DESIGN CHALLENGE

“When used properly, nothing drives growth and eliminates poverty more effectively than water.”
- Blue Planet Run

1/5 of the world lacks access to safe water for drinking and daily use.

How can we work with people living in Chile's campamentos to develop new tools for using, storing & transporting water in order to help break the cycle of poverty?

ABOUT THESE CARDS:

These cards are intended as a tool for the field research phase. They define the initial topics and outline research methodologies. They are not intended to be prescriptive, but rather a starting point for gaining insights into another culture.

The cards are organized into six topics:

- A Day in the Life
- Materiality/Space
- Aspirations/Limitations
- Carrying/Moving
- Storing/Containing
- Use/Reuse Water

Outputs of the research phase:

> experiential, not only intellectual understanding
> observations of reality & stories from people
> deeper understanding of human needs, barriers & constraints
Materiality / Space

What is the material reality of personal and collective objects in the household and neighborhood?

How can we best impact this area?

Behavioral Archaeology:
Look for evidence of people’s activities, habits & values inherent in the placement, wear patterns, and organization of things.

Social Networks & Spaces:
Notice different kinds of social relationships within a user group and map the network of their interactions. In what ways do objects, materials & spaces express social relationships?

Personal Inventory (functional):
Ask people to show & describe objects they handle daily - catalog evidence of lifestyle. (30 min)

EXTRA TIPS
> How do things wear out?
> What can we learn from resourcefulness of the material culture?
> be aware of materials & spaces throughout Santiago, not only in the slums
A Day in the Life

Catalog a day in the life of people in the campamentos, with special attention to the role water plays.

How can we best impact this area?

DAY IN THE LIFE

METHODOLOGIES

A Day in the Life of a Family:
Catalog the activities and contexts that water users experience throughout a day.

Shadowing:
tag along with people to observe and understand their day-to-day routines, interactions and contexts. (1-2 hours)

Timeline:
Create a branching timeline of household members’ activities. Every person in the household plays a different role. How do the roles of different people relate to each other?

EXTRA TIPS

> Each team member can shadow a different household member.
> Ask the family member to record what they’re doing each time a watch timer / beeper goes off
How do people carry objects, water and themselves around?

How can we best impact this area?

**CARRYING/MOVING METHODOLOGIES**

**Behavioral Mapping:**
Track the positions and movements of people within a space over time and note what are they carrying or moving around while doing it. (45 min)

**Flow Analysis:**
Represent the flow of water through all phases of use. Consider water's behavior, not only on a map or plan, but also as it moves up & down.

**Fly on the Wall:**
In public spaces, such as markets, neighborhoods, or public transit, observe and record behavior within its context, without interfering with people's activities. (1-2 hr)

**EXTRA TIPS**
> What do people carry around (wallet, phone, children, jewelry, etc.). Why do they carry those things around? (take “whats in my bag” photo)
> Why do they carry those things around?
> Survey carrying solutions that exist on the market & that families have invented.
STORING / CONTAINING
METHODOLOGIES

Error Analysis:
List all the things that can go wrong when storing/containing water and determine the various possible causes.  (30 min)

Scenario Testing / "What If":
After your initial research, show users a series of cards depicting possible future scenarios for storing water and invite them to share their reactions.  (30 min)

Guided Tour:
Ask participants if you can accompany them on a guided tour of how they contain objects. Why did they choose a specific means of storage?  (45 min)

EXTRA TIPS
> Be aware of cultural biases & preconceptions
> Consider differences between storing valuables vs daily objects
> How does the house itself serve as a container to keep out rain, store water, etc?
> Survey containment solutions that exist on the market & that families have invented.

How do people store, contain and protect valuables, food, water and everyday objects?

How can we best impact this area?
**USING / REUSING WATER**

**METHODOLOGIES**

**Storyboard of Water’s Day / Week:**
Illustrate a character-rich story line describing the context of use of water. Water is the main character; if water could tell its story, what would it say?

**Camera Journal:**
Distribute a kit with camera, journal & instructions. Ask participants to keep a diary of activities related to using water. (15 min / 1-2 days)

**Narration:**
As they perform a task or process, ask participants to describe aloud what they are thinking -- to reach users’ perceptions, concerns & motivations. (45 min)

**EXTRA TIPS**
> Other documentation methods: Script photos - ask people to re-enact each step of a process; time-lapse video
> Ask the family what’s missing?
> What objects have been re-used for a function or task different than its original purpose?
> Be sensitive to private activities (i.e. shower)
> Buy cameras ahead of time

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**Use / Reuse Water**

How is water used over the course of a day and week?

How can we best impact this area?
Aspirations/Limitations

What are people’s aspirations, and what keeps people from achieving them?

How can we best impact this area?

Aspirations / Limitations
Methodologies

Personal Inventory (Emotional):
Document the things that people identify as important to them as a way of cataloging evidence of their lifestyles. (30 min)

Collage or Card Sorting:
Ask participants to build a collage from a provided collection of images and to explain the meaning of the images and arrangements they choose. (30-45 min)

Draw your Past / Future:
Ask participants to "draw the future you want?" ("If you won the lottery...") Draw a path from past to now to that future with the steps & hurdles along the way. (30min)

Extra Tips
> first gain people’s trust
> gather direct, unfiltered quotes
> plan deep interview questions and practice interview techniques
> ask “why” 5 times - to get to real why
> Prep & print visual cards ahead of time