

# Customers of the Future: Sustainability and Food



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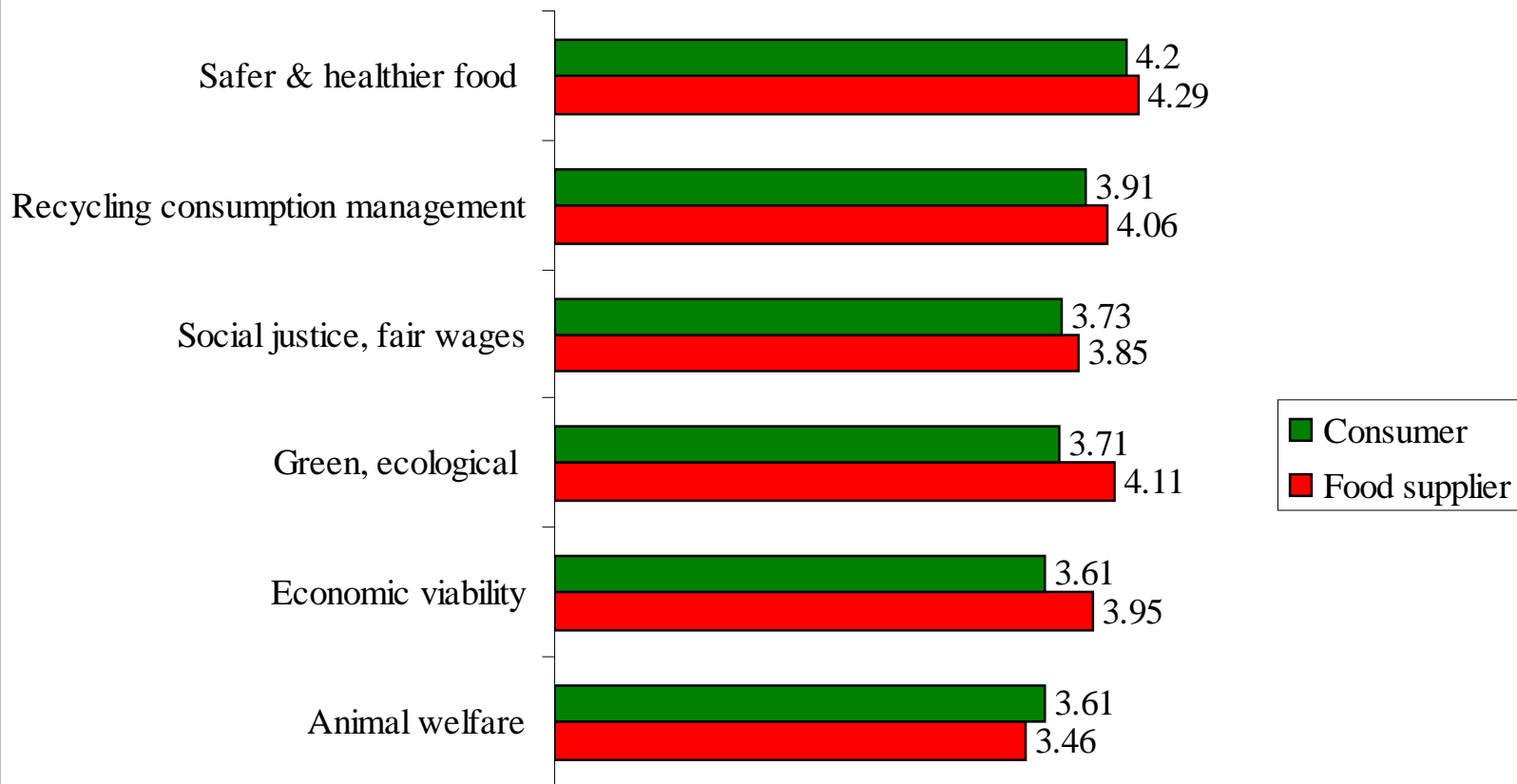
Which of these  
represents  
“sustainable  
agriculture”?



They both could.  
But how would  
we know?



## Importance of sustainability related issues in a sustainable food system





# What is *SUSTAINABILITY*?

- It is not a four letter word.
- It is not a code word for environmental concerns being trump in decision making.
- It is not assured by being small; any more than it is assured not to be by being big.
- It is about achieving better outcomes across *Prosperity, People, and Planet.*
- *Sustainability* is a **WICKED PROBLEM!**

# The Problem with Wicked Problems

- We are increasingly asked to deliver products and services related to “*wicked problems*.” (Rittel & Weber; Conklin).

Wicked Problems	Sustainability
<b>No definitive formulation of the problem exists.</b>	Prosperity, People, Planet
<b>Solutions are not true or false, but better or worse.</b>	Can't know if truly sustainable
<b>Stakeholders have radically different frames of reference.</b>	Businesses = prosperity Environmental groups = planet Social justice groups = people
<b>System components &amp; cause/effect relationships are uncertain.</b>	Consider the claim: small is sustainable, large is not.

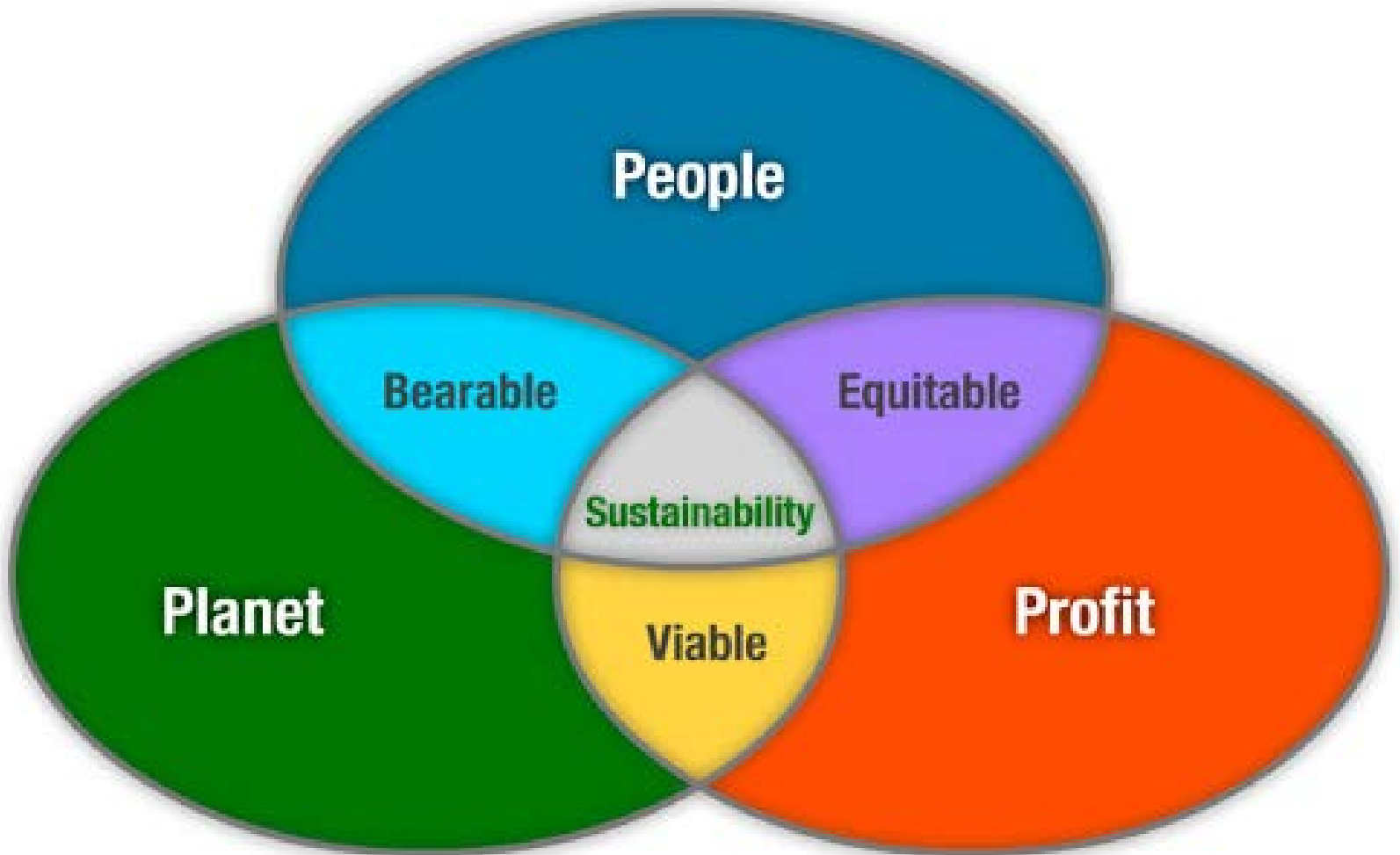


# The Problem with Wicked Problems

- Bottom line: ***Wicked problems are not solved, but managed.***
  - By taking actions toward desired outcomes:
    - ***Impact:*** Have system components moved in a better direction?
    - ***Process:*** Has there been responsiveness to the stakeholders who can veto as well as enable?
  - Fundamental need to attend to ***both impact and process.***



# Impacts?



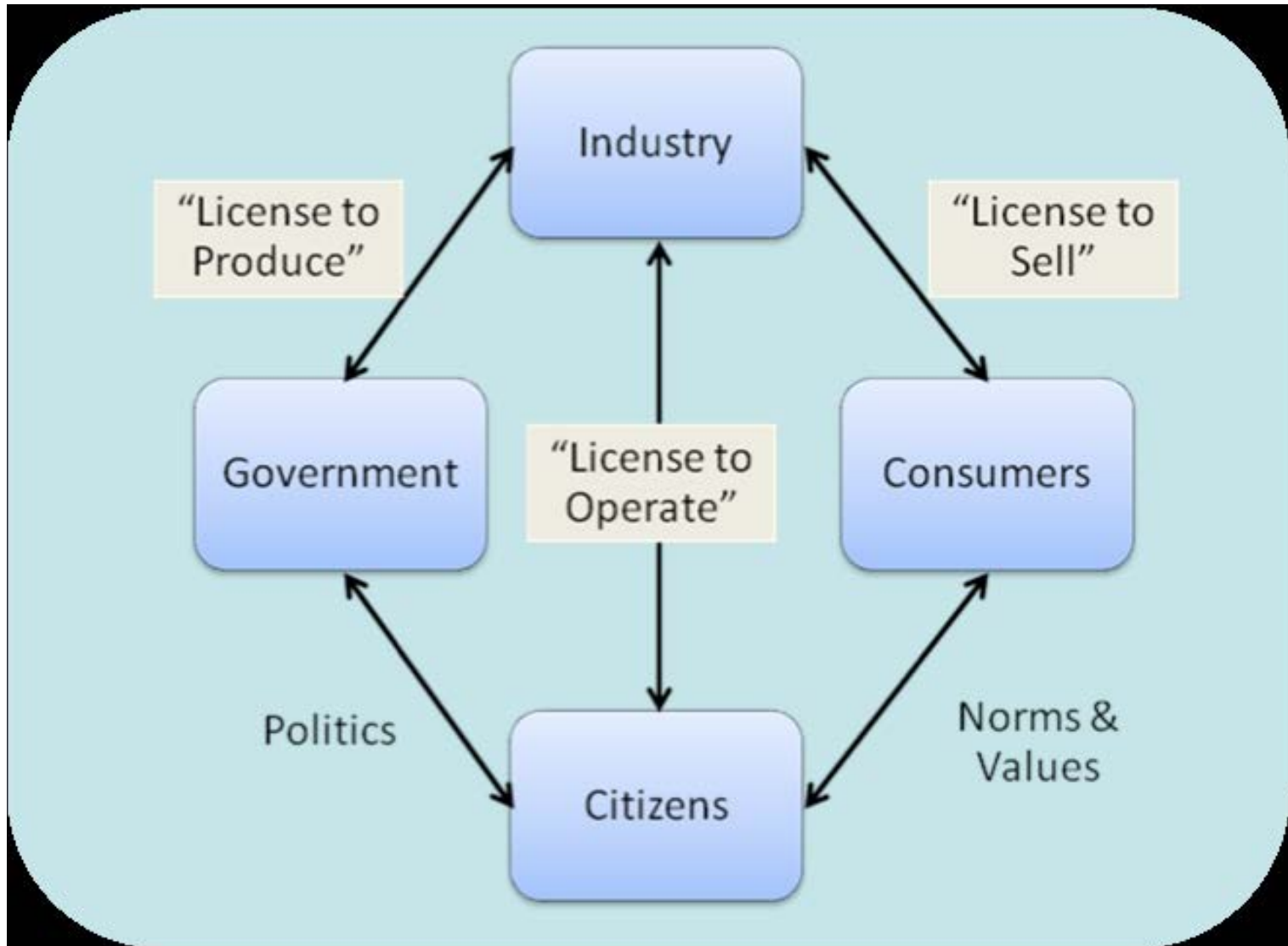
Source: TransForum

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# Stakeholder Process?

Source: TransForum



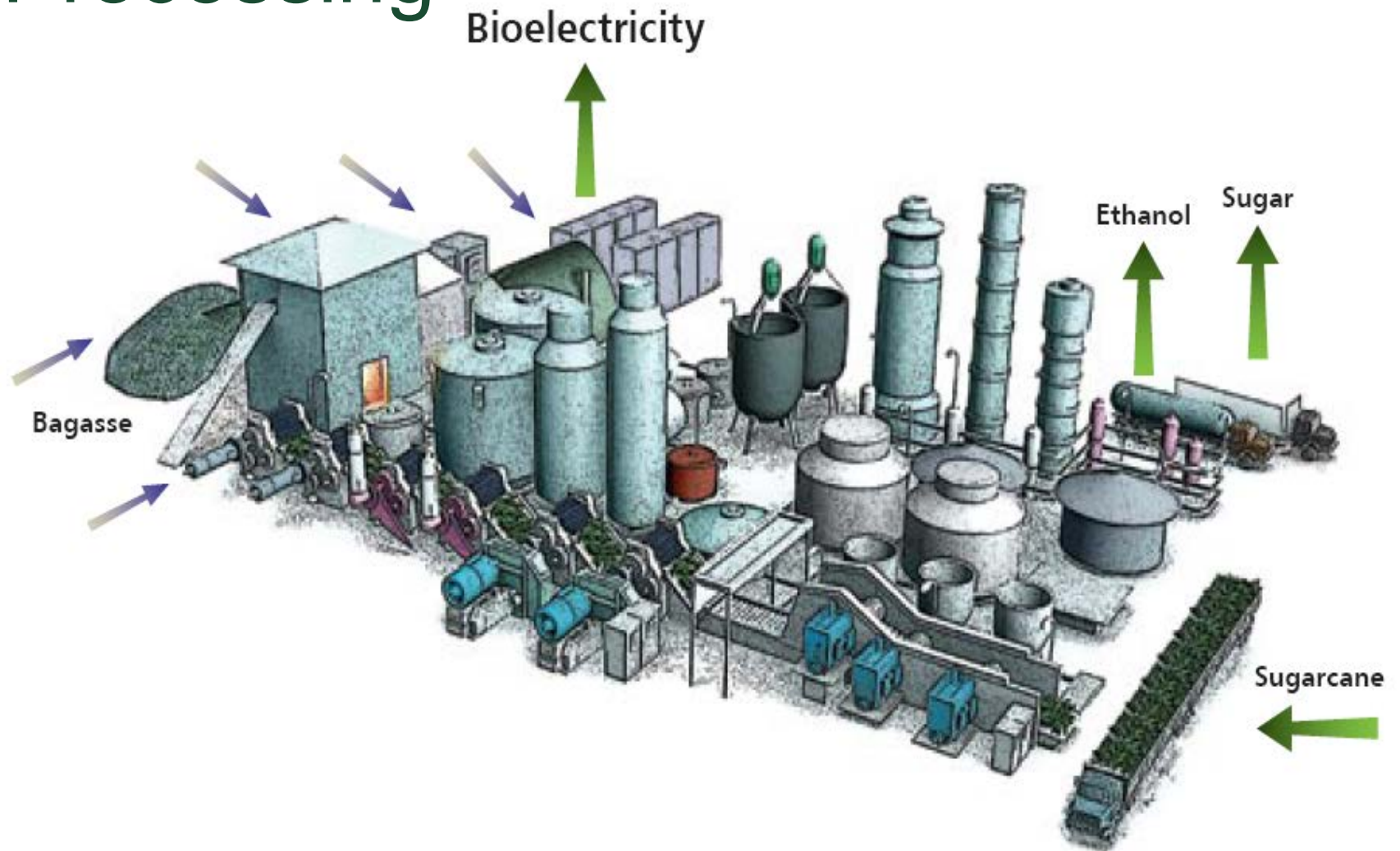




# Examples of Managing Sustainability

- Brazil's Sugar Cane Industry
- TransForum (The Netherlands)
- A Traveler's Guide to Managing Sustainability

# Example 1: Brazilian Sugar Processing



# Machine Harvesting of Cane



*Machine harvesting of sugar cane.*



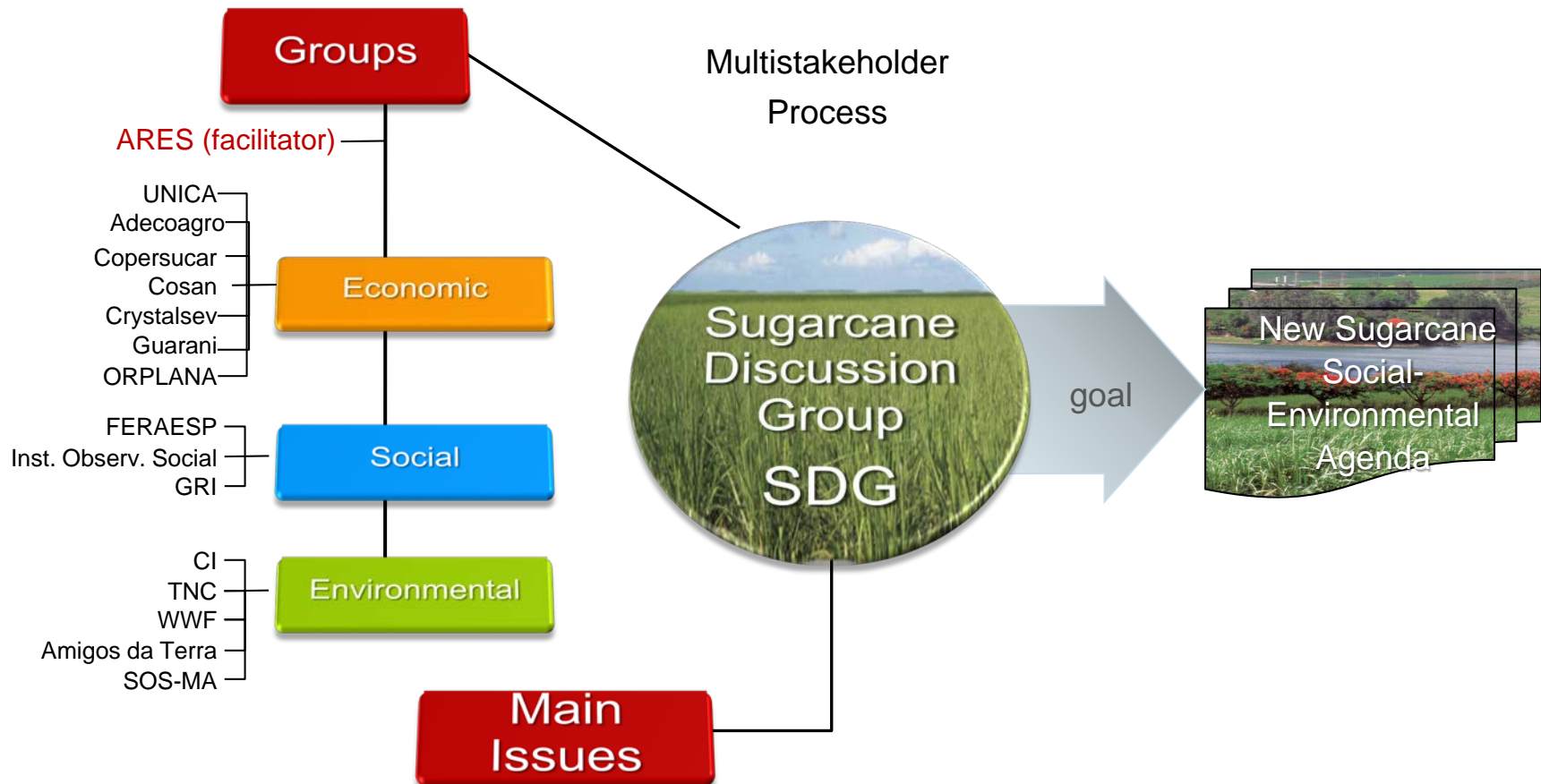
# Sustainable?

- Prosperity: Improved
  - Free from importing energy
  - Capable of exporting energy
- Planet: Improved
  - 9 barrels of oil equivalent for every barrel put into industry
  - Elimination of burning cane fields
- People: ???
  - Positive impacts for prosperity and planet
  - 300,000 to 500,000 uneducated, unskilled workers being put out of work in rural Brazil

**Brazilian Sugar Industry has made great progress, but no silver bullet has emerged!**



# Sugarcane Discussion Group - SDG



1. Forestry Code and Working Landscapes
2. Energy Matrix and Climatic Changes
3. Work Conditions
4. Mechanization (effects on labor workers / requalification)

# Multistakeholder Initiatives

- **“The dialog** occurring between NGOs and the private sector increases daily, ***replacing progressively a battle field with the parts entrenched in their agendas.*** MSI focus on **finding and developing a common ground** where the diverse and imprecise concepts of sustainability are progressively discussed. Furthermore, they are gradually incorporated into operational practices.”
- **“It is neither painless nor a comfortable process.** Not even perceived as efficient. **Discussions seem to be vague and results are not easily achieved. It is typically a paradigm change.** A decision making process is built based on “consent through dialog”, replacing the traditional consent driven by unilateral power of governmental regulation and enforcement.”



# Example 2: TransForum

- Dutch Innovation Program
  - 60 million euros, 50/50 funding partnership between private and public sectors of agriculture
  - 6 year life (2005-2010)
- Goal: Increase sustainability of Dutch ag
- TransForum sponsored three types of projects:
  - Practice projects (30 experiments)
    - Multiple scales of agriculture
    - Multiple parts of the supply chain
    - Product, process and marketing innovation
  - Scientific projects (solutions to specific problems)
  - Learning projects



# The TransForum Model

## ■ 3 Components

- 5 principles that recognized wicked nature of sustainability and need for system innovation and multi-stakeholder engagement
- Core strategy 1: Initiate and guide projects based on the principles
- Core strategy 2: Monitor & reflect to learn from the project work.


## ■ High performance projects:

- Had full multi-stakeholder engagement from the start.
  - Business, government, NGOs, and knowledge institutions
  - Collaboration and not mere presence
  - Open to experimentation and learn





# Traveler's Guide to Managing Sustainability



Get key stakeholders  
at the table early  
and often.

Engage them in  
experimentation and  
innovation.

Learn,  
monitor and reflect  
together.

Focus on impact  
and process  
performance.



# Relevance to Cooperatives?

- Cooperatives by their nature represent multiple players in a supply chain.
  - We can be an **enabler** of sustainability.
  - We can be a **target** of sustainability.
- We need to be at the table.
  - **Sustainability can't be done alone!**
  - We must be **open** to innovation and learning.
    - It's not about existing knowledge.
    - It's not about winning nor compromising.
    - It's not about irreconcilable trade-offs.
  - We must **assist others to be open** to innovation and learning as well.

