

The discussion "Use cases for behavioral science across the climate adaptation policy cycle (and beyond)" will start shortly...

As we wait for people to gather, could you answer two questions in chat window? 1. What are your top policy priorities? 2. What limitations have you seen in policy responding to climate change? Use cases for behavioral science across the climate adaptation policy cycle (and beyond)

Competence Centre on Behavioural Insights 24 October 2024



We see. Complex Systems. Human Behavior. New Futures. Applying Behavioural Science in Policymaking for Adaptation to Climate Change: A Case Study of Pastoralism in the Arid and Semi-Arid Lands of Northern Kenya

Wendy Chamberlin, Alexandra De Filippo, and Steve Wendel Final Draft, as of 15 July 2024



Image from Katherine Bundra Roux / IFRC (p-DJI0104)

Chamberlin, W., De Filippo, A. and Wendel, S. (2024). Applying Behavioural Science in Policymaking for Adaptation to Climate Change: A Case Study of Pastoralism in the Arid and Semi-Arid Lands of Northern Kenya. Internal Draft Report. International Institute for Sustainable Development (IISD) and sistemaFutura.





## introductio



#### Introductions

- A problem facing behavioral science
- Examples of pro-environment nudges

### **Pastoralism:**

- The challenges of livelihood productivity
- Tools to see "what's really going on"

### Framework:

- Behavioral science's role across the policy cycle
- An example for Extreme Heat

### **Closing:**

- The breadth of behavioral science
- An invitation

### agenda

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Wendy Chamberlin



How can we encourage and support environmentally sustainable behavior?

### **Food waste reduction in Norway**





**Food waste** carries huge environmental problems like greenhouse emissions and land degradation. Two nudges were implemented at a hotel's buffet... The interventions each decreased food waste by roughly **20%**.

 Use of smaller plates
 A big sign at the end of the buffet that read...

*'Welcome back! Again! And again! Visit our buffet many times. That's better than taking a lot once"* 

### Water conservation in Costa Rica



**Overconsumption of water** in Belén, Costa Rica. Around 25% more than the country average Stickers that compare the household's water consumption with their...

There was an overall **reduction of 4.5%** over water consumption in Belén.

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2587-0200 / 2587-0201 o al correo electrónico servicios@belen.go.cr

#### 2. Town







"...behavioral science researchers are almost always trying to nudge in the context of complex systems in which they can at best tweak behavior at the margin." Thaler (2020)



## pastoralism

### Pastoralism faces many challenges...

Pastoralists of Marsabit, rural Kenya, Feb 2018. Photo: Kandukuru Nagarjun / Flickr

# For success, these efforts require an enabling environment

### And, there are direct and indirect costs and constraints

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#### **Northern Rangelands Trust**

### Transforming Lives, Conserving Nature

Read our 2023 Annual Report Summary

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### Fragmentation blocks sustainable behavior and livelihood productivity

# Tools for see "what's really going on"



















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### We need an understanding across multiple levels, and of feedback loops between them



Adapted from Kania et al. (2018). The water of systems change. <u>Here</u>



### Behavioral Systems

### **Behavioral Science:**

Body of evidence Tools for research (RCTs, etc.) Applied tools (behavioral maps, etc.) Mental model of decisions & behavior Experimental mindset Systems Analysis: Systems Thinking System Dynamics Agent-Based Models Social Network Analysis Complexity Theory

### Many of them (but not all) center around a diagram of the system.





The options extend to highly detailed, computational modeling.

#### Start new simulation(s): US Inequality Map, Customer Lifetime Value... 🗸 Outputs Data displayed Concentration of Poverty Location Continental United States V August 26th, 2024 (Today) 0 Start date End date × years V UTH DAKOT Scenarios to include Bear Market, Targeted EJ Mid-Income cam... No. of Runs to Simulate VEBRASKA 20 **JULINOP** COLORADO 100,000 KANSAS ARKANSAS 250 500 Miles Saved Simulation Results Asset Ownership: Type x Race 401(k) ownership Retirement Sufficiency (per hh) Effect of Increased Savings Contribute 3% More Per Year (20 Year Maximum)

**A** Financialsim



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### framework



### Our role across the policy cycle





Implement (activate administration, drive compliance, etc.)

Increase adoption of existing policies and programmes (Behaviorally Public Policy)

Improve the quality of implementation and service (Behavioral Public Administration)



Pokomo council of elders, Victor Apollo (2022)



### HISTORICAL INJUSTICES A Complementary Indicator for distributing the Equalization Fund





**REPUBLIC OF KENYA** 

African Socialism and its Application to Planning in Kenya



Formulate and Adopt (consult, develop policies, build coalitions,etc.) Design a policy to account for the biases and decision-making processes of the target population

Design a policy based on feedback loops and time-delayed ripples in the system

Communicate climate science (Behavioral communications)

Commission on Revenue Allocation (2012)



Plan for Policies (Define Problem, Asses Risks, Set Agenda, etc)

Monitor and Evaluate (assess cost and effects, review changing context, etc)

Apply behavioural science to the policy makers themselves

Support policy advocacy

Employ rigorous mixed-methods to monitor and evaluate policies (RCTS, etc)

Systemic MERL: Tracing the effects of policies and programs across the system and other policy domains

Better understand where new or updated policies are needed

Electric Fences, Endonyonarasha village, Kenya



### Another example: Extreme heat













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### System-level policy needs local grounding

### **Coordination and Collaboration**

### Prioritization

### Sustainability



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### 2. Water conservation in Costa Rica



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There was an overall **reduction of 4.5%** over water consumption in Belén.

**1. Neighborhood**and...
Itembién en Belén el agua se agota, cuidémosla!
Itu hogar consumió menos agua que el promedio de casas en fu barrio!
Buen trabaio!
Use el guen trabaio!
Use el guen trabaio!
Use el guen trabaio!
Item el guen de casas en fu barrio!
Buen trabaio!
Use el guen trabaio!
Use el guen trabaio!
Diolo! Tu hogar consumió más agua que el consel de casas en tu barrio!
Diolo! Tu hogar consumió más agua que el casas en tu barrio!
Use el guen de casas en tu barrio!
Use el guen agua para egar el jardin; el gacata on necesita agua!
No lare el guen de lagua se agota, cuidémosta!

Si tiene alguna duda, puede contactarse con la Dirección de Servicios Públicos al teléfono 2587-0200 / 2587-0201 o al correo electrónico servicios@belen.go.cr

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### An invitation





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