

# Three water filters **interchange** the rules:

## Working together to increase access to safe water for low-income families

**Problem:** Existing household water treatment and safe storage (HWTS) devices are not well suited for users in low-resource settings. Some of the challenges are:

- **Cost**—too expensive
- **Complexity**—too difficult to assemble and use correctly
- **Durability**—too easy to break in challenging settings
- **Desirability**—product aesthetics must be designed for low-income settings

**Solution:** Development and introduction of new products that were designed with and for low-income families. These products are:

- **Affordable** to low- and middle-income households
- **Appropriate** for challenging conditions
- **Adaptable** such that filters and devices from different manufacturers can be interchanged

### Designing with users for users

Low-income consumers in developing countries live and work under challenging conditions. Yet these consumers are not often engaged in the product design process, resulting in products that do not address their unique needs. We engaged with low- and middle-income families in Andhra Pradesh, India, to identify existing product shortcomings and help design more appropriate HWTS devices.

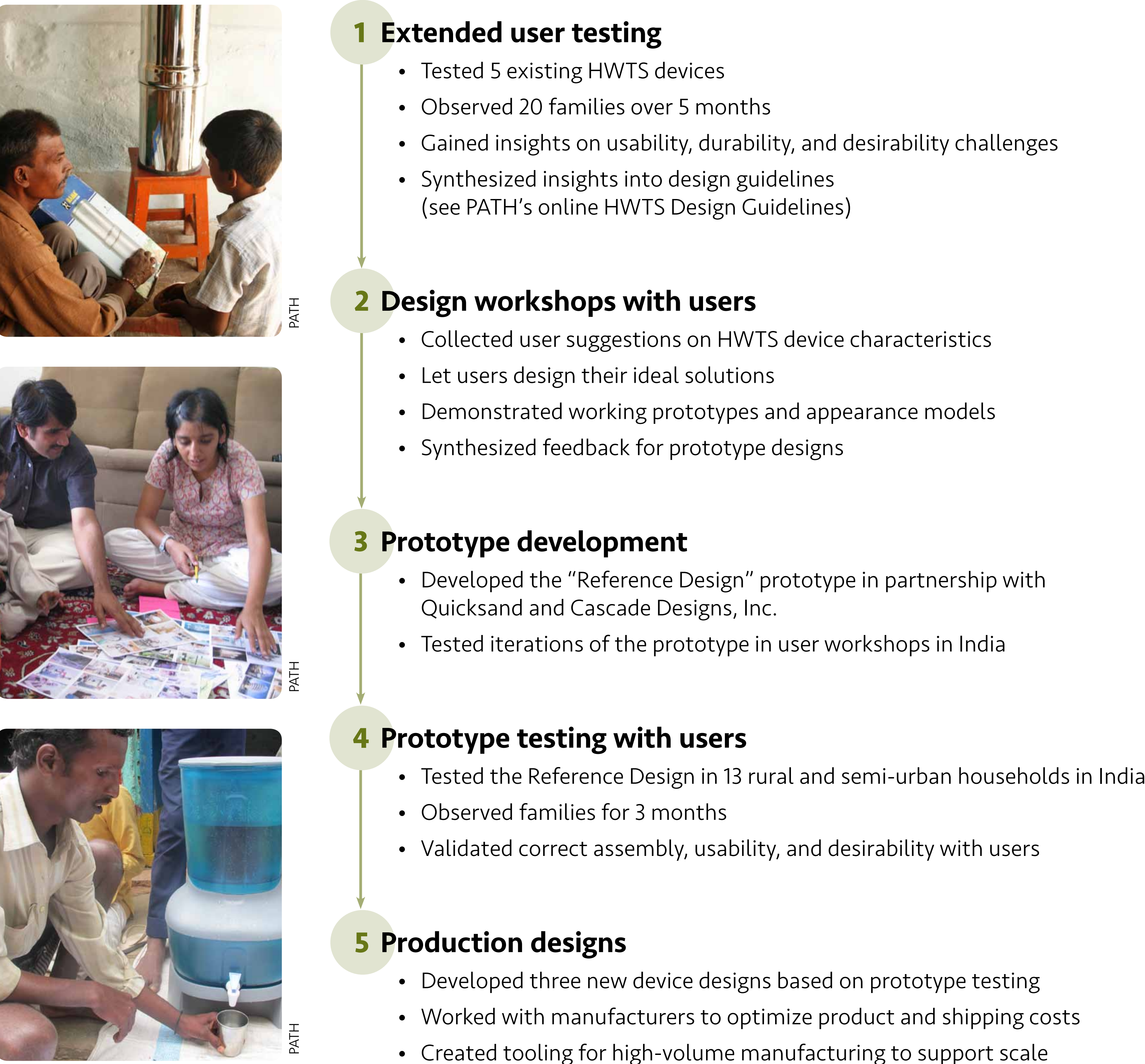
### Working together to create a common interface

Through an iterative user-centered design process, product developers worked together to create a common interface to connect the filter element to the device that we call the C1 Common Interface.

This new feature will benefit low-income consumers long term with:

- **Choice and competition:** With a non-proprietary interface, consumers and distributors will not be locked in to having to purchase filter elements from only one company.
- **Ease of use:** The new C1 Common Interface controls the orientation of the filter element and reduces the risk of accidental contamination of the treated water.

### Iterative user-centered design process



### Going beyond product design

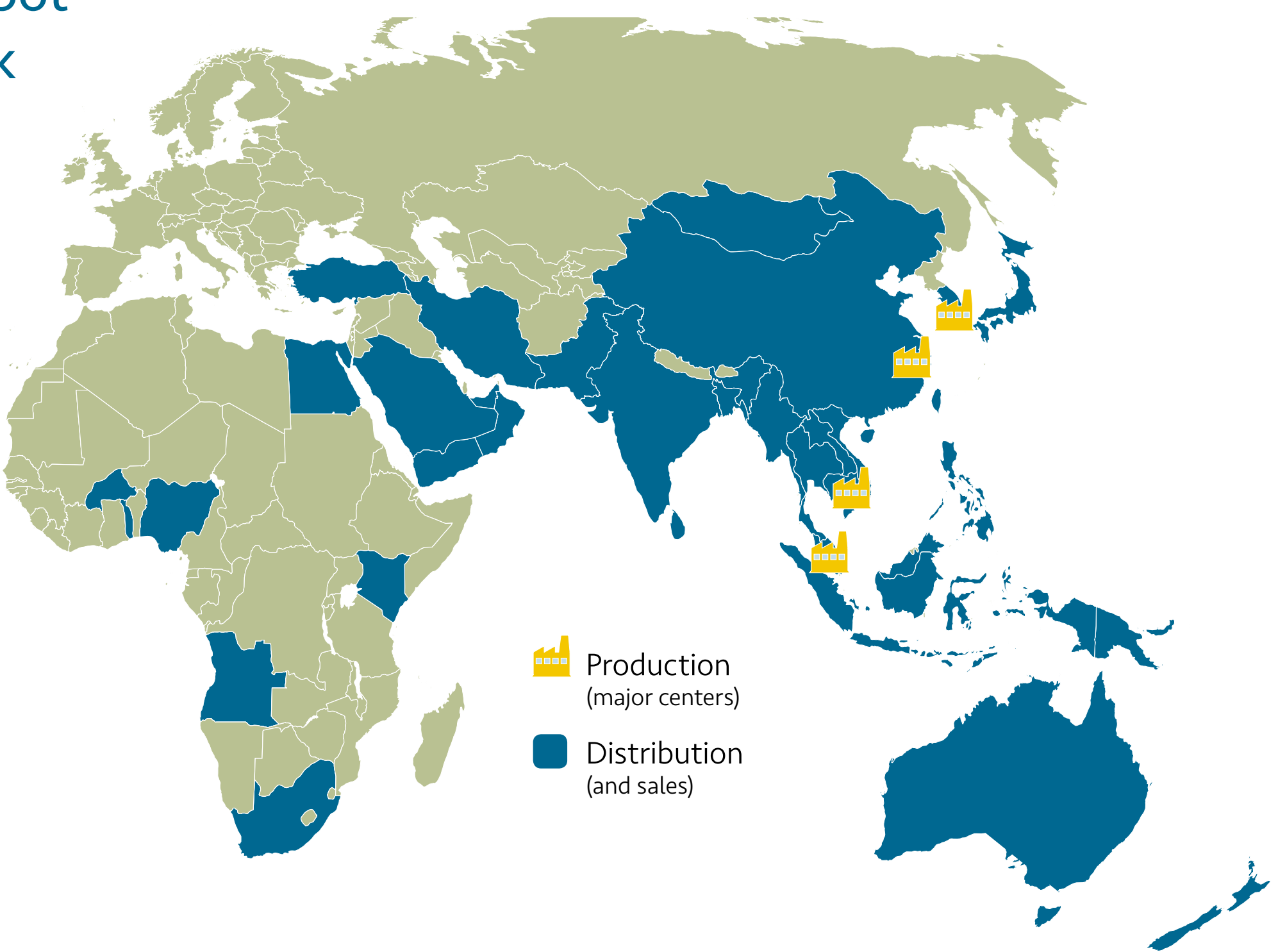
PATH is partnering with three mineral pot water treatment device manufacturers in China to create three different HWTS devices based on PATH's Reference Design. We are also working with filter element producers to create effective filters. Both the devices and the filter elements will incorporate the C1 Common Interface.

This partnership will improve:

- **Choice**—ensuring that devices and filters from multiple producers work together so that customers will benefit from being able to choose among more solutions that meet their needs.
- **Scale**—building on success by partnering with manufacturers that can export efficiently, scale manufacturing capacity to meet demand, and provide competitive and affordable prices.
- **Sustainability**—achieving increased uptake and consistent use by designing and implementing a supply strategy that leverages a decentralized manufacturing and distribution network at scale.

The new products will be available for export from China in early 2012.

### Leveraging mineral pot distribution network



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PATH's Safe Water Project is a five-year learning initiative funded by the Global Development division of the Bill & Melinda Gates Foundation. Its primary focus is to test market approaches for improving access to effective household water treatment and safe storage products for low-income households.