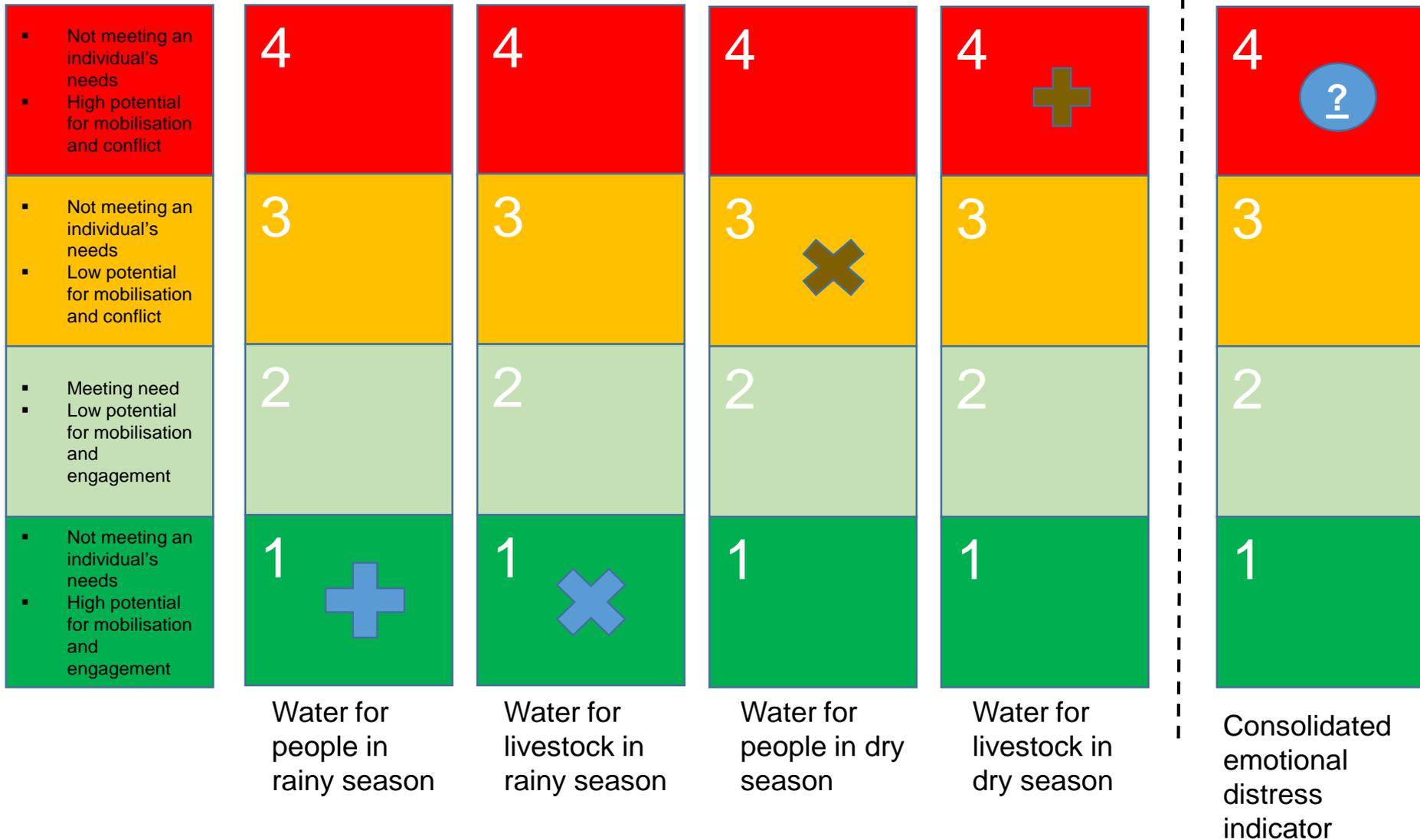
English	Happy	Excited	Content	Calm	Depressed	Sad	Afraid	Angry
Translation to Afar	<i>Ruffa</i>	<i>Qajjib</i>	<i>Sabri</i>	<i>Amana</i>	<i>Niayirgiqe</i>	<i>qaade</i>	<i>meysi</i>	<i>Bagcarrite</i>
Translation back to English (by different translator)	<i>Happy</i>	<i>Surprise</i>	<i>Patient</i>	<i>Trust</i>	<i>(never heard the word before)</i>	<i>(not sure)</i>	<i>Afraid</i>	<i>Thirsty - (suggested Naqabu as translation of Angry)</i>

# Processing emotional distress at the individual-level

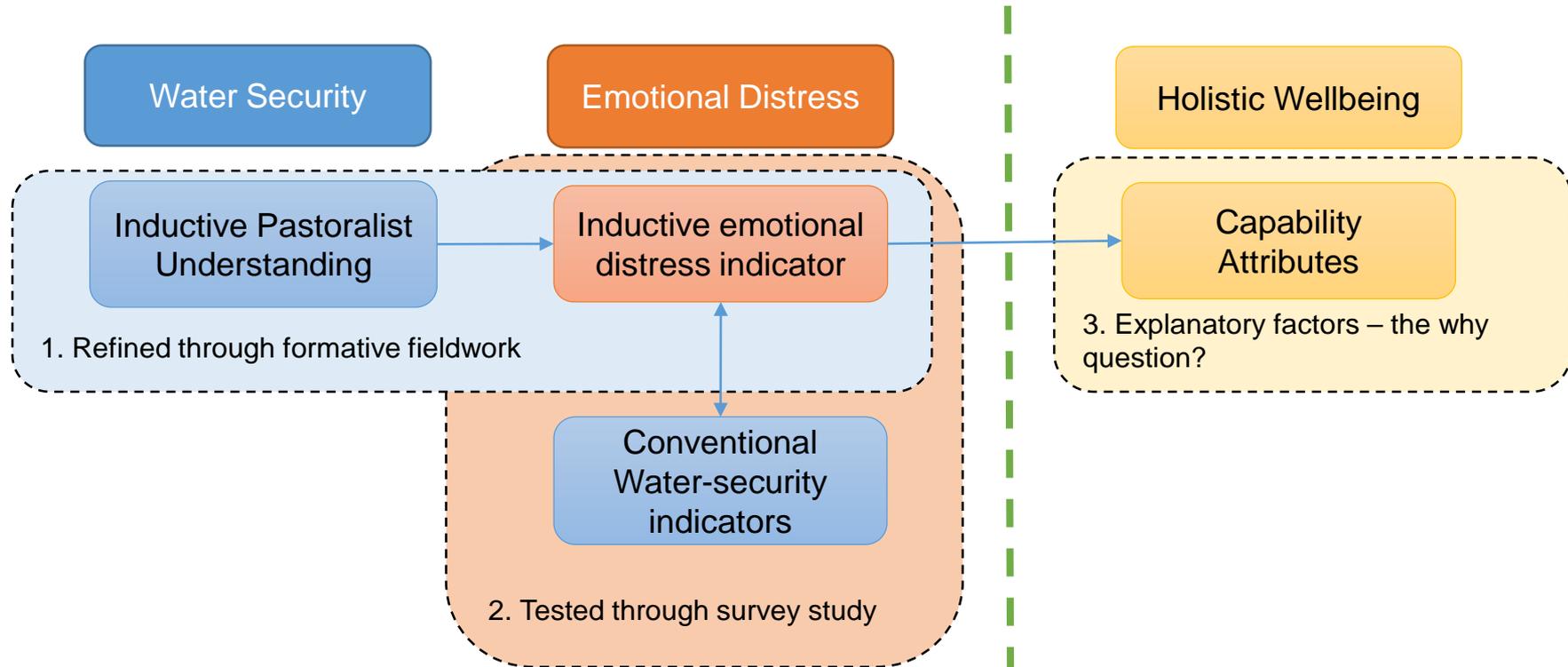
	Act.	Pass.	Pos.	Neg.
A	1	2	3	
B	1	2	3	
C	1	2		3
D	2	1		3



# Processing emotional distress at the individual-level



# Refining & testing the emotional distress indicator



## ***Some key questions for the analysis:***

- Do men and women pastoralists report similar emotional distress to water insecurity?
- How well do conventional indicators predict the water-security related emotional distress of pastoralists?
- What are the water security risks most likely to lead to the conflict-risk emotions among pastoralists?

# WEEP: Water-security in Ethiopia and the Emotional-response of Pastoralists

- New study into experience-based indicators of water security
- A way to understand and evaluation the needs of vulnerable groups – M&E toolkit an output from project
- Detailed investigation into water within the Afari pastoralist context
- Ideas very much still in development so we are keen to learn from other experiences and share our learnings going forward



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