

## Questions for Rare from the Conservation X Labs Ideathon Participants

Thanks for your great questions! We've tried to answer as many as possible. The following responses were compiled by several Rare staff members based on our experience and are not representative of all staff. If you have follow-up questions or others we didn't address below, please email us at [behavior@rare.org](mailto:behavior@rare.org). You can also explore our websites at [rare.org](http://rare.org) and [behavior.rare.org](http://behavior.rare.org).

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### 1. How can you identify which problems lend themselves specifically to behavior change intervention (vs. other types of interventions)? Do the principles of BC apply to actors that are companies, or governments, or only to individuals?

In the broadest sense, behavior change interventions are relevant for problems where there is a clearly identified 'desired' behavior that a group of people is not doing (because they are doing something else or in a state of inaction). Since the core ingredients are people and behaviors, this can be at the household/community level, company/organizational level, or government level. At Rare we tend to focus on resource-users and local communities, because of the opportunity for individual or community-led change in the places we work. We also work with partner organizations and governments (e.g., mayors, officials) whose behavior could directly impact what options are available for communities. Looking 'upstream' at actors in the system who could have the biggest impact towards our goals is an important step, yet sometimes those actors are less available or feasible to change. In our work we have found that working with people who have the most direct contact with natural resources can create a more direct path to the outcomes we seek and provide benefits to communities themselves (e.g, reducing overfishing). The type of behavior change solution you then choose to apply to a given problem emerges through research and context.

Based on our experience in the sector, in [Fish Forever](#) we have found it helpful to "break down" the complex world of coastal fisheries into:

- Community-level collective behaviors that directly impact overfishing: respecting marine reserves, registering yourself as a fisher and actively participating in fisheries management.
- Community-level individual behaviors that facilitate collective behaviors: such as recording fish catch to provide data for decision-making, saving with regularity to enhance household financial resilience and activities that add value to fish catch to decrease fishing pressure.
- Decisions that enable collective behaviors: for example, enacting policy that grants coastal communities authority to manage their resources, approving regulations that establish Managed Access and Reserve areas and Regional Development Plans that allocate budget to coastal fisheries management.

With this clarity we are better able to identify the actors and their particular motivations and barriers for behavior change, resulting in the design of behaviorally-informed interventions best suited for each one.

## **2. Were these levers of behavior change created by solely behavioral scientists in the Global North? Would appreciate learning more about this process and how they came to be.**

Rare's behavior change framework - the levers of behavior change - represents a distillation of a lot of evidence-based principles from behavioral and social science and found in other behavior change models. While we are not experts on the diversity of the field, our general finding is that behavioral science (although depends what you include there) has not been the most diverse field in terms of its researchers, and many populations who are selected for research studies are categorized as '[WEIRD](#)' (Western, Educated, Industrialized, Rich, Democratic). It's also possible that the funding and support for behavioral and social science differs for different countries and how that shapes research priorities. Perhaps it is more useful to think about the current diversity of identities and perspectives brought to the field, and we hope that grows in the years to come. In any case, there is still a lot of work to be done in assessing how different behavior change principles apply to different populations and contexts and the 'universality' of these principles. Some effects, such as those for defaults, have been studied and shown to replicate across countries. It's also important to as much as possible match evidence from a given research context to your own context and population. For example, we recognize the need to be careful about applying findings from experiments with U.S. college students to, for example, rural fishing communities in the Philippines.

Still, humans have more in common than not, so we see opportunities to learn about social and cultural differences while still recognizing what could be shared about our biology and cognition. The development and public health fields are good examples of ones whose behavior change work have explored a wide range of countries and contexts. What excites us at Rare is the ability to research and learn from what works for environmental and conservation problems and across contexts. Rare has also traditionally worked in places that are not located in the 'Global North,' and our behavior change approach has been deeply influenced by our staff, partners, what has worked in communities, and how successes have replicated across over 60 countries.

## **3. What do people tend to 'get wrong' when first introduced to behavior change?**

Among environmental practitioners, there are a few statements that we tend to hear quite often that are worth reconsidering. First is individual or household behavior is unlikely to make a difference on major problems (see #1 and #9 for more on that). Second is that more common behavior change tools like information, material incentives, or rules and regulations are the go-to strategies. These tools have a lot of value, and there are ways we can make them even more behaviorally-informed or use a different tool to have greater impact. The information-action gap and ability for incentives to backfire, particularly when it is hard to put a value on an action, give reason for caution. Third is that any given tool is a 'silver bullet.' We can't emphasize enough the importance of what we call our [Empathize](#) step in our [Behavior-Centered Design](#) approach. Understanding the motivations and barriers of your target audience relative to the

target behavior and then using those insights to develop hypotheses about why and how behavior change could happen is critical.

Empathizing done right is very powerful, when community leaders express they've discovered new things about their own communities and how this shapes their vision of their role as behavior change agents, it is a great reminder of how easily we can assume we know "enough" about an issue, people and their context.

Here are a few other examples from [Make it Personal](#), Rare's program on climate change in the U.S. The value of individual and household behavior change is often under-estimated as a strategy for addressing climate change. At the same time, solutions based on traditional levers, such as material incentives, as well as investments in technology have proliferated. For example, advancements in technology and tax credit policy have already reduced the price of residential solar panels by more than 70% in the last decade. However, as of 2018, solar generated only 1.5% of U.S. electricity, and less than 2% of American households had solar. Similarly, electric vehicle (EV) battery prices have fallen by nearly 90% in dollars per kilowatt from 2010 to 2019. Despite this remarkable decrease in price, only 1.6% of new car purchases in the U.S. were electric in 2018. These are just a few examples demonstrating that traditional approaches to behavior change rarely work on their own.

Instead, we believe behaviorally-informed solutions are more likely to achieve meaningful behavior change. In the context of both solar and electric vehicles, tax credit policy could benefit through behavioral design. Hyperbolic discounting tells us that people undervalue rewards in the future, as opposed to the now. However, many incentive schemes are based on tax credits, which the buyer would only benefit from months later when they receive a refund. These incentives could be far more effective, even at lower cash values, if brought into the now by providing them at time of purchase.

#### **4. When changing behavior, how do you make sure you are not subconsciously forcing someone to do something but are encouraging them to change their behavior towards [it]? Where would the practice of 'nudging' fit into the six levers?**

Our belief is that ideally behavior change maintains choice and free will. In our [Fish Forever](#) work, we've found it helpful to talk about behavior adoption rather than behavior change to emphasize the point that people can ultimately choose or not choose to do a behavior. Behavior change solutions are therefore trying to reduce barriers and enhance existing motivations for a given behavior. Current work on COVID-19 is a particularly interesting example for this in the case of our societies encouraging social/physical distancing, wearing masks, and handwashing. Whether we realize it or not, these are behavior change campaigns! Each person is responding differently to the pandemic; people are making their own decisions about whether the social, material, and/or emotional costs are significant enough for them to comply with these new guidelines. In our coastal fishery work, communities will only adopt the desired behaviors when they recognize them to be important for realizing shared goals. We recently released a [Theory of Cooperative Behavior Adoption](#) that rests on the assumption that if a community does not ultimately believe that they would all be better off by preserving a resource, then their behavior is unlikely to change.

Research on behavioral economics, choice architecture, and ‘nudging,’ has gotten a lot of attention from behavioral scientists and the public recently. These tools are powerful and have demonstrated some real impacts on a wide range of topics. It’s important to recognize though that these are a set of tools, but not the only tools. We still need to conduct research about what is likely to change behavior and cannot assume them (or any others) to be a silver bullet. Unfortunately, some nudging or choice architecture interventions have sought to universally apply these tools or use them in ways that end up being disempowering. As with our goals of ‘behavior change for good,’ it is essential to recognize the power dynamics of behavioral designers and how they are working with and learning from target audiences to develop behavior change goals.

### **5. Regarding the six levers of behavior change: Are ones more effective/certain combinations that have seen more success in inducing behavior change?**

There are some combinations that seem to appear more often together than not, but it’s most important that this emerges through your research. Here are some but not an exhaustive list of pairings we’ve seen be effective:

- Information + Emotional Appeals (e.g, marketing and messaging)
- Social Influences + Emotional Appeals (e.g., social identities)
- Information + Choice Architecture (e.g., feedback on performance and reminders)
- Material Incentives + Rules and Regulations (e.g., enforcement of rules)
- Material Incentives + Social Influences (e.g., group incentives)

Ultimately, your research should guide you in finding a good combination of levers for a specific audience in a particular context, validating your design assumptions through testing is key to understanding whether or not you’ve picked the most appropriate “mix.”

### **6. What is the preliminary research you are doing to identify which lever to work with best in each social and environmental setting?**

Our main areas of work right now are on coastal fisheries ([Fish Forever](#)), climate-compatible agriculture ([Lands for Life](#)), and U.S. climate mitigation ([Make it Personal](#)). Each program has a different behavior change strategy depending on the specific behaviors and audiences.

For our [Fish Forever](#) program, I recommend exploring our [Theory of Cooperative Behavior Adoption](#) for an explanation of how the levers intersect with this program (more on this in question #8).

Our Lands for Life program and Make it Personal programs are still in the research phase of developing their approaches to learn about behavioral motivations and barriers. Please feel free to visit our [website](#) to learn more about each of our programs.

### **7. How do you quantify ‘success’ when you’re assessing a program’s progress?**

Here are a few examples from our work, and ultimately it is up to each program strategy to determine what its metrics of success are in terms of goals and outcomes. In general, we are looking at whether a given program had an effect on those goals relative to whether the program didn't happen:

For our [Fish Forever](#) program, we have a comprehensive monitoring and evaluation (M&E) plan that tracks how each part of the program is moving towards achieving a series of short term milestones and outcomes as well as, long-term impacts. Outcome metrics are organized into three broad categories: Community-Based Management, Policy and Governance and Blended Finance. Impact metrics are categorized into four categories: Conserve Biodiversity, Sustain Livelihoods, Improve Well-Being, and Secure Food.

Community-Based Management houses behavior change and ecological outcomes, through which we are aiming to assess whether the activities of the program have led to changed behaviors (e.g., less overfishing) that are durable over time as well as had an impact on the natural resource itself (e.g., increase in fish biomass), all relative to whether those changes would have happened if [Fish Forever](#) was not present.

For our [Make It Personal](#) work, our north star objective is to get back on track to the U.S. commitments under the Paris Agreement by 2030. This would entail reducing CO<sub>2</sub> emissions by roughly 500 metric tons a year. Given that Make It Personal is a newer program at Rare, we are currently developing guide posts to quantify our success along the way.

## **8. What part do local communities in Rare's Fish Forever program play throughout the eight steps of the Behavior-Centered Design journey?**

Communities are an integral part of the whole [Behavior-Centered Design](#) approach. Due to our experience working in coastal fisheries, we have a baseline understanding of key stakeholders at local, sub-national and national levels, as well as the critical behaviors associated with each one. In the program Start-Up stage, we work with a range of partners to validate our assumptions and adjust as needed ([Frame](#)).

During Profiling and Baselineing we use tools such as key informant interviews, community walks and focus group discussions, as well as a Household Survey to identify the key drivers and inhibitors of behavior adoption at the community level, among other programmatic data ([Empathize](#)).

Strategies for different elements of the program are developed and validated with stakeholders before proceeding with their implementation. This ranges from testing materials for clarity of messaging and cultural appropriateness, to providing guidelines and mentoring to adapt behaviorally informed activities such as public pledges ([Map](#), [Ideate](#), [Prototype](#), [Test](#) and [Launch](#)).

We are in the process of developing a robust set of tools to monitor the effectiveness of behavior interventions grounded in the [Theory of Cooperative Behavior Adoption](#). In the past, we've used qualitative assessments such as focus group discussions to gauge key message

retention, anecdotal evidence and enforcement records of infractions as a proxy to changes in behaviors ([Assess](#)).

Our ultimate goal is to establish community-based sustainable fisheries management, therefore throughout the 3.5 year Fish Forever journey we work alongside partners, site implementation teams and community leaders to co-design, implement and adapt programmatic activities, progressively building their skills and creating the enabling policy environment to sustain the work long-term.

### **9. What role does larger systemic/structural change play when you consider strategies for individual/community behavior change?**

Understanding the system in which behavior change operates is important for having a meaningful impact on core outcomes. We start our behavior change work by [Framing](#) the challenge; this involves identifying problems/undesired outcomes and then all of the actors and behaviors that are contributing to it. From there we identify what the associated desired behaviors are and which ones we have the most feasibility, momentum, and impact to change. While there are indeed leverage points upstream of individuals and communities, the feasibility of working with those actors can be immensely difficult. This is not to say that we shouldn't try or identify these opportunities where they arise, but our work at Rare has shown us the power of working at the individual and community level (often in partnership with policy change at regional and state governments) in achieving transformative change (more on this in question #1). It's also important to recognize that systemic and structural change happens because of a lot of different behaviors changing in tandem. The challenge, then, is identifying which behavior might create a spillover to other behaviors and/or just how many of the behaviors related to a systemic problem need to change to see systems change.