

## Product Trials: Bringing the Consumer to the Table

A Formative Research Tool to Ensure Consumer Preferences in the PoU Marketing Plan



#### Authors

- Julia Rosenbaum, Academy for Educational Development, USAID/HIP
- Karuna Onta, formally USAID/HIP, now CARE/Nepal
- Suraja Pradhan, Solutions Consultant Pvt. Ltd.
- Siddartha Shrestha, WES, UNICEF/Nepal



### Key aspects to consider for successful and sustainable PoU uptake

- Efficacy of Products (*it works in the "lab"*)
- Market Feasibility turns "beneficiaries" into consumers
- Consumer Acceptability households "like" the products
- Household Effectiveness users are able to successfully treat their water under "normal" conditions



### **Formative Research Objectives**

Collect and incorporate data into the point-of-use focused hygiene promotion strategy



### **Formative Research Objectives**

- To understand consumer (community) knowledge & perception of diarrheal risk related to water, characteristics of "clean" and "dirty water"; current purification practices
- Explore overall concept and value of water disinfection
- Determine the perceived benefits, costs, challenges, perceived effectiveness of various purification techniques
- Assess value/ willingness to pay
- Invite modifications to make methods easier [negotiation of improved behaviors]
- Measure actual effectiveness



### **Product Trials – Nepal**

Examine Categories of Products, NOT Specific Products

- Filtration (CS filter)
- Chlorination (Blinded WaterGuard)
- Boiling
- Solar Disinfection (SODIS)
- BioSand Filter











### Methodology

Women asked to:

- discuss use of treatment methods over time;
- compare methods by different characteristics;
- modify use...

...while testing for effectiveness.

All field work managed by Solutions Consultant Linked to representative survey



### Methodology

- 30 day trial
- 3 home visits during 30 day trial period
  - Day 1
  - Day 3
  - Day 30 (ish)
- Women with kids under 5 from four study districts
  - Kapilvastu,
  - Parsa
  - Dang
  - Panchthar
- Total 80 participants
  - 20 tried each method
  - 5 each per district



## Confirmed larger study findings about characteristics of water considered "fit to drink"

- Crystal clear "sanglo pani"
- Free of turbidity, visible dirt and/or sand

and to a lesser extent:

- Free of bugs and insects
- Absence of (objectionable) smell
- Cool water temperature was also a highly desired attribute, though not necessarily tied to water that was "fit" to drink.



## Got the concept of disinfection when explained, but didn't find their water "unfit"

- Virtually no one expressed any sense of "microbial" or bacterial contamination
- When researchers explained the concept, participants appeared to grasp this concept of "contamination by germs"
- Valued the benefit of making the water "healthier & germ-free" for their family
- Repeated this benefit throughout the interviews



## Low to no perception of risk, but quite willing to try disinfection

- Few felt their water was contaminated
- Unfit referred to turbidity and physical attributes
- Despite this, all recruits willing to try a method of disinfection, needed little convincing
- Learned steps to using/maintaining methods quite easily, correctly



 Most all kept with the method for the entire study period

... but also drank other (regular) water, didn't exclusively use disinfected H2O

• Made few alterations, although invited



### Overall acceptability, without considering cost

- CS filter the favorite
- Chlorination "second"
- SODIS and boiling both acceptable, but considered less desirable options



# Acceptability of different water treatment methods

- Taste, smell, appearance, color, temperature
- Effort, convenience, maintenance
- Perceived effectiveness
- Acceptability to family members
- Willingness to pay



#### Receptacles



- People LIKED having "extra" bottles from SODIS
- CS filter came with a "dispenser"
- Kettles provided, but not normally available... and still "small," which adds to "cost"
- BIG issue of having "extra" receptacle for separating out drinking water for disinfection



### Waiting Time

- People have good access overall to water
- Most can get water within 15 minutes
- If you haven't "planned ahead," disinfected water won't be "ready"
- Methods take time
  - SODIS 6 hours to 2 days
  - CS filter 2.4 to 5.6 liters/hour
  - Chlorination  $-\frac{1}{2}$  hour minimum



#### **Product Effectiveness**

- Households were overall successful in using the various techniques to disinfect water
- Exception to this was the CS filter
- Assumed but not proven that water was still testing positive due to secondary contamination







## Challenge of Marketing PoU Disinfection & Safe Water Storage

- Complex behavior to promote, given existing practices
  - Separate out drinking (& cooking) water
  - Not current practice & lack of "spare" vessels
  - Choose method/obtain
  - Disinfect
  - Protect
  - Use always at home and school





### **Key Considerations**

- No method will be acceptable if it doesn't address turbidity
- Temperature a factor
- Time for disinfection
- Availability of spare receptacle
- PET/PVC bottles not readily available
- Effectiveness and cost of popular CS filter



#### On the bright side...

- People were quite willing to try the new technique
- Grasped the mechanics and concepts
- Maintained behavior over time, though not exclusively
- While products didn't provide all characteristics of good, fit water, none of the "negative" product attributes outweighed perceived benefits



### For more information

• jrosenba@aed.org

To download tools and reports

• www.hip@watsan.net/page/337