

# >> ACT TO ADAPT

Behavioral Design for Climate Adaptation

Read the full report at ideas42.org/climateadaptation

## The climate is changing, and we must change too.

The effects of climate change are being felt around the world—from more frequent and more severe extreme events, to heat-related illness and the spread of infectious disease, to diminished agricultural yields. While we can, and must, decrease greenhouse gas emissions through mitigation efforts, it is also time to adapt to the impacts already occurring.



# Why Behavioral Science?

We know from studying behavior that our instincts can, at times, fail us—especially when it comes to a collective, coordinated response to climate change. Humans are not natural long-term planners, and we all share tendencies that make it challenging to adapt to complex new realities.



#### **Present Bias**

We favor immediate rewards, and minimizing immediate costs, at the expense of long-term goals.

**Psychological Distance** 

# For example

Coastal cities build pumps, raised roads, and other short-term immediate changes to address flood risk, instead of making more comprehensive improvements that have high upfront costs.

Residents of areas that have never experienced a flood, heat wave, or hurricane may be less likely to take precautionary steps.

# **>>>**

#### **Sunk Cost Fallacy**

People continue to invest in an endeavor based on investments that have already been made and cannot be recouped, even if changing behavior would be more beneficial.

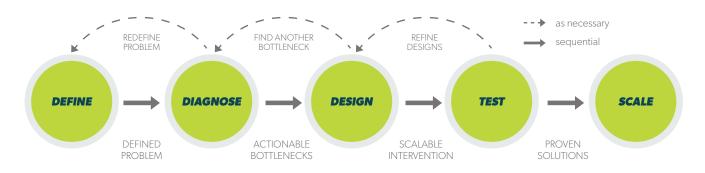
We consider issues that have not affected

us personally as abstract and irrelevant.

Cities and municipalities may continue investing in existing gray infrastructure rather than investing in new green infrastructure.

Using behavioral science, we can identify barriers to effective action and then design better programs, products, and policies that help more everyday people as well as key decision-makers follow through on adaptation efforts—setting everyone up for stronger futures.

ideas42's behavioral design process has five key phases. We start by defining the problem without any embedded assumptions, then investigate the structural, economic, social, or psychological context in which the decision is being made. Having identified behavioral barriers at play, we design interventions that address the contextual causes of behavior, rigorously test them in the field, and scale them to new channels or audiences.



# **Example Barrier**

# **Example Design Idea**



Residents of fire-prone areas may not take behaviors to reduce the risk of fire on their property when the incentives are abstract, distant, and the behaviors themselves feel private.

Send out annual "fire protector maps" that use descriptive norms and feedback to compare fire prevention behaviors.



Health workers at rural clinics do not receive, communicate, and act on warnings about potential malaria outbreaks in ways that are timely and effective. Information about a potential outbreak may not be salient due to limited attention and present bias.

Send short SMS messages to health care workers in non-endemic areas that are projected to experience a malaria outbreak within the next month. The messages would contain simple, easy-to-follow rules of thumb about malaria risks, outbreaks, and best practices to plan for and to treat possible cases.



Agricultural workshops and trainings provide important information but can be unnecessarily complex. Heuristics, or rules of thumb, simplify this information into actionable, easy-to-use shortcuts.

Provide training for extension agents, cooperative leaders, and producer groups in teaching simple, easy-to-use rules of thumb, or heuristics. These heuristics can be communicated either in-person during workshops, trainings, and farmer field schools or via mobile-based voice messages and timed to correspond with planting and harvest cycles.

### We often hear the question, "Is it better to focus on individual change or structural change?"

We view the question as a false choice: no decision is purely individual or purely structural. While behavioral design is often understood to be the province of "nudges," we can, and must, address more complex adaptation-related decisions, which we refer to as SCOPE decisions.











#### **SCOPE** decisions might look like:

- » Developing long-term climate adaptation plans for cities
- » Designing agricultural extension services
- » Allocating dwindling water resources
- » Rolling out disaster response protocols
- » Establishing early warning systems for disease outbreaks