The Transformation Game: using the CLEANED R tool to negotiate inclusive and sustainable vision of transforming livestock value chains

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Objective

Develop an engagement protocol that allows decision makers to learn about major environmental dynamics resulting from changes in livestock value chains, identify trade-offs and synergies and develop a vision for an inclusive and sustainable vision of how to transform a livestock value chain to meet future ambitions

The CLEANED R tool

Ex-ante spatially explicit environmental simulation tool computing :
1. Land pressure, land use change and overall production
2. Water use for livestock
3. Greenhouse gas emissions (IPCC tier 2)
4. Biodiversity change
5. Nitrogen soil balance

Based on user input of number of livestock, alive weight, productivity and feed basket for each category of livestock

The interactive protocol

Develop Scenario via Vignette Selection

Test environmental impacts

H M L L

Low, Medium or High level of environmental impact. Maps illustrate distribution. Narrative description of reasons for (un)acceptability of results recorded by facilitators.

Revise?

Stop

Test socio-economic impacts

L M L H

Level of achievement of indicators (Low, Medium, High). Narrative description of reasons recorded by facilitators.
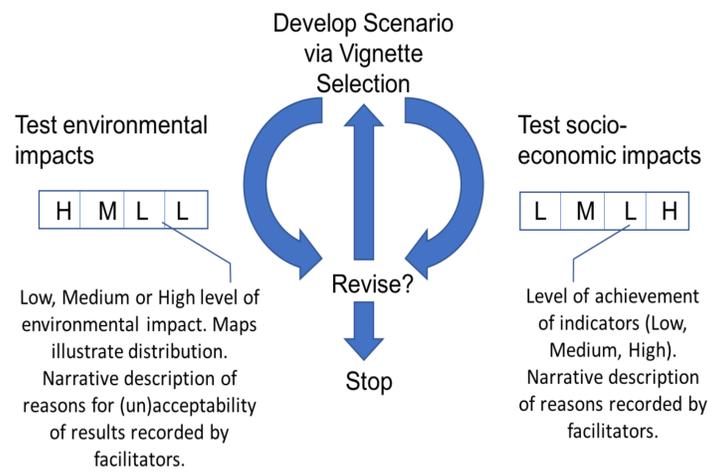
Figure 1: The iterative process of designing, evaluating and re-designing scenarios for the future

Participatory well being indicators

Participatory well being indicators definition based on story telling about successful individuals in the future to :
1. Understand how local people define success
2. Derive indicators to measure success
3. Define thresholds that allows to communicate to what extend the success has been reached (in terms of high/medium/low)

The transformation game: implementation of the protocol

Game board, with livestock categories

Bricks to represent the livestock numbers

Vignettes, livestock management options per category with consistent productivity-feed basket combinations
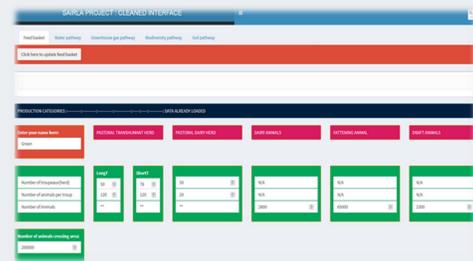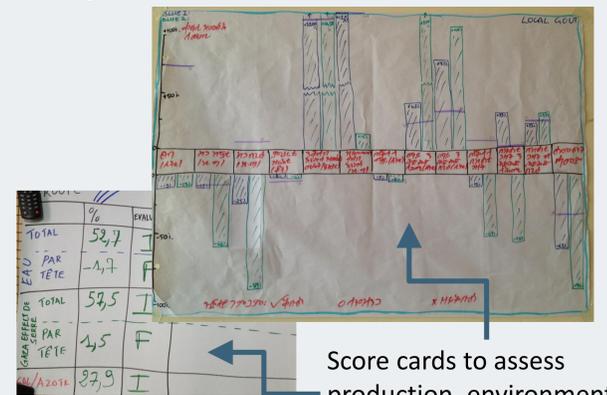
Figure 2: Game board with vignettes and bricks

Figure 2: The CLEANED R interface to calculate changes in production and environment

Score cards to assess production, environmental and well-being changes

Lessons learnt from Ethiopia, Tanzania and Burkina Faso

The CLEANED R tool becomes a boundary object : a neutral agent in the process that is not fully understood by individuals but every one accepts its results

In Burkina Faso:
➢ Crop farmers and pastoralists can co-exist in peace – if the pastoral routes and zones are well managed.
➢ The transformation game can be used to solve conflicts between crop farmers and pastoralists

In Tanzania:
➢ Improved cattle fed with bran, oil-seed cake and locally planted fodder will reduce pressure on land – at the cost of buying staple food from other areas.
➢ The transformation game unlocks the power of imagination. It helps communities get engaged, think beyond individuals and join forces to address challenges that hamper them in achieving their goals.

In Ethiopia:
➢ Meat and milk production can be increased without increasing environmental impact from livestock.
➢ Farmers understood why some policies exist while high level policy makers, who are aware of the policy targets, discovered why some policies do not work on the ground.