

# INVESTIGATING BEHAVIOR CHANGE within RBF projects (GPOBA, etc.)

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**E-Discussion**

**Output-Based Aid/Results-Based Financing Community of Practice**

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# E-discussion

1. Share initial findings from a project desk review.
2. Get feedback from staff working or interested in Results-Based Financing (RBF) & Behavior Change.

## Background of the review

### Objectives:

- Investigate how behavior change is reflected in World Bank's RBF projects on access to basic infrastructure (incl. OBA and PforR).
- Propose an analytical framework by characterizing behavior change in RBF for
  - 1) project beneficiaries (i.e. poor customers)**
  - 2) implementing partners (i.e. ministries, contractors, etc.)**
  - 3) broader sector participants (i.e. via a demonstration effect / crowding in finance)**

### Audience :

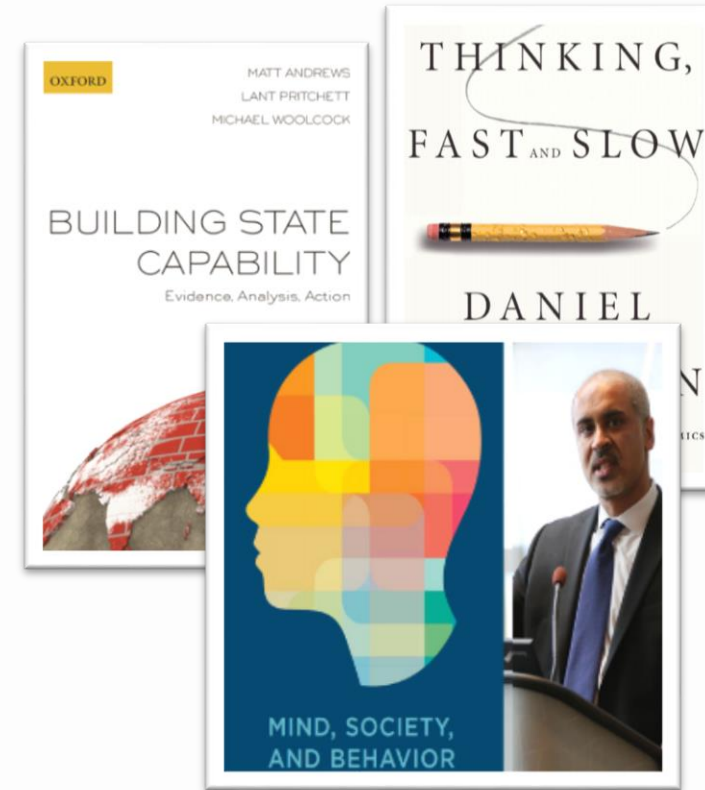
- RBF and Behavior Change practitioners within the Bank, WBG partners and donors

# Questions for e-discussion

1. What tools can be used for behavior change diagnostic or planning without overburdening project preparation?
2. What do you think of and how would you improve the research question: **Does Results-Based Finance prompt clients to address behavior change in**
  - being pro-poor, targeting the poor customers,
  - improving capacity/service quality,
  - creating a demonstration effect?
3. What research methods would you see as appropriate to investigate this research question?

# Methodology

- Analytical framework from *WDR'2015*, *Problem Driven Iterative Adaptation*, *Thinking Fast and Slow*, etc.
- Desk review of RBF projects in SDN
  - partial results from 18 GPOBA projects, 3 PforRs, 1 IPF-as-RBF in 17 countries are presented here →
- Interviews with TTLs
- Other methods TBD



# Overview of RBF approaches

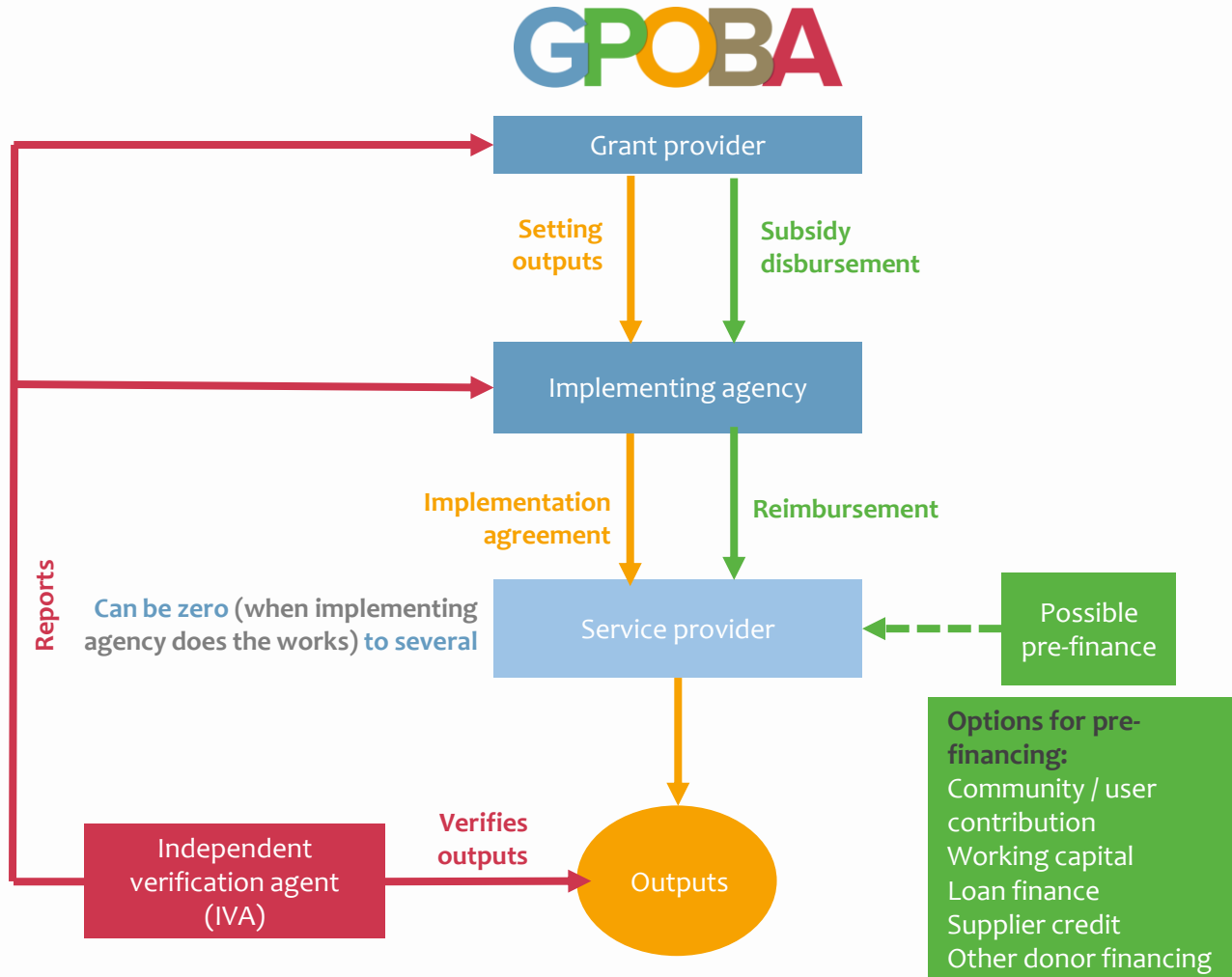
RBF tackles the Principal-Agent problem

- Though high-powered incentives – traditional economics,
- By embedding behavior change at various levels.

Examples - for discussion...

	PforR	GPOBA	IPFs with RBF
<b>high-powered incentives</b>	<ul style="list-style-type: none"><li>- DLIs (generally, prefinanced from WB/IDA advances)</li><li>- Visibility of non-delivery in next period</li></ul>	<ul style="list-style-type: none"><li>- DLIs (prefinanced by client or third-party)</li><li>- Visibility of non-delivery in this period</li></ul>	
<b>embedding behavior change</b>		E.g. Pushing implementing partners towards servicing the poor	

# E.g., output-based aid



1. A Service Provider (public, private or public-private partnership scheme) self-finance and delivers pre-defined outputs;
2. To receive these subsidy payments, the results must be verified. First, the Service Provider reports on the outputs it has delivered to an Independent Verification Agent (IVA);
3. The IVA reports back to the funding bodies on the actual quantity of outputs delivered. IVA checks may be scheduled over a number of months to ensure sustainability of outcomes;
4. Based on the verification reports, the fund providers release funds to the Implementing Agency;
5. The Implementing Agency then releases these funds as subsidy payments to the Service Provider;
6. The project may also provide incentives to Service Providers in the form of low-cost refinancing of credit. In these cases the International Finance Institutions (IFIs) can provide low cost loans to the Implementing Agency;
7. The Implementing Agency then uses these loans to offer low cost loans to the Service Providers. These loans are typically used to finance household credit, the profits of which are used to finance Service Providers' working capital;
8. The IVA gathers information on output delivery throughout the course of the project and delivers an ex-post evaluation review to the funding bodies at its close.

# Initial findings on behavior change at the beneficiary level

# Typical outputs in GPOBA projects are behaviors

Connection to a service or network (e.g., water)

Connection + usage

Purchase of a system/product (e.g., solar home system)

Purchase of a system on credit + repayment of loan

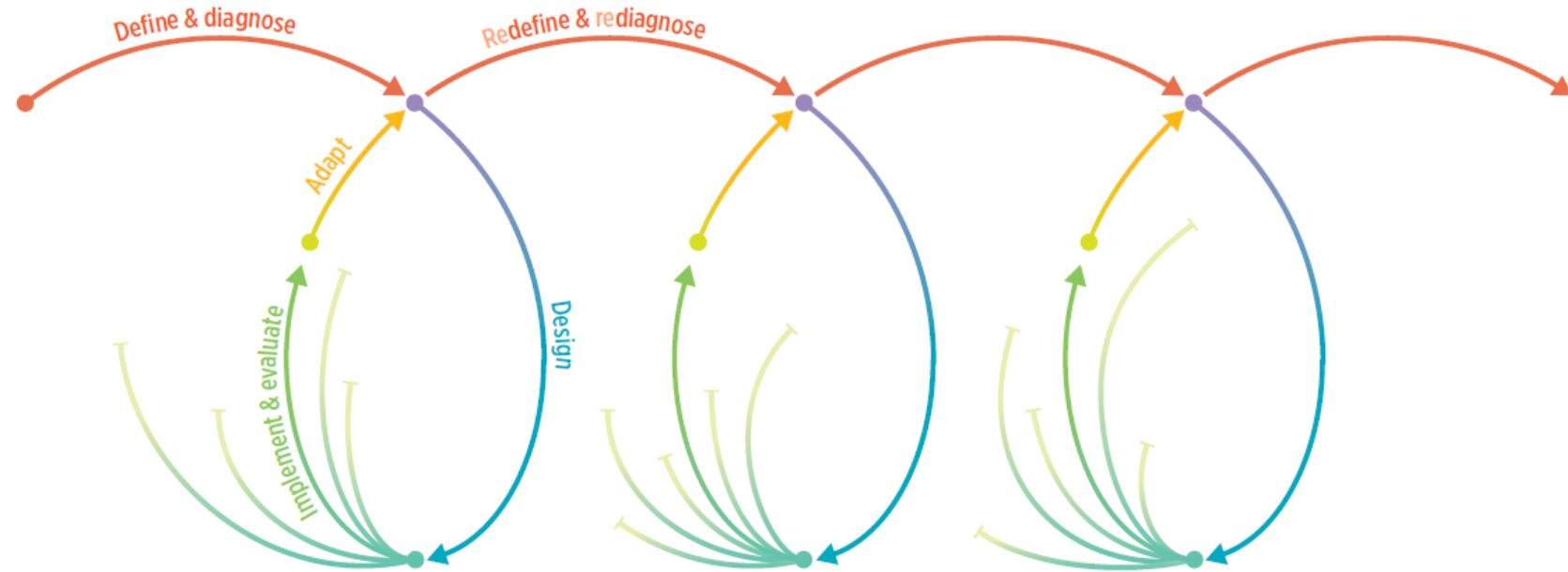
***...so hypotheses about how to achieve these outputs matter!***



# Overarching framework from WDR 2015

People think:

- Automatically
- Socially
- With mental models

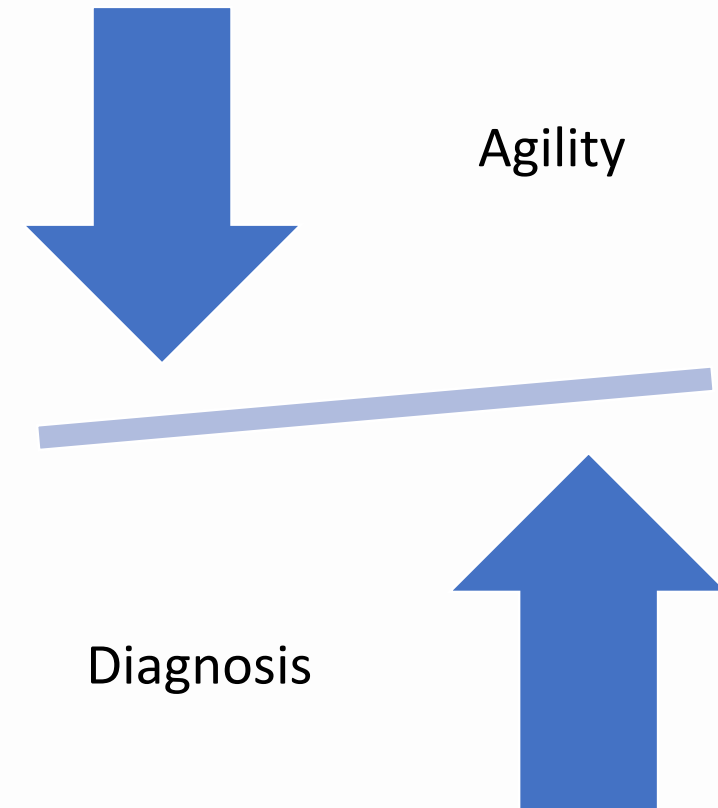


Source: WDR 2015 team.

Iterative process for understanding behaviors and identifying effective interventions (WDR 2015)

# Diagnosis in GPOBA

- Extensive diagnosis perceived as hampering agility.
- Most projects drew on willingness/ability to pay surveys, lessons learned from previous/similar projects and other secondary data sources to determine interventions.
- Theories of change were not explicitly stated.
- Effective monitoring and restructuring offered opportunity to adapt and learn and adjust intervention



# Diagnosis suggested barriers (and interventions) typical of infrastructure projects

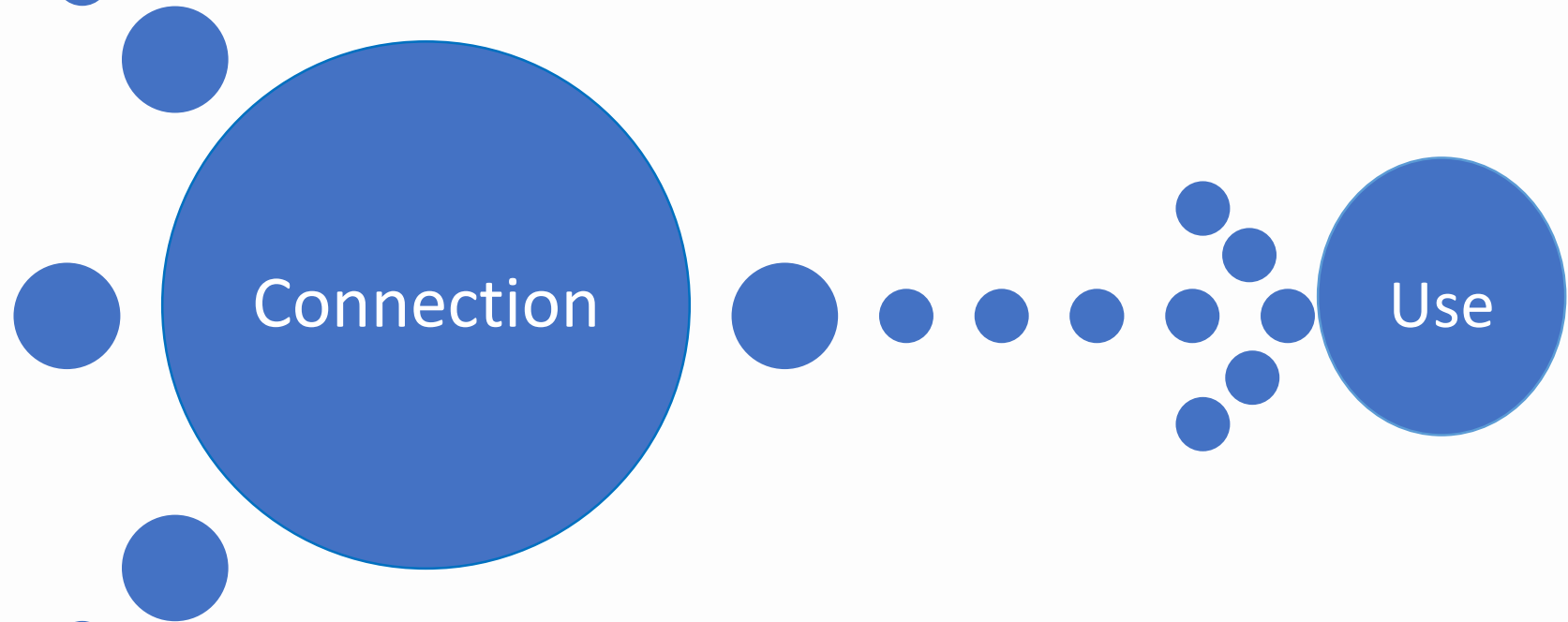
Affordability (Subsidy)



Awareness of program  
(Awareness campaign)



Access to service



# Did this theory of change hold?

- Since the majority of the projects reviewed met their targets for connections and 3 months of billable use, the theory of change may have held, particularly for water.
- In some cases, reliance solely on previous project lessons learned proved insufficient and incorrect assumptions about target population were made (Senegal On-Site Sanitation).
- Moreover, determinants that influence one of the intended behaviors (such as connection) are not the same as those that influence another behavioral outcome (such as sustained usage).
- Without additional data collection, it is difficult to say whether the same determinants would apply as interventions get further scaled up in a country and different population segments are reached and whether behavioral outcomes are sustained over time.

# Other behavioral determinants identified through monitoring and evaluation

## Connection

- Quality of service (ex. Cameroon Water Lease – OBA for coverage expansion)
- Social proof around subsidies (Armenia Access to Heat/Gas)
- Access to supporting products e.g., wiring (Ethiopia electricity access expansion project)
- Perceived negative consequences e.g. fear of reprisal from illegal vendors in Kenya Electricity Expansion Project

## Sustained usage

- Quality of service (Cameroon Water Lease)
- Previous experience with invoices and billable services (Columbia natural gas connection)
- Feedback/information on usage to date (Cameroon Water Lease)



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# Other behavioral determinants identified through project supervision and evaluation (cont'd)

**Purchase  
of  
product/  
system**

- Ease of access to rural bank for loan (Solar PV Systems for Rural Poor in Ghana)
- Prior experience/satisfaction with similar product (Solar PV Systems for Rural Poor in Ghana)

# Interventions (activities) typically found in GPOBA to support behavioral outcomes

- “Socialization”/awareness-raising of subsidy program, mostly through public relations, media and outreach
- Some marketing interventions by private sector found in energy projects, often supported by TA – in this case, beneficiaries are seen as consumers
- Little detail can be found in reports and POMs which is to be expected given emphasis is on results/outcomes, not activities/outputs
- Consistency of results with BC CoP’s 2014 landscape study and new IEG portfolio review in water projects.

# What can we learn from projects that did not meet behavioral outcomes?

- Behavioral outcomes requiring a “collective action” proved more challenging and require a deeper understanding and more comprehensive set of interventions than just awareness-raising:
  - Apartment boilers in Armenia Access to Heat/Gas
  - Master meters/downstream billing for water in Surabaya



# **Initial findings on behavior change at the implementing agency level**

# Hypothesis: RBF prompts the resolution of potential biases of implementing partners

Type of bias	Explanation
Complexity bias	Last mile challenges are complex. As the number of options increases, people's ability to accurately evaluation the different options decreases.
Confirmation bias	Selective gathering of information to support a previously held belief and to the neglect of information that does not support previously held beliefs.
Sunk cost bias	Tendency to continue a project once an initial investment of resources has been made
Effects of context on judgement and decision-making	The biases organizations may hold about the population they are intending to serve, in this case the poor.

# Complexity bias

## Senegal on-site sanitation

- **Implementing agency:** ONAS
- **Objective:** Increase sanitation coverage in the region of Dakar through the construction of on-site systems
- **Possible bias:** Instead of conducting a household survey to assess the capacity and willingness of households to pay for sanitation services, ONAD adopted the same household contribution levels as those used under the previous project (PAQPUD). Moreover, no behavior change component was originally planned.
- **What happened:** Many households were not able to pay for their full contribution (required under the GPOBA agreement) before the work got underway which slowed down progress.
- **Action taken:** The range of technology options was increased from the original 5 to include lower cost options. A communications campaign, including television and radio ads, was implemented later after restructuring.

# Confirmation bias

## Kenya electricity

- **Implementing agency:** KPLC
- **Objective:** Expand electricity grid into slum areas
- **Possible bias:** KPLC assumed main barrier for households in slums to connect to grid was cost of connection. Diagnosis was mainly based on ability/willingness to pay survey.
- **What happened:** Connection rate was slower than anticipated. KPLC conducted additional research that showed that many people in slums continued to purchase electricity from illegal connectors despite higher usage rates. Factors included lack of trust, lack of accurate information about the program and the comparative cost between legal and illegal electricity supply, payment barriers, and fear of reprisals from the cartels operating in the target slums.
- **Action taken:** As part of restructuring, KPLC adopted a community-supportive approach, hired social scientists to better understand and improve interactions with slum dwellers in the 'difficult slums'; begun collaborating with youth groups to enroll slum dwellers; and improved its marketing materials targeting slum residents with deployment of tents/kiosks, flyers, and other education materials. Moreover, KPLC allocated counterpart contributions of US\$100,000 equivalent budget for working with Civil Society Organizations (CSOs) to help customers switch to legal connection.

# RBF – addresses “sunk-cost bias”

For Discussion

# Effect of context on judgment

## Solar PV Systems for Rural Poor in Ghana

- **Implementing agency:** Various dealers (vendors)
- **Objective:** Increased access to sustainable electricity services through solar PV systems for remote rural households
- **Possible bias:** Poor households will purchase smaller systems and have lower aspirations.
- **What happened:** Willingness to pay was unexpectedly high. All of the vendors participating in the project were surprised to find the size and depth of the market once they began serving the remote rural areas, particularly for large solar home systems that can supply or come supplied with an LED TV.
- **Action taken:** Since it was felt that the original target for households being served (15,000) would be exceeded by approximately 10% by the project's closing date, the project requested to shift \$120,000 from the subsidies allocation (solar PV grants) to the technical assistance (consultant services) to cover the inspection and certification of the additional 1,500 systems sold.

# **Initial findings on change at sector level (demonstration effect)**

# Evidence of demonstration effect

- Proof of concept: Private sector/market development Solar PV Systems for Rural Poor in Ghana (test out prices, financing, inspections, and subsidy arrangements), master meter (Expanding Piped Water Supply to Surabaya's Urban Poor)
- Scale up within sector: the OBA approach was successful and recognized, thus leading to plans for scaling up + halo effect/social proof (households were not connected through GPOBA are now willing to be connected) (Manila Water)



**A simple framework like EAST may provide a check-list for TTLs and implementing partners for selection of activities (Behavioral Insights U.K.)**



# Make it easy, attractive, social and timely

## Easy

- Harness the power of defaults.
- Reduce the 'hassle factor' of taking up a service.
- Simplify messages.

## Attractive

- Esthetics matter.
- Design subsidy schemes for maximum effect (e.g. lotteries).

## Social

- Show that most people perform the desired behavior (if that is the case).
- Use the power of networks.
- Encourage people to make a public commitment or pledge.

## Timely

- Prompt people when they are likely to be most receptive – remember cognitive tax of poverty).
- Behavior is generally easier to change when habits are already disrupted, such as around major life events.
- Consider the immediate costs and benefits. Help people plan their response to events

