Participatory design of a tool to evaluate the sustainability of tropical farming systems – the case of French Reunion Island

A tool for what?
The increasingly constrained context of agricultural production calls for the re-examination of the ways in which agricultural innovation is built. Participatory methods can provide solutions to this problem but need dedicated tools to both identify improvement objectives and to evaluate the system that needs to be redesigned. Here we report the co-design of a dual-purpose tool addressed to farmers to assess farm sustainability and to identify improvement objectives.

Objectives
Acquire pedagogic tool based on:
- the 3 scales of the sustainability concept
- easily understandable indicators and aggregation method

What is a sustainable farm on Reunion Island?

To define a set of shared sustainability objectives for local farms

Which indicators/variables to evaluate these objectives?
Collectively select/define indicators and variables grouped into sustainability components

3
Which weight to give to the indicators/variables?
Collectively define weight of indicators and ceiling values of components

Conclusions
Starting from the conceptual frame work of an existing tool (Zehm, Vaux et al 2008), we proposed here an original participatory approach that resulted in a tool adapted to local expectations for farm sustainability. Evaluation both at different levels of aggregation, i.e., from the level of sustainability to the indicator, allows to easily identify the levers for improvement. The tool is currently being tested on a sample of farms which are representative of the main farming systems used in Reunion Island today.

Reference