Causal Mapping

Cameroon Hackathon 2022

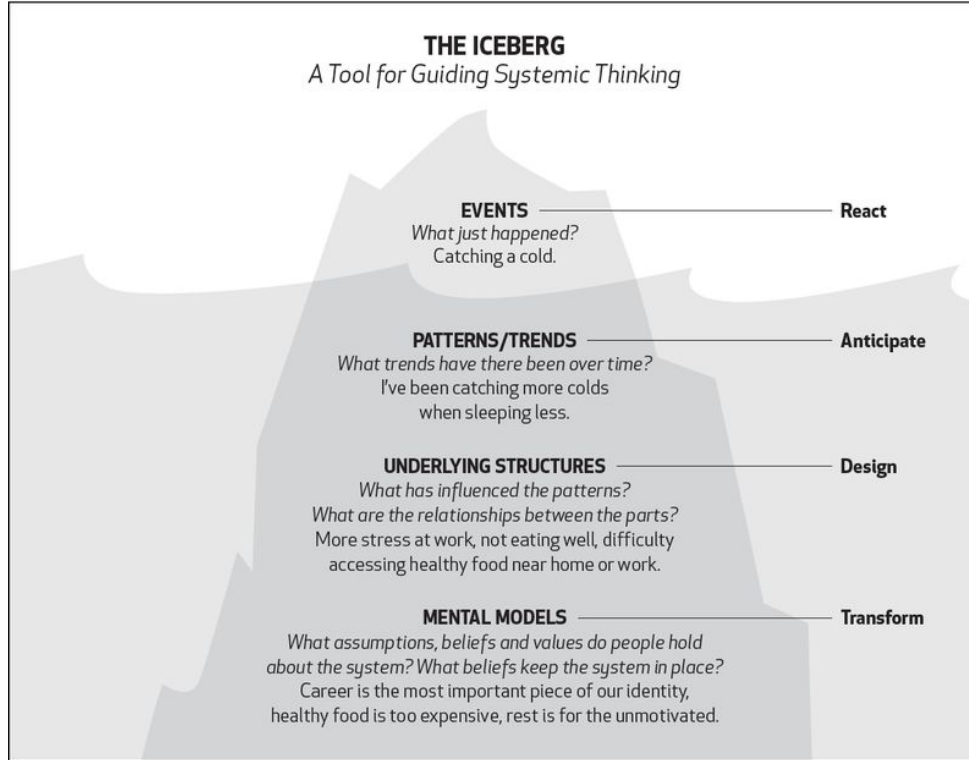**Surjyatapa Ray**

Introductions

Objective of the workshop

➔ To understand the systems approach
➔ Creating Causal Maps
➔ Discuss waste management in Cameroon [Is it a wicked problem]
➔ Self-exercise: create causal loops for waste management issues
➔ Discussion and Reflection

What is a system

"A system is a set of elements or parts that is coherently organized and interconnected in a pattern or structure that produces a characteristic set of behaviours, often classified as its function or purpose"

- Donella Meadows, 2008, p.188

The Iceberg Model

THE ICEBERG
A Tool for Guiding Systemic Thinking

EVENTS — **React**
What just happened?
Catching a cold.

PATTERNS/TRENDS — **Anticipate**
What trends have there been over time?
I've been catching more colds
when sleeping less.

UNDERLYING STRUCTURES — **Design**
What has influenced the patterns?
What are the relationships between the parts?
More stress at work, not eating well, difficulty
accessing healthy food near home or work.

MENTAL MODELS — **Transform**
What assumptions, beliefs and values do people hold
about the system? What beliefs keep the system in place?
Career is the most important piece of our identity,
healthy food is too expensive, rest is for the unmotivated.

Source: ecochallenge dot org
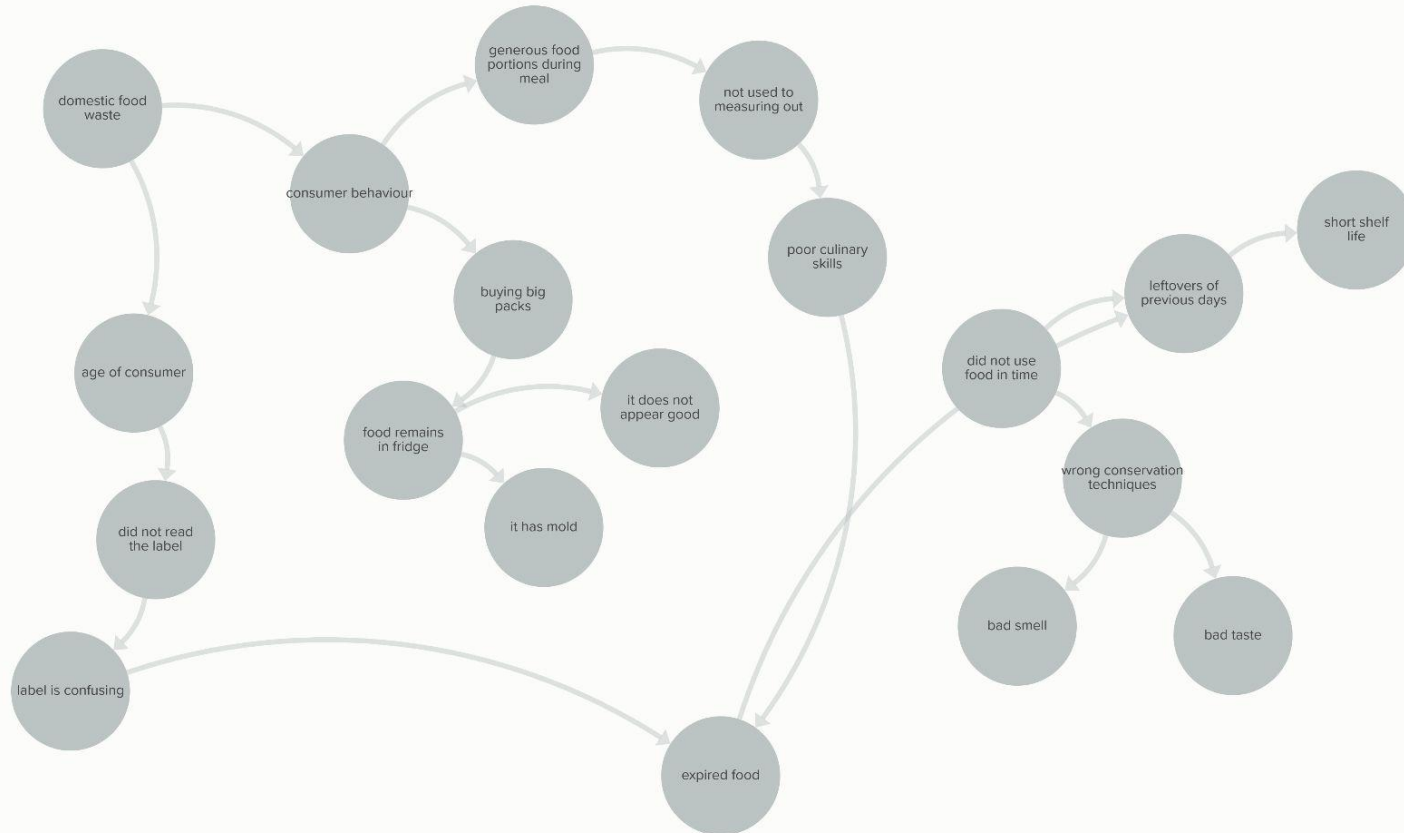
What do you think is an important waste management issue in Cameroon?

Causal Mapping

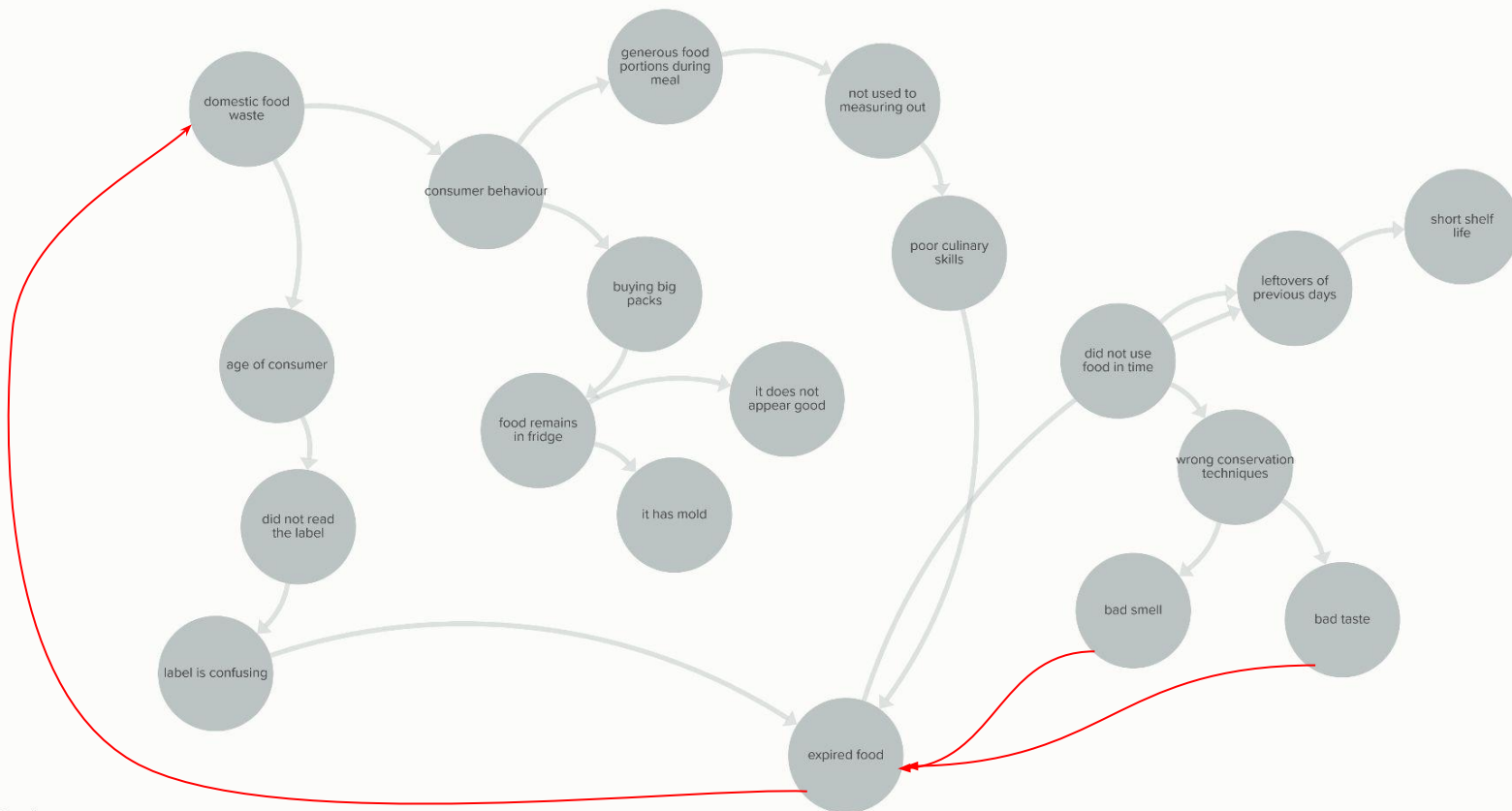What do you think is an important waste management issue in Cameroon?
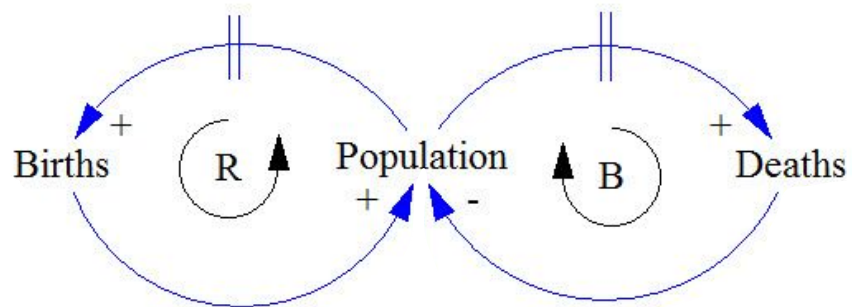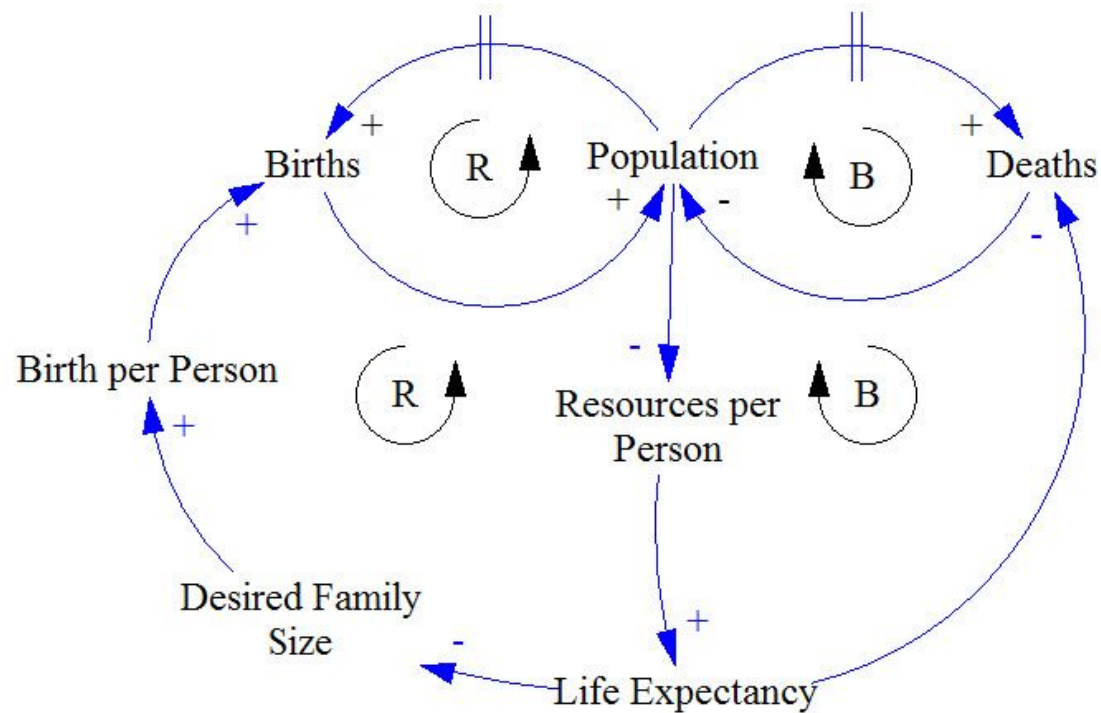
Domestic Food Waste

- domestic food waste
- consumer behaviour
- generous food portions during meal
- not used to measuring out
- poor culinary skills
- buying big packs
- food remains in fridge
- it does not appear good
- it has mold
- age of consumer
- did not read the label
- label is confusing
- expired food
- did not use food in time
- leftovers of previous days
- short shelf life
- wrong conservation techniques
- bad smell
- bad taste

Legend

- - - - - Opposite

Causal Loops

Legend

- - - - - Opposite

Feedback Loops

Feedback Loops

Loops within the system
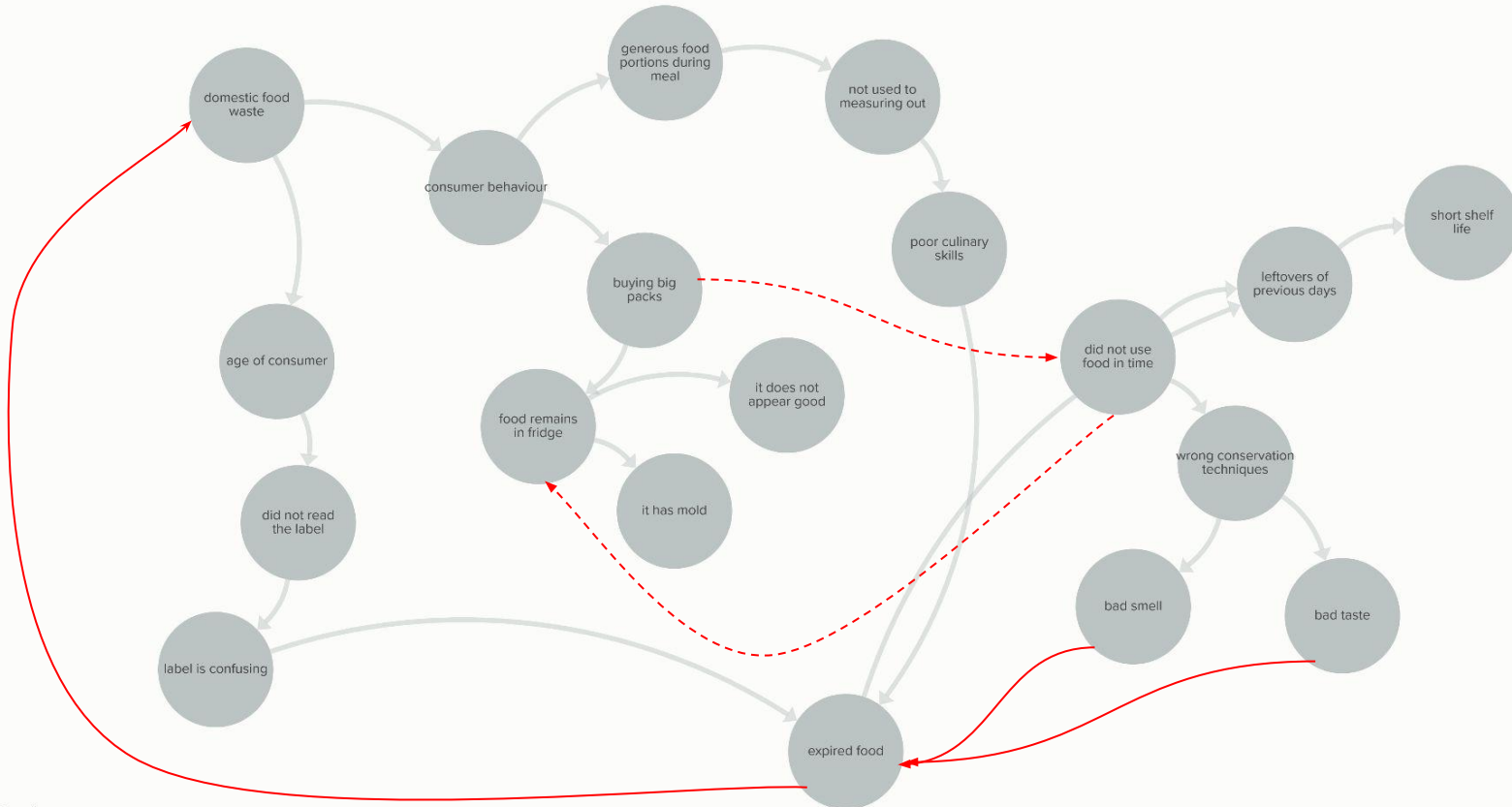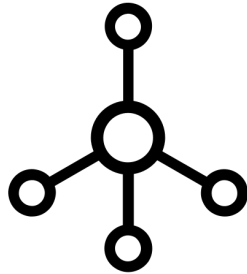

Legend

- - - - Opposite

Identifying nodes of change

Legend

----- Opposite
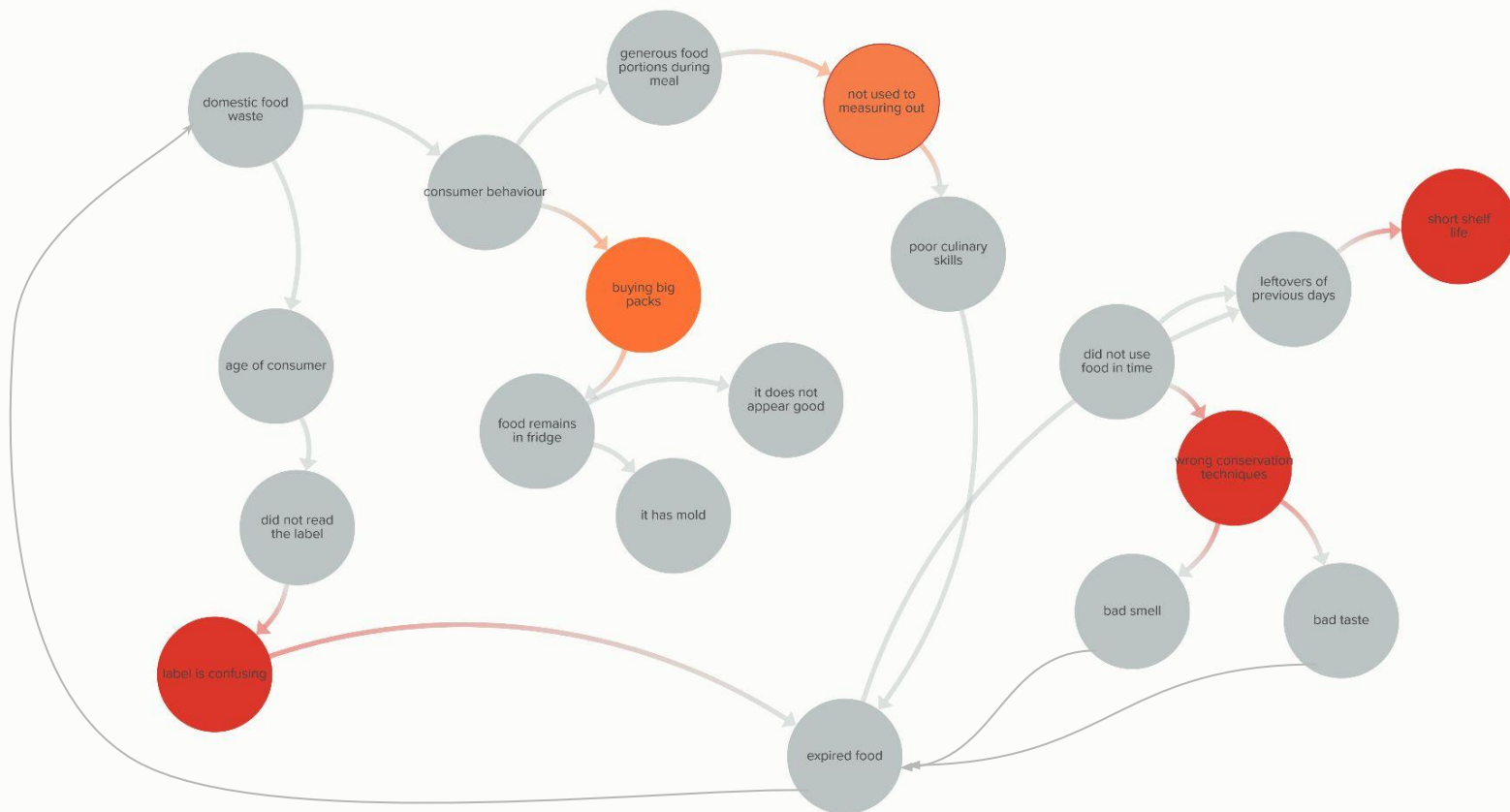
Exercise

Exercise

Create a causal map of a waste management issue (event) in cameroon

Discussion

Thank you.