This is part of a series of project briefs discussing the activities, research findings, and field experiences of PATH's Safe Water Project.

DECEMBER 2010

Picturing the Customer: Developing Consumer Personas from Research on Household Water Use in Andhra Pradesh, India

Background

Safe drinking water is essential to good health. In resource-poor settings, however, water often comes from unsafe sources and carries potentially deadly pathogens. Use of unsafe water leads to many of the estimated 1.8 million deaths each year from diarrheal disease. To reduce the risk of illness or death, United Nations Millennium Development Goal 7 targets a 50 percent decrease in the proportion of people without sustainable access to safe drinking water by 2015.

To increase access to clean water, PATH is working to identify, adapt, and develop appropriate products and business models to build a sustainable commercial market in household water treatment and safe storage (HWTS) for low-income consumers.

In 2008, PATH's Safe Water Project (SWP) undertook a household research study in Andhra Pradesh, India, to inform product introduction, commercial distribution, and marketing for HWTS products. The research was led by Research Triangle Institute (RTI) International, which surveyed approximately 1,000 respondents about water sources, perceptions of water

PATH/Siri Wood

quality, definitions of "safe" water, and water treatment and storage behaviors. The answers were correlated with home location (e.g., rural or urban), socioeconomic class, education, type of home, family size, and ownership of durable goods.

From the RTI data, a researcher commissioned by PATH created a set of five consumer personas—fictional, archetypical families that exemplify various aspects of water values.

The PATH Safe Water Project undertook a household research study in Andhra Pradesh, India, interviewing 1,000 respondents about their water sources, perceptions of water quality, definitions of "safe" water, and water treatment and storage behaviors.

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Personas have long been used in product design and development, as well as in marketing campaigns. The key difference between product design/development personas and marketing personas lies in the former's focus on users (the people who will use the product) rather than on consumers (the people who will buy the product).

From the product design and development perspective, personas can serve to increase empathy with users, provide a clear focus on the user audience, facilitate improved communication about users, and help to avoid user stereotypes. Design personas focus on how the product will be used after the purchasing decision has been made. Marketing personas, by contrast, help to form strategies for positioning products against competitors and creating an understanding of factors that influence purchasing decisions.

The SWP will use these personas in a hybrid manner, pulling from both product design and marketing schools of thought. From the design perspective, the personas will improve our understanding of users and how they may interact with HWTS products. From the marketing perspective, these personas will help us hypothesize about purchase decisions, allowing us to segment consumers and create strategies to generate demand.

(Note: map used for indicative purposes only)

Creating the SWP Personas

Most study participants reported safety as their primary goal in providing safe drinking water to their households. To further segment users, however, study participants were assigned a water awareness score. Water awareness was determined as the key segmentation model for determining the personas. This score was a significant factor determining who is most likely to treat water. Scores were derived from respondents' understanding of (1) health problems that may result from use of unsafe water, (2) how water can be contaminated in the home, and (3) how water can be contaminated away from the home. Based on survey responses, respondents were segmented as having:

- High water awareness
- Average water awareness
- Low water awareness
- Minimal water awareness

Table 1. Scheme for defining the five consumer personas

Water awareness	Location*	Socioeconomic classification†	Persona‡
High	Urban	Slightly higher (C/D)	Uppu family
	Rural	Slightly higher (R2)	Raju family
Average	Rural	Slightly higher (R2)	Rangan family
Low	Metro	Lower (E1)	Murty family
Minimal	Rural	Lower (R3)	Rudraraju family

*A metro area is a city that has a municipal corporation (a higher administrative body to manage urban affairs). Urban areas typically have a town council. Rural areas have a gram panchayat as the administrative unit.

†Families in the slightly higher socioeconomic classification (SEC) are considered "seekers/mainstreamers." They are described as the middle majority who seek security and value social acceptance (PATH combined the McKinsey Global Institute's May 2007 report on the Indian consumer market with Rama Bijapurkar's book *Winning in the Indian Market: Understanding the Transformation of Consumer India* to characterize profiles within each SEC segment. See the Safe Water Project is marketing reports, available through www.path.org, for more information). Those from the lower SEC are considered "aspirers/strivers." They are considered new consumers with a goal of escaping from hardship and improving their lives, and they value hope and luck.

‡ For details, see pages 4 to 14.

To create the final personas, initial segmentation based on water awareness was combined with information related to India's socioeconomic classification (SEC) for urban and rural households making between US$1 and $5 a day.[1]

Table 1 shows how water awareness, location, and socioeconomic classification helped to define the five personas.

Detailed descriptions of the personas were derived from 11 key data elements. As exemplified in the summary sheets on the following pages, these elements were:

1. Demographics and household information.
2. Water sources, including distance to a water source.
3. Water storage, including storage capabilities and patterns.
4. Current water treatment behaviors.
5. Concerns about water contamination and actions taken on health messages.
6. Social network (all personas are described as Hindu or Other Backward Caste, or OBC[2]) and sources of health messages received.
7. Household illness.
8. Kitchen and home.
9. Household expenditures.
10. Defecation and waste behaviors.
11. Thoughts about other health and community problems.

Each persona is accompanied by a detail page that offers more in-depth explanation of the survey data on which each persona is based. The detail pages explain the rationale for assigning names and attributes and provide percentages from the data that were analyzed to create the persona families.

RTI study highlights

The RTI data used to create the personas confirmed a hypothesis underlying the SWP: that those who are more aware of problems related to water will be more motivated to treat water. The survey results demonstrated a positive correlation between water awareness and water treatment history. A majority of the RTI study participants indicated that safety is a primary goal in providing safe drinking water to their households. Even though most respondents understood the connection between water and health, this understanding did not always translate into behavior change.

The study also led to broader understanding of respondents' choices about water sources, and water treatment. The data showed, for example, that a vast majority of respondents chose their water
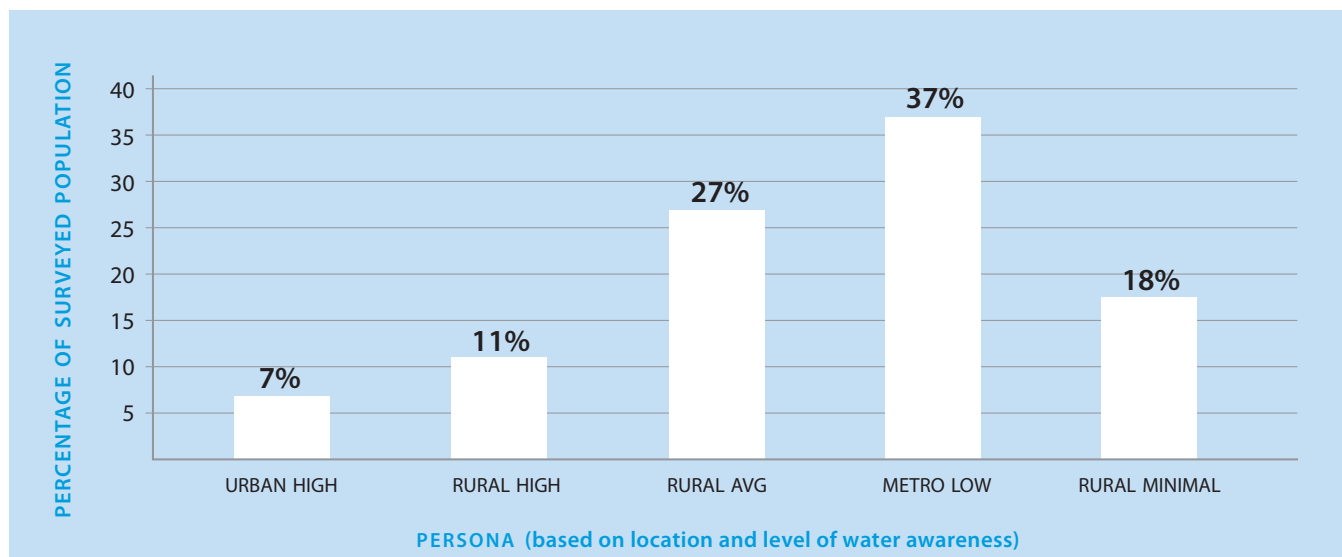
Figure 1. Proportion of survey sample represented by each persona

[1] SEC is a widely used classification system created by the Market Research Society of India to segment consumers based on education and occupation of the chief wage earner in rural (R1 through R4) and urban households (A1, A2, B1, B2, C, D, E1, and E2). Read more about the SEC classifications at: marketingpractice.blogspot.com/2007/02/marketing-funda-socio-economic.html (accessed September 2010).

[2] The Central Government of India classifies some of its citizens based on their social and economic condition as Scheduled Caste, Scheduled Tribe, and Other Backward Class (OBC), many of which are eligible for certain social benefits from the Ministry of Social Justice and Empowerment.

source because they believed it to be safe for drinking and cooking. Another interesting finding was that water awareness was significantly correlated with the total number of durable goods owned. Higher awareness was associated with a larger number of assets.

Developing consumer personas from household survey data in Andhra Pradesh enables PATH and other groups to picture the consumer and more effectively target specific populations. The personas highlight the relevance of water awareness as a factor influencing the likelihood of specific populations becoming early adopters of HWTS products. They also help describe the living conditions and water storage behaviors of typical households in rural and urban settings. Based on the personas, marketers can tailor retail strategies, prices, messages, and products to the right kinds of consumers at the right time and place.

A project brief on the RTI study is available at www.path.org, and a full report on the study is available upon request at info@path.org.

Acknowledgments

www.path.org
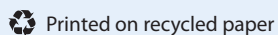
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PATH
A catalyst for global health

Mailing address

PO Box 900922
Seattle, WA 98109
USA

Street address

2201 Westlake Ave.,
Suite 200
Seattle, WA 98121
USA

	URBAN HIGH	RURAL HIGH	RURAL AVG	METRO LOW	RURAL MINIMAL
	7%	11%	27%	37%	18%

UPPU FAMILY Primary targets, represent about 7% of the survey population

The Uppu family seeks security and highly values social acceptance. While they have a relatively good understanding of what causes contamination in water and the problems contamination can cause, they cannot always afford the time or money to properly treat their drinking water.

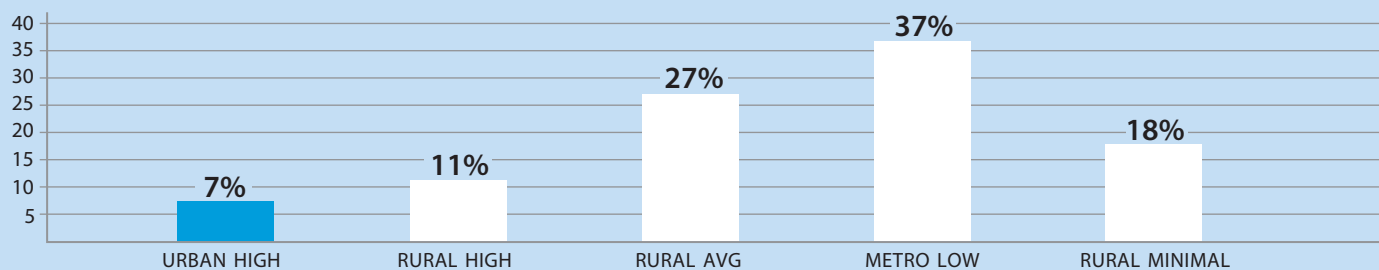**Key persona segmentation differences:**
- Lives in an urban (not metro) location
- Has a high understanding about water contamination

Marketing segmentation:
- SEC C/D (Seekers/Mainstreamers)
- Part of the middle majority who seek security and value social acceptance

Water source

The Uppus use a private water connection (PWC) from a tap inside their house.
- The family uses approximately 94 liters a day.
- They pay about 20 rupees a month for their water.
- They also pay, on average, 6 rupees a month to repair and maintain the tap.

Key contamination concerns for a PWC:
- Reddish/brackish water (9.3% of those with PWC available)
- Fluoride (6.3% of those with PWC available)
- Salinity (3.3% of those with PWC available)

Water storage

Main storage vessels are 10- to 12- liter clay pots.
- Only partially cover the vessels
- Store the water vessels on the floor
- Two vessels are typically full in the dry season
- Access the water by dipping with their hands using a cup
   but do not use the cup for drinking

The Uppus chose this storage vessel because "the material keeps the water cool."

Storage vessel cleaning

- Clean the vessels daily
- Use only water to clean

Current water treatment behavior

- Use plastic sieve filter
- Will treat in both the wet and dry seasons
- Bought the plastic sieve filter from a mobile sales person

Likelihood to treat water: 55%

Personal

Respondent: **Hema**

I always desire to have a healthy family, and I think people who treat their water have good knowledge about health and have good habits.

Age: 33
Education: Completed higher secondary school
Newspapers: Yes, can read

Husband: Himu, age 38
Daughter: Himaja, age 13
Son: Hasith, age 11

Employment
Respondent: Does not work
Head of house: Maintenance worker at the
Nagarjunasagar Dam

Identification
Religion: Hindu
Caste: OBC

Living situation
Where: Nagarjunasagar (Urban /not metro)

Home
Ownership: Owns
Rooms: Two rooms, *pucca* house
Roof: Slate
Walls: Stone

Kitchen
Location: Inside home with partition
Stove: Gas

Sanitation
Defecation: Toilet
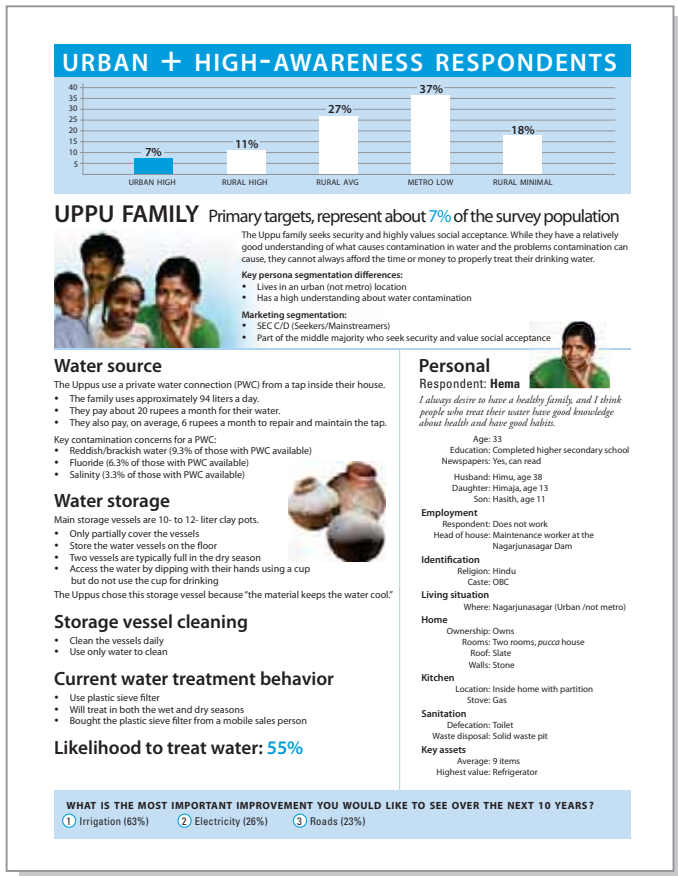Waste disposal: Solid waste pit

Key assets
Average: 9 items
Highest value: Refrigerator

WHAT IS THE MOST IMPORTANT IMPROVEMENT YOU WOULD LIKE TO SEE OVER THE NEXT 10 YEARS?

1 Irrigation (63%)   2 Electricity (26%)   3 Roads (23%)

Uppu Family Detail

Water source: 58% use a PWC with an inside tap in this group (the highest percentage of any group).

Usage is based on mean for a family of four using a PWC.

The mean cost for an urban family with an inside tap was 20 Rs a month; mean for maintenance was 6.37 Rs.

These are key the contaminations concerns reported by those who had a PWC available to them.

Water storage: Clay pots were chosen for this family because they were the most likely to identify water coolness as their primary reason to choose a storage vessel (47%); clay is associated with water coolness.

While 92% in this persona group cover their storage vessel completely, 8% keep the vessels only partially covered (the highest percentage of any group).

59% of this persona group and 51% of users of this type of vessel store them on the floor.

80% of bhinda/pot storage vessel users accessed water this way. While 75% also used the cup for drinking, the high awareness groups were the least likely to do so.

Storage vessel cleaning: 83% of this group clean their vessels daily; 54% clean with only water.

Current water treatment behavior: 58% of this persona group (urban + high awareness) use a filter in the wet season; 35% use a filter in the dry season. 56% of the filter users use a plastic sieve type. 54% purchased the sieve from a mobile sales person.

Likelihood to treat water: 60% of urban + high awareness + PWC users treated their water in some way; 50% of the high awareness group in general did. The total of 55% is the split between the two.

Urban + high awareness respondents: The combination of urban + high awareness constitutes 7% of the survey population. High awareness respondents constitute 18% of the survey population; urban residents also constitute 18%.

Key persona segmentation differences: While 63% of high awareness families live in rural environments, 29% live in urban (the most of any group), 3% live in peri-urban, and 4% live in metro environments. (The breakdown of the sample is 72% rural, 18% urban, 2% peri-urban, and 8% metro).

Definitions: A metro area is a city that has a municipal corporation (a higher administrative body to manage urban affairs). Urban areas typically have a town council. Rural areas have a gram panchayat as the administrative unit.

Marketing segmentation: SEC C/D are segments previously identified by PATH. The Mainstreamer category is derived from Rama Bijapurkar's model described in his book, *Winning in the Indian Market: Understanding the Transformation of Consumer India*. The Seeker category is derived from the McKinsey Global Institute's model in the May 2007 report.

Family description: The first sentence is from Bijapurkar's description of Mainstreamers. The second sentence captures their status as a high awareness family and reflects that participants expressed a desire to filter water but identified time and costs as primary obstacles.

Names: The "Uppu" name corresponds to the family's urban location. The first names start with H to correspond to their "high awareness" classification. Hema is Telugu for gold; Himu is Telugu for snow.

Quote: This quote is paraphrased from two participants in a focus group; the participants are identified as female, SEC R3, from Vauilathuta and female, SEC R2, from Nachupally.

Age and education: Spouse mean age for this persona group (urban + high awareness) was 34.2 years; high awareness families represent the two youngest groups.

In this persona group, 39% have no education, 41% have some or completed primary school, and 17% have some or completed secondary school. Hema's education is inflated here to emphasize that this is the group with the least amount of respondents with no education.

61% of head of households in this persona group can read a newspaper, at least a little (this represents the highest percentage of any group).

Employment: 83% of spouses do not work in this persona group. Head of house: 37% worked as factory workers, 17% as skilled artisans. This job is fictional, based on the location.

Identification: 85% of this persona group are Hindu; 69% are classified as OBC caste.

Living situation: Location was chosen to represent an urban but not metro area. Average family size was 4.2 in this persona group. 46% of households in this group have at least one child age 6–12, and 44% have one child age 4–5.

Home: 58% of this persona group own their home. Mean size is 2.4 rooms. Materials were chosen as common for *pucca* houses, which have fixed walls of bricks, stoves, or cement and a roof of tiles, corrugated iron, or timber.

Kitchen: 77% of this persona group had kitchens inside their homes; 73% had gas stoves.

Sanitation: 87% of this persona group had private toilets; 56% used solid waste pits.

Key assets: 9 items is the highest number of reported durable goods by any persona group. While only 14% in this group own refrigerators, this is the highest of any group. Note that durable goods were counted by type. For example, if the respondent owned 30 books and one television, this would be counted as 2 durable goods items by type.

Most important improvement over the next 10 years: This section lists the top three areas for improvement reported by this persona group (urban + high awareness); percentages reflect the number who identified the area for improvement.

URBAN + HIGH-AWARENESS RESPONDENTS

			37%	
		27%		
	11%			18%
7%				
URBAN HIGH	RURAL HIGH	RURAL AVG	METRO LOW	RURAL MINIMAL

RAJU FAMILY   Primary targets, represent about 11% of the survey population

The Rajus highly value family responsibility. They feel it is very important to garner respect from their friends and neighbors. They report receiving more messages about health-related information from family and friends compared to other persona families.

Key persona segmentation differences:
- Lives in a rural location
- Has a high understanding about water contamination

Marketing segmentation:
- SEC R2 (Seekers/Mainstreamers)
- Part of the middle majority who seek security and value social acceptance

Water source

The Rajus use a public well located 14 minutes from their house.
- The family typically uses approximately 68 liters a day.
- Hasini and her older daughter collect the water twice a day using 10- to 12-liter plastic or metal bhindas.
- The family is not required to pay for the public well water.

Key contamination concerns for public wells:
- Salinity (36.9% of those with public wells available)
- Fluoride (2.5% of those with public wells available)
- Reddish/brackish water (2.4% of those with public wells available)

Water storage

Main storage vessels are 10- to 12-liter wide-mouth copper bhindas.
- They cover the vessels
- Store the vessels slightly elevated, but less than 3 feet off the ground
- Typically keep three storage vessels full in the dry season
- Access the water by dipping with their hands and a cup and use the cup for drinking

The Rajus chose this storage vessel because "the material keeps the water cool."

Storage vessel cleaning

- Clean the vessels daily
- Use only water to clean

Current water treatment behavior

- Use simple cloth filter
- Will treat in the wet season only
- Bought the cloth filter from a mobile sales person

Likelihood to treat water: 51%

Personal
Respondent: **Hasini**

We can avoid germs by purifying water. So we filter water, mostly in the wet season or when people in the family are sick.

Age: 33
Education: Some primary school
Newspapers: Yes, can read with difficulty

Husband: Harshal, age 42
Son: Hemal, age 14
Daughter: Hita, age 9
Daughter: Himantha, age 5

Employment
Respondent: Does not work
Head of house: Works on his own small farm

Identification
Religion: Hindu
Caste: OBC

Living situation
Where: Nachupally

Home
Ownership: Owns
Rooms: Two rooms, *pucca* house
Roof: Concrete
Walls: Concrete

Kitchen
Location: Outside the house in open air
Stove: Traditional wood-burning

Sanitation
Defecation: Toilet
Waste disposal: Solid waste pit

Key assets
Average: 8 items
Highest value: Bicycle

WHAT IS THE MOST IMPORTANT IMPROVEMENT YOU WOULD LIKE TO SEE OVER THE NEXT 10 YEARS?

① Irrigation (42%)   ② Better water supply (34%)   ③ Electricity (18%)

Raju Family Detail

URBAN + HIGH-AWARENESS RESPONDENTS

URBAN HIGH	RURAL HIGH	RURAL AVG	METRO LOW	RURAL MINIMAL
7%	11%	27%	37%	18%

RAJU FAMILY Primary targets, represent about 11% of the survey population

The Rajus highly value family responsibility. They feel it is very important to garner respect from their friends and neighbors. They report receiving more messages about health-related information from family and friends compared to other persona families.

Key persona segmentation differences:
- Lives in a rural location
- Has a high understanding about water contamination

Marketing segmentation:
- SEC R2 (Seekers/Mainstreamers)
- Part of the middle majority who seek security and value social acceptance

Water source
The Rajus use a public well located 14 minutes from their house.
- The family typically uses approximately 68 liters a day.
- Hasini and her older daughter collect the water twice a day using 10- to 12-liter plastic or metal bhindas.
- The family is not required to pay for the public well water.

Key contamination concerns for public wells:
- Salinity (36.9% of those with public wells available)
- Fluoride (2.5% of those with public wells available)
- Reddish/brackish water (2.4% of those with public wells available)

Water storage
Main storage vessels are 10- to 12-liter wide-mouth copper bhindas.
- They cover the vessels
- Store the vessels slightly elevated, but less than 3 feet off the ground
- Typically keep three storage vessels full in the dry season
- Access the water by dipping with their hands and a cup and use the cup for drinking
The Rajus chose this storage vessel because "the material keeps the water cool."

Storage vessel cleaning
- Clean the vessels daily
- Use only water to clean

Current water treatment behavior
- Use simple cloth filter
- Will treat in the wet season only
- Bought the cloth filter from a mobile sales person

Likelihood to treat water: 51%

Personal
Respondent: Hasini

We can avoid germs by purifying water. So we filter water, mostly in the wet season or when people in the family are sick.

Age: 33
Education: Some primary school
Newspapers: Yes, can read with difficulty
Husband: Harshal, age 42
Son: Hemal, age 14
Daughter: Hita, age 9
Daughter: Himantha, age 5

Employment
Respondent: Does not work
Head of house: Works on his own small farm

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Living situation
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Kitchen
Location: Outside the house in open air
Stove: Traditional wood-burning

Sanitation
Defecation: Toilet
Waste disposal: Solid waste pit

Key assets
Average: 8 items
Highest value: Bicycle

WHAT IS THE MOST IMPORTANT IMPROVEMENT YOU WOULD LIKE TO SEE OVER THE NEXT 10 YEARS?
① Irrigation (42%) ② Better water supply (34%) ③ Electricity (18%)

Water source: Only 13% of this persona group (rural + high awareness) use a public well. The mean distance to a public well was 14 minutes. However, the most common water source for this group was a public tap (39%).

This family is representing public well users because high awareness groups were the most likely to use a public well if available.

Usage is based on the mean for a family of five using a public well.

Respondents using a public well did not report an associated cost.

These are key contamination concerns for public well users.

Water storage: 65% of this persona group uses 10- to 12-liter bhindas. Higher awareness groups were more likely to give their reason for vessel choice as water coolness.

93% of this group covered their vessels.

Most in this persona group (55%) actually store their vessels on the floor; 40% elevate them (the highest percentage of any persona group).
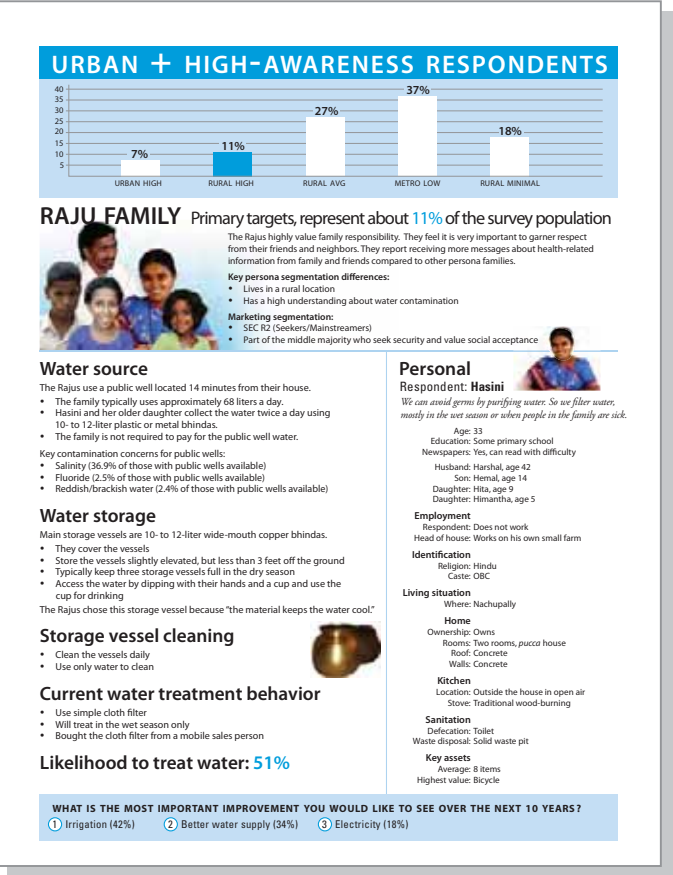
80% of bhinda/pot storage vessel users accessed water this way, 73% in this persona group (rural + high awareness) accessed their water this way, and 75% also used the cup for drinking.

Storage vessel cleaning: 92% of this persona group clean their vessels daily; 54% clean with only water.

Current water treatment behavior: Most (54%) never treat water. 41% of this persona group use a filter in the wet season, and 34% use a filter in the dry season. 56% of the filter users use a plastic sieve type. 54% purchased the sieve from a mobile sales person.

Likelihood to treat water: 52% of rural + high awareness + public well respondents treated their water in some way; 50% of the high awareness group in general did. The total of 51% is the split between the two.

Rural + high awareness respondents: The combination of rural + high awareness constitutes 11% of the survey population. High awareness respondents constitute 18% of the survey population; rural residents constitute 72%.

Key persona segmentation differences: 63% of high awareness families live in rural environments, 29% live in urban, 3% live in peri-urban, and 4% live in metro environments. (The breakdown of the sample is 72% rural, 18% urban, 2% peri-urban, and 8% metro).

Definitions: A metro area is a city that has a municipal corporation (a higher administrative body to manage urban affairs). Urban areas typically have a town council. Rural areas have a gram panchayat as the administrative unit.

Marketing segmentation: SEC R2 is a segment previously identified by PATH. The Mainstreamer category is derived from Rama Bijapurkar's model described in his book, *Winning in the Indian Market: Understanding the Transformation of Consumer India*. The Seeker category is derived from the McKinsey Global Institute's model in the May 2007 report.

Family description: The first sentence is from Bijapurkar's description of Mainstreamers which describes the segment motivation as family responsibility and conformity. This persona group reported the highest incidence of receiving health messages from family and friends.

Names: The "Raju" name corresponds to the family's rural location. The first names start with H to correspond to their "high awareness" classification. Hasini is Telugu for joyful; Harshal is Telugu for lover.

Quote: This quote is paraphrased from two participants in a focus group; the participants are identified as female, SEC R3, from Vauilathuta and male, SEC D/E, from Varigupally.

Age and education: Spouse mean age for this persona group (rural + high awareness) was 33.6 years; high awareness families represent the two youngest groups.

In the rural + high awareness group, 48% have no education, 35% have some or completed primary school, and 11% have some or completed secondary school.

49% of heads of households in this persona group can read a newspaper.

Employment: 49% of spouses do not work in this persona group. Head of house: 19% worked on others farms, 19% worked as skilled artisans, 15% worked on their own small farm.

Identification: 82% of this persona group are Hindu; 65% are classified as OBC caste.

Living situation: Nachupally was the only SEC R2 location from the RTI study. Average family size was 4.5 in this persona group. 47% of households in this group have at least one child age 13–18, 42% have at least one child age 6–12, and 14% have one child age 4–5.

Home: 86% of this group own their home. Mean size is 2.4 rooms. Materials were chosen as common for *pucca* houses, which have fixed walls of bricks, stoves, or cement and a roof of tiles, corrugated iron, or timber.

Kitchen: 36% of this persona group had kitchens outside in open air; 62% of this persona group used a wood-burning stove.

Sanitation: 50% of this persona group had private toilets; 44% used solid waste pits.

Key assets: Televisions and bicycles were the top two valued items. 91% owned a television, and 71% owned a bicycle.

Most important improvement over the next 10 years: This section lists the top three areas for improvement reported by rural + high awareness groups; percentages reflect the number who identified the area for improvement.

Bar chart values:
- URBAN HIGH: 7%
- RURAL HIGH: 11%
- RURAL AVG: 27%
- METRO LOW: 37%
- RURAL MINIMAL: 18%

RANGAN FAMILY

Primary targets, represent about 27% of the survey population

The Rangan family is working hard so they can afford to send their children to school. Recently, Aditi and her son Aman were sick for four days, and the doctor told them the illness could be due to bad water. Aditi would like to convince Adi to buy a ceramic filter for their drinking water.

Key persona segmentation differences:
- Lives in a rural location
- Has an average understanding about water contamination

Marketing segmentation:
- SEC R2 (Seekers/Mainstreamers)
- Part of the middle majority who seek security and value social acceptance

Water source

The Rangans use a public tap located 4 minutes from their house.
- The family uses approximately 150 liters a day.
- Aditi collects the water once a day using the storage jerricans', that requires several trips.
- The family is not required to pay for the public water tap.

Key contamination concerns for public tap:
- Reddish/brackish water (10.4% of those with public tap available)
- Fluoride (5.8% of those with public tap available)
- Salinity (4.5% of those with public tap available)

Water storage

Main storage vessels are 10- to 12-liter narrow-mouth plastic jerricans.
- They cover the vessels
- Store the water vessels on the floor
- Typically keep three storage vessels full in the dry season
- Access the water by pouring

The Rangans chose this storage vessel because "they are easy to clean."

Storage vessel cleaning

- Clean the vessels daily
- Use only water to clean

Current water treatment behavior

- Boil water
- Will treat only in the wet seasons or when people in the family are sick
- On average, they boil the water for 15 minutes and use the water for everyone in the family

Likelihood to treat water: 39%

Personal

Respondent: **Aditi**

We will definitely purify water when our children are sick but cannot do it all year.

Age: 34
Education: Completed some primary school
Newspapers: Yes, can read with difficulty

Husband: Adi, age 43
Son: Aman, age 8
Daughter: Aakriti, age 7
Daughter: Aasrita, age 4
Daughter: Aasha, age 6 months

Employment
Respondent: Does not work
Head of house: Wage laborer on another farm

Identification
Religion: Hindu
Caste: OBC

Living situation
Where: Nachupally

Home
Ownership: Owns
Rooms: Two rooms, *pucca* house
Roof: Slate
Walls: Stone

Kitchen
Location: Inside home with partition
Stove: Gas

Sanitation
Defecation: Toilet
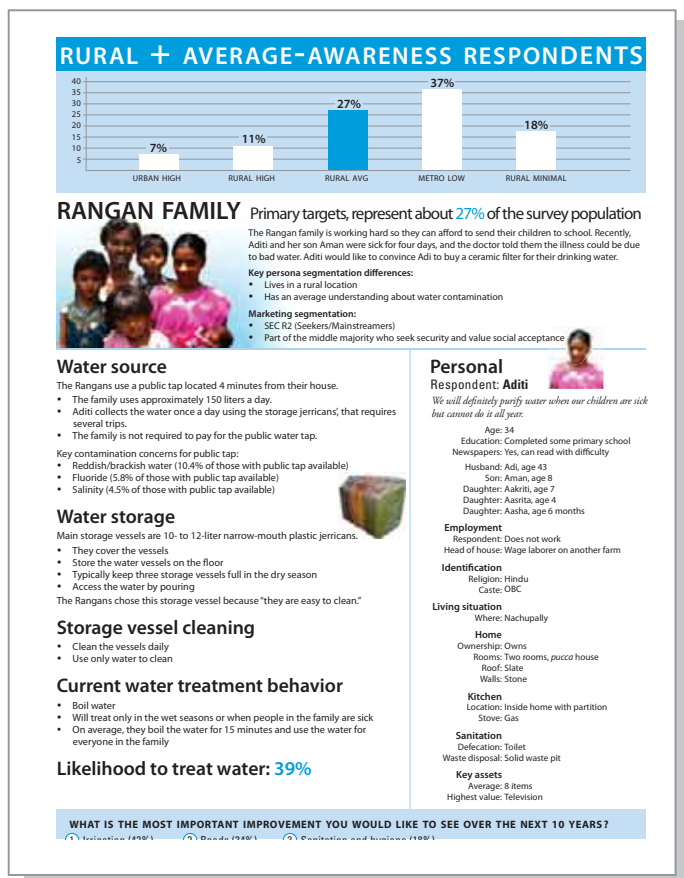Waste disposal: Solid waste pit

Key assets
Average: 8 items
Highest value: Television

WHAT IS THE MOST IMPORTANT IMPROVEMENT YOU WOULD LIKE TO SEE OVER THE NEXT 10 YEARS?

1 Irrigation (42%)   2 Roads (34%)   3 Sanitation and hygiene (18%)

Rangan Family Detail

RURAL + AVERAGE-AWARENESS RESPONDENTS

URBAN HIGH 7% | RURAL HIGH 11% | RURAL AVG 27% | METRO LOW 37% | RURAL MINIMAL 18%

RANGAN FAMILY Primary targets, represent about 27% of the survey population

The Rangan family is working hard so they can afford to send their children to school. Recently, Aditi and her son Aman were sick for four days, and the doctor told them the illness could be due to bad water. Aditi would like to convince Adi to buy a ceramic filter for their drinking water.

Key persona segmentation differences:
- Lives in a rural location
- Has an average understanding about water contamination

Marketing segmentation:
- SEC R2 (Seekers/Mainstreamers)
- Part of the middle majority who seek security and value social acceptance

Water source
The Rangans use a public water tap located 4 minutes from their house.
- The family uses approximately 150 liters a day.
- Aditi collects the water once a day using the storage jerricans, that requires several trips.
- The family is not required to pay for the public water tap.

Key contamination concerns for public tap:
- Reddish/brackish water (10.4% of those with public tap available)
- Fluoride (5.8% of those with public tap available)
- Salinity (4.5% of those with public tap available)

Water storage
Main storage vessels are 10- to 12-liter narrow-mouth plastic jerricans.
- They cover the vessels
- Store the water vessels on the floor
- Typically keep three storage vessels full in the dry season
- Access the water by pouring

The Rangans chose this storage vessel because "they are easy to clean."

Storage vessel cleaning
- Clean the vessels daily
- Use only water to clean

Current water treatment behavior
- Boil water
- Will treat only in the wet seasons or when people in the family are sick
- On average, they boil the water for 15 minutes and use the water for everyone in the family

Likelihood to treat water: 39%

Personal
Respondent: **Aditi**
We will definitely purify water when our children are sick but cannot do it all year.

Age: 34
Education: Completed some primary school
Newspapers: Yes, can read with difficulty
Husband: Adi, age 43
Son: Aman, age 8
Daughter: Aakriti, age 7
Daughter: Aasrita, age 4
Daughter: Aasha, age 6 months

Employment
Respondent: Does not work
Head of house: Wage laborer on another farm

Identification
Religion: Hindu
Caste: OBC

Living situation
Where: Nachupally
Home
Ownership: Owns
Rooms: Two rooms, *pucca* house
Roof: Slate
Walls: Stone
Kitchen
Location: Inside home with partition
Stove: Gas
Sanitation
Defecation: Toilet
Waste disposal: Solid waste pit
Key assets
Average: 8 items
Highest value: Television

WHAT IS THE MOST IMPORTANT IMPROVEMENT YOU WOULD LIKE TO SEE OVER THE NEXT 10 YEARS?

Rural + average awareness respondents: The average awareness respondents constitute 27% of the survey population.

Key persona segmentation differences: 71% of average awareness families live in rural environments, 18% live in urban, 2% live in peri-urban, and 9% live in metro environments. (The breakdown of the sample is almost identical—72% rural, 18% urban, 2% peri-urban, and 8% metro).

Definitions: A metro area is a city that has a municipal corporation (a higher administrative body to manage urban affairs). Urban areas typically have a town council. Rural areas have a gram panchayat as the administrative unit.

Marketing segmentation: SEC R2 is a segment previously identified by PATH. See Raju family detail for more information.

Family description: This family was chosen to represent recent water borne illness; however, only 7% of the survey population had been sick in the last 2 weeks. The RTI report indicated that treatment was triggered most often by sickness. 46% of those in the average awareness group reported being "very satisfied" with their water source, regardless of the source.

Names: The "Rangan" name corresponds to the family's rural location; however, the family represents all locations for those in the average awareness classification. The first names start with A to correspond to their "average awareness" classification. Aditi is Telugu for mother of the Gods, and Adi is Telugu for first.

Quote: This quote is paraphrased from two participants in a focus group; the participants are identified as male, SEC D/E, from Mangasumudram and female, SEC R2, from Nachupally.

Age and education: Spouse mean age for this persona group was 35.8 years, which was skewed down to emphasize that higher awareness is associated with youth.

In this persona group, 47% have no education, 30% have some or completed primary school, and 19% have some or completed secondary school.

51% of heads of households in this persona group can read a newspaper.

Employment: 56% of spouses do not work in this persona group. Head of house: 19% worked as skilled artisans and 15% worked on another farm as wage labor.

Identification: 88% of this persona group are Hindu; 65% are classified as OBC caste.

Living situation: Nachupally was the only SEC R2 location from the RTI study. Average family size was 4.6 in this persona group (the largest of any persona groups). 22% of households in this group have at least one child age 0–3, 20% have at least one child age 4–5, and 55% have at least one age child 6–12.

Home: 78% of this group owns their home. Mean size is 2.5 rooms. Materials were chosen as common for *pucca* houses, which have fixed walls of bricks, stoves, or cement and a roof of tiles, corrugated iron, or timber.

Kitchen: 63% of this persona group had kitchens inside with a partition. 75% had a gas stove.

Sanitation: 65% of this persona group had private toilets; 43% used solid waste pits.

Key assets: Televisions and bicycles were the top two valued items. 91% owned a television; 74% owned a bicycle. Note that durable goods were counted by type. For example, if the respondent owned 30 books and one television, this would be counted as 2 durable goods items by type.

Most important improvement over the next 10 years: This section lists the top three areas for improvement reported by average awareness groups in all locations; percentages reflect the number who identified the area for improvement.

Water source: 27% of this persona group (average awareness) used a public tap. The mean distance to a public tap was 4 minutes. However, the most common water source for this persona group was a PWC (48%).

Usage is based on the mean for a family of six using a public tap.

Respondents using a public tap did not report an associated cost.

These are the key contamination concerns for public tap users.

Water storage: 63% of this persona group (average awareness) uses 10- to 12-liter bhindas; 31% use 10- to 12-liter jerricans. However, if looking at the combination of rural location + average awareness + public tap user, 35% used jerricans (representing the highest percentage of a combination group). Three storage vessels was the mean for a family of six.

96% of this persona group covered their vessels.

Jerricans were most often stored on the floor (66%).

While only 11% of jerrican storage vessel users accessed water by pouring, mouth type (narrow mouth) was positively associated with pouring. In reality, 76% in this persona group accessed their water by dipping with hands and a cup.

Storage vessel cleaning: 89% of this persona group clean their vessels daily; 54% clean with only water. Jerricans were positively associated with being easy to clean.

Current water treatment behavior: While only 13% of this persona group boiling water during the wet season, this family was chosen to represent boiling to emphasize the RTI finding of illness triggering treatment. Most (60%) never treat, 32% use a filter in the wet season, and 26% use a filter in the dry season.

Likelihood to treat water: 39% of average rural + awareness group + public tap respondents treated their water in some way; 40% of the average awareness group in general did.

7%	11%	27%	37%	18%
URBAN HIGH	RURAL HIGH	RURAL AVG	METRO LOW	RURAL MINIMAL

MURTY FAMILY Secondary targets, represent about 37% of the survey population

The Murtys main goal is to provide a better life for their children. To help attain this goal they send their children to English-medium schools, spending more on education than any of the other four persona families.

Key persona segmentation differences:
- Lives in a metro location
- Has a low understanding about water contamination

Marketing segmentation:
- SEC E1 (Aspirers/Strivers)
- New consumers who value hope and are trying to offer their children a better life

Water source

The Murtys use a private water connection (PWC) located in their yard.
- The family uses approximately 115 liters a day.
- Lasya collects the water once a day using 10-liter broad-mouth plastic and stainless steel bhindas that requires several trips.
- The family pays 125 rupees a month for the water, plus an average of 36 rupees a month
  for repair and maintenance of the PWC.

Key contamination concerns for PWC:
- Reddish/brackish water (9.3% of those with PWC available)
- Fluoride (6.3% of those with PWC available)
- Salinity (3.3% of those with PWC available)

Water storage

Main storage vessels are 10- to 12-liter wide-mouth steel bhindas.
- Cover the vessels
- Store the water vessels on the floor
- Typically keep two vessels full in the dry season
- Access the water by dipping with their hands and a cup, and use the cup for drinking

The Murtys chose this storage vessel because "they are easy to clean."

Storage vessel cleaning
- Clean the vessels daily
- Use soap and water

Current water treatment behavior
- The Murtys are unlikely to treat their water; however, if they were to treat it, low awareness groups usually choose boiling in the wet season.

Likelihood to treat water: 32%

Personal

Respondent: **Laxman (son)**

We need more money if we want to buy good products that purify water. Right now, we do not have the money to buy them.

Age: 19
Education: In his first year of college
Newspapers: Yes, can read

Father: Lalit, age 44
Mother: Lasya, age 37
Sister: Latha, age 15

Employment
Respondent: College student
Head of house: Non-farm construction worker
Spouse: Hotel housekeeper

Identification
Religion: Hindu
Caste: OBC

Living situation
Where: Hyderabad (metro)

Home
Ownership: Owns
Rooms: Two rooms, *pucca* house
Roof: Concrete
Walls: Concrete and brick

Kitchen
Location: Inside home with partition
Stove: Gas

Sanitation
Defecation: Toilet
Waste disposal: Solid waste pit

Key assets
Average: 8 items
Highest value: Television

WHAT IS THE MOST IMPORTANT IMPROVEMENT YOU WOULD LIKE TO SEE OVER THE NEXT 10 YEARS?

1. Irrigation (19%) 2. Roads (25%) 3. Household water supply (14%)

Murty Family Detail

METRO + LOW-AWARENESS RESPONDENTS

URBAN HIGH	RURAL HIGH	RURAL AVG	METRO LOW	RURAL MINIMAL
7%	11%	27%	37%	18%

MURTY FAMILY Secondary targets, represent about 37% of the survey population

The Murtys main goal is to provide a better life for their children. To help attain this goal they send their children to English-medium schools, spending more on education than any of the other four persona families.

Key persona segmentation differences:
- Lives in a metro location
- Has a low understanding about water contamination

Marketing segmentation:
- SEC E1 (Aspirers/Strivers)
- New consumers who value hope and are trying to offer their children a better life

Water source
The Murtys use a private water connection (PWC) located in their yard.
- The family uses approximately 115 liters a day.
- Lasya collects the water once a day using 10-liter broad-mouth plastic and stainless steel bhindas that requires several trips.
- The family pays 125 rupees a month for the water, plus an average of 36 rupees a month for repair and maintenance of the PWC.

Key contamination concerns for PWC:
- Reddish/brackish water (9.3% of those with PWC available)
- Fluoride (6.3% of those with PWC available)
- Salinity (3.3% of those with PWC available)

Water storage
Main storage vessels are 10- to 12-liter wide-mouth steel bhindas.
- Cover the vessels
- Store the water vessels on the floor
- Typically keep two vessels full in the dry season
- Access the water by dipping with their hands and a cup, and use the cup for drinking
The Murtys chose this storage vessel because "they are easy to clean."

Storage vessel cleaning
- Clean the vessels daily
- Use soap and water

Current water treatment behavior
- The Murtys are unlikely to treat their water; however, if they were to treat it, low awareness groups usually choose boiling in the wet season.

Likelihood to treat water: 32%

Personal
Respondent: **Laxman (son)**

We need more money if we want to buy good products that purify water. Right now, we do not have the money to buy them.

Age: 19
Education: In his first year of college
Newspapers: Yes, can read
Father: Lalit, age 44
Mother: Lasya, age 37
Sister: Latha, age 15

Employment
Respondent: College student
Head of house: Non-farm construction worker
Spouse: Hotel housekeeper

Identification
Religion: Hindu
Caste: OBC

Living situation
Where: Hyderabad (metro)
Home
Ownership: Owns
Rooms: Two rooms, *pucca* house
Roof: Concrete
Walls: Concrete and brick
Kitchen
Location: Inside home with partition
Stove: Gas
Sanitation
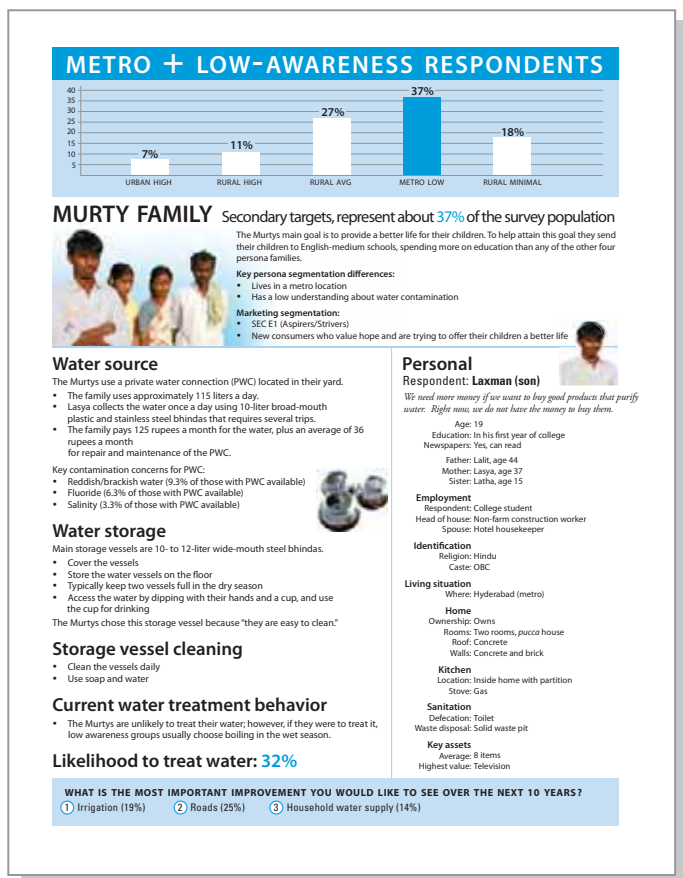Defecation: Toilet
Waste disposal: Solid waste pit

Key assets
Average: 8 items
Highest value: Television

WHAT IS THE MOST IMPORTANT IMPROVEMENT YOU WOULD LIKE TO SEE OVER THE NEXT 10 YEARS?
① Irrigation (19%) ② Roads (25%) ③ Household water supply (14%)

Water source: 38% of this persona group used a PWC, which was the most common for this persona group. 81% of metro dwellers used a PWC.

Usage is based on the mean for a family of four using a PWC.

Costs reflect those reported by metro inhabitants using a PWC for a yard tap.

These are the key contamination concerns for PWC users.

Water storage: 73% of this persona group (low awareness) uses 10- to 12-liter bhindas. Two vessels was the mean for a family of four.

99% of this persona group covered their vessels.

51% of bhinda users stored them on the floor.

79% of this persona group accesses the water by dipping with their hands and a cup; 76% in this persona group also used the cup to drink.

Storage vessel cleaning: The number one reason lower awareness groups choose their storage vessels is that they are easier to clean.

89% of this persona group clean their vessels daily; 50% clean with soap and water.

Current water treatment behavior: 68% of this persona group never treat their water. This is the highest rate of nontreatment among all groups.

Likelihood to treat water: 31% of metro + low awareness group + PWC respondents treated their water in some way; 32% of the low awareness group in general did.

Metro + low awareness respondents: Low awareness respondents constitute 37% of the survey population.

Key persona segmentation differences: 75% of low awareness families live in rural environments, 13% live in urban, 2% live in peri-urban, and 10% live in metro environments. (The breakdown of the sample is almost identical—72% rural, 18% urban, 2% peri-urban, and 8% metro).

Definitions: A metro area is a city that has a municipal corporation (a higher administrative body to manage urban affairs). Urban areas typically have a town council. Rural areas have a gram panchayat as the administrative unit.

Marketing segmentation: SEC E1 is a segment previously identified by PATH. The Striver category is derived from Rama Bijapurkar's model described in his book, *Winning in the Indian Market: Understanding the Transformation of Consumer India."* The Aspirer category is derived from the McKinsey Global Institute's model in the May 2007 report.

Family description: The description is from Bijapurkar's depiction of this market segment. The metro + low awareness combination did spend a larger percentage of expenditures on education compared to other groups.

Names: The "Murty" name corresponds to the family's metro location; however, the family represents all locations for those in the low awareness classification. The first names start with L to correspond to their "low awareness" classification. Lasya is Telugu for smile/laugh; Lalit is Telugu for handsome.

Quote: This quote is paraphrased from one participant in a focus group identified as male, SEC D/E, from Mangasumudram. The quote reflects a common sentiment of the financial obstacles to treating water.

Age and education: Mean age for a child acting as the respondent for the survey was actually 30.1 years; 15% were 20 or under. Laxman was chosen to be the respondent because it was more common for children to be respondents in metro versus other areas. Laxman is a college student because 50% of the 19-year-old children answering the survey were in college.

In the average awareness group, 49% have no education, 31% have some or completed primary school, and 12% have some or completed secondary school. 48% of heads of households in this persona group can read a newspaper.

Employment: Head of house: 22% worked on another farm as wage labor, 13% work as skilled artisan, 16% of metro dwellers worked in construction. 50% of spouses worked in this persona group; housekeeper was the most common metro job.

Identification: 79% of this persona group are Hindu; 65% are classified as OBC caste.

Living situation: Hyderabad was chosen because it is a metro location. Average family size was 4.4 in this persona group. 53% of households in this group have at least one child age 13–18.

Home: 81% of this group owns their home. Mean size is 2.2 rooms. Materials were chosen as common for *pucca* houses, which have fixed walls of bricks, stoves, or cement and a roof of tiles, corrugated iron, or timber.

Kitchen: 45% of this persona group had kitchens inside with a partition; 49% had a gas stove.

Sanitation: 58% of this persona group had private toilets; 45% used solid waste pits.

Key assets: Televisions and bicycles were the top two valued items. 84% owned a television; 73% owned a bicycle. Note that durable goods were counted by type. For example, if the respondent owned 30 books and one television, this would be counted as 2 durable goods items by type.

Most important improvement over the next 10 years: This section lists the top three areas for improvement reported by low awareness groups in all locations; percentages reflect the number who identified the area for improvement.

Bar chart:
- URBAN HIGH: 7%
- RURAL HIGH: 11%
- RURAL AVG: 27%
- METRO LOW: 37%
- RURAL MINIMAL: 18%

RUDRARAJU FAMILY

Secondary targets, represent about 18% of the survey population

The Rudraraju's only daughter recently married and moved away. The family worked hard to make sure she got an education. Meghna's mother, Manta, lives with them now, after the death of her husband two years ago. Manta firmly believes that water treatment is a waste of time.

Key persona segmentation differences:
- Lives in a rural location
- Has a minimal understanding about water contamination

Marketing segmentation:
- SEC R3 (Aspirers/Strivers)
- New consumers who value hope and are trying to offer their children a better life

Water source

The Rudrarajus use a private well located 11 minutes from their house.
- The family uses approximately 68 liters a day.
- Meghna collects the water once a day using 10-liter broad-mouth plastic bhindas; this requiring several trips.
- The family does not pay for the use of the private well.

Key contamination concerns for private well:
- Salinity (17.5% of those with private well available)
- Germs, worms and insects (4.7% of those with private well available)
- Chlorine smell (1.7% of those with private well available)

Water storage

Main storage vessels are 10- to 12-liter wide-mouth aluminum bhindas.
- They cover the vessels
- Store the water vessels on the floor
- Typically keep two vessels are full in the dry season
- Access the water by dipping with their hands and a cup and use the cup for drinking

The Rudrarajus chose this storage vessel because it "is easy to keep clean."

Storage vessel cleaning

- Clean the vessels daily
- Use soap and water

Current water treatment behavior

- The Rudrarajus are unlikely to treat their water; however, if they did treat, minimal awareness groups usually choose to use a filter in the wet season.

Likelihood to treat water: 30%

Personal

Respondent: **Mahesh**

Whenever our son in law visits us, he insists on drinking only hot water. I boil the water as soon as I get a phone call that he is visiting us.

Age: 55
Education: No formal education
Newspapers: No, cannot read

Wife: Meghna, age 44
Mother-in-law: Manta, age 72

Employment
Respondent: Works on another farm as wage labor
Spouse: Does not work

Identification
Religion: Hindu
Caste: OBC

Living situation
Where: Ramaswamypalli

Home
Ownership: Owns
Rooms: Two rooms, semi-*pucca* house
Roof: Grass thatch
Walls: Brick

Kitchen
Location: Outside the house in open air
Stove: Traditional wood-burning

Sanitation
Defecation: In the open
Waste disposal: Compost or bury

Key assets
Average: 8 items
Highest value: Television

WHAT IS THE MOST IMPORTANT IMPROVEMENT YOU WOULD LIKE TO SEE OVER THE NEXT 10 YEARS?

1. Irrigation (23%)   2. Roads (19%)   3. Sanitation and hygiene (10%)

Rudraraja Family Detail

RURAL + MINIMAL-AWARENESS RESPONDENTS

URBAN HIGH	RURAL HIGH	RURAL AVG	METRO LOW	RURAL MINIMAL
7%	11%	27%	37%	18%

RUDRARAJU FAMILY Secondary targets, represent about 18% of the survey population

The Rudraraju's only daughter recently married and moved away. The family worked hard to make sure she got an education. Meghna's mother, Manta, lives with them now, after the death of her husband two years ago. Manta firmly believes that water treatment is a waste of time.

Key persona segmentation differences:
- Lives in a rural location
- Has a minimal understanding about water contamination

Marketing segmentation:
- SEC R3 (Aspirers/Strivers)
- New consumers who value hope and are trying to offer their children a better life

Water source
The Rudrarajus use a private well located 11 minutes from their house.
- The family uses approximately 68 liters a day.
- Meghna collects the water once a day using 10-liter broad-mouth plastic bhindas; this requiring several trips.
- The family does not pay for the use of the private well.

Key contamination concerns for private well:
- Salinity (17.5% of those with private well available)
- Germs, worms and insects (4.7% of those with private well available)
- Chlorine smell (1.7% of those with private well available)

Water storage
Main storage vessels are 10- to 12-liter wide-mouth aluminum bhindas.
- They cover the vessels
- Store the water vessels on the floor
- Typically keep two vessels are full in the dry season
- Access the water by dipping with their hands and a cup and use the cup for drinking

The Rudrarajus chose this storage vessel because it "is easy to keep clean."

Storage vessel cleaning
- Clean the vessels daily
- Use soap and water

Current water treatment behavior
- The Rudrarajus are unlikely to treat their water; however, if they did treat, minimal awareness groups usually choose to use a filter in the wet season.

Likelihood to treat water: 30%

Personal
Respondent: **Mahesh**

Whenever our son in law visits us, he insists on drinking only hot water. I boil the water as soon as I get a phone call that he is visiting us.

Age: 55
Education: No formal education
Newspapers: No, cannot read
Wife: Meghna, age 44
Mother-in-law: Manta, age 72

Employment
Respondent: Works on another farm as wage labor
Spouse: Does not work

Identification
Religion: Hindu
Caste: OBC

Living situation
Where: Ramaswamypalli

Home
Ownership: Owns
Rooms: Two rooms, semi-*pucca* house
Roof: Grass thatch
Walls: Brick

Kitchen
Location: Outside the house in open air
Stove: Traditional wood-burning

Sanitation
Defecation: In the open
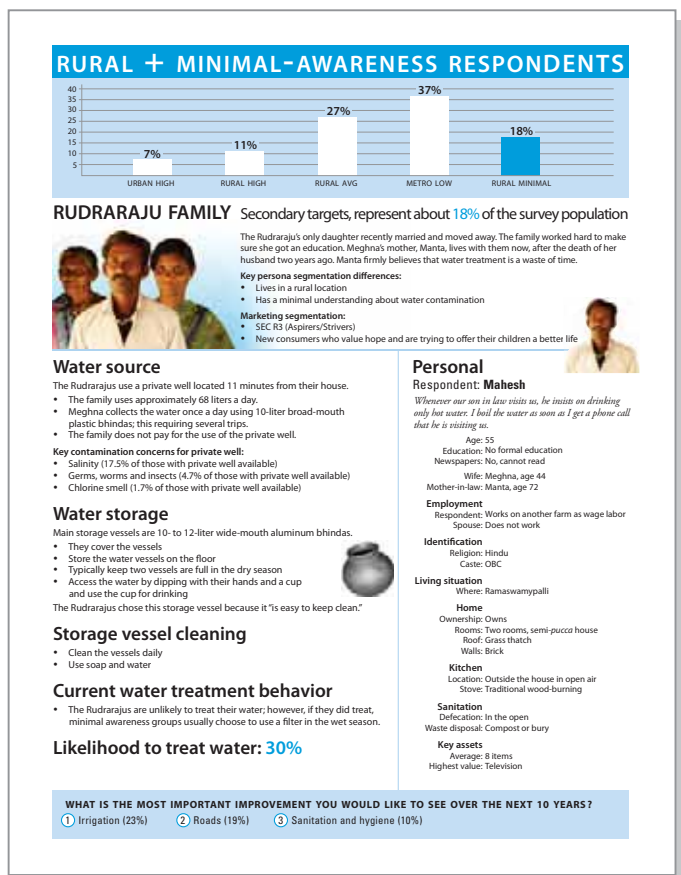Waste disposal: Compost or bury

Key assets
Average: 8 items
Highest value: Television

WHAT IS THE MOST IMPORTANT IMPROVEMENT YOU WOULD LIKE TO SEE OVER THE NEXT 10 YEARS?
① Irrigation (23%)   ② Roads (19%)   ③ Sanitation and hygiene (10%)

Water source: While only 3% of the minimal awareness group use a private well, as one of the top four sources (7% of the survey population) one family needed to represent the source.

Actually, 39% of this persona group uses PWC and 35% use a public tap.

Time to get water is indicated as the mean distance for a private well. Usage is based on mean for a family of three using a private well.

No costs were associated with the use of a private well.

These are the key contamination concerns for private well users.

Water storage: 68% of this persona group (minimal awareness) uses 10- to 12- liter bhindas for storage. Two vessels was the mean for a family of three.

97% of this persona group covered their vessels.

51% of bhinda users stored them on the floor.

81% of this persona group accesses the water by dipping with their hands and a cup; 77% in this persona group also used the cup to drink.

Storage vessel cleaning: The number one reason lower awareness groups choose their storage vessels is that they are easier to clean.

83% of this persona group (minimal awareness) clean their vessels daily; 60% clean with soap and water (the highest use of soap and water).

Current water treatment behavior: 62% of this persona group (minimal awareness) never treat their water.

Likelihood to treat water: 38% of rural + minimal awareness group + private well respondents treated their water in some way; 39% of the minimal awareness group in general did. The total of 30% is skewed lower to correspond to the trend that higher awareness is significantly positively associated with more treatment.

Rural + minimal awareness respondents: Minimal awareness respondents constitute 18% of the survey population.

Key persona segmentations differences: 76% of low awareness families live in rural environments, 17% live in urban, 1% live in peri-urban, and 7% live in metro environments. (The breakdown of the sample is almost identical—72% rural, 18% urban, 2% peri-urban, and 8% metro).

Definitions: A metro area is a city that has a municipal corporation (a higher administrative body to manage urban affairs). Urban areas typically have a town council. Rural areas have a gram panchayat as the administrative unit.

Marketing segmentation: SEC R3 is a segment previously identified by PATH. The Striver category is derived from Rama Bijapurkar's model described in his book, *Winning in the Indian Market: Understanding the Transformation of Consumer India*. The Aspirer category is derived from the McKinsey Global Institute's model in the May 2007 report.

Family description: The description emphasizes the RTI study finding that older respondents were less likely to see a need for water treatment.

Names: The "Rudraraju" name corresponds to the family's rural location; however, the family represents all locations for those in the minimal awareness classification. The first names start with M to correspond to their "minimal awareness" classification. Meghna is Telugu for cloud; Mahesh is Telugu for Lord Siva.

Quote: This quote is paraphrased from one participant in a focus group identified as female, SEC R2, from Nachupally.

Age and education: The mean age of the head of house for this persona group (minimal awareness) is 47.0 years (skewed higher here to emphasize that this is the oldest group).

In the minimal awareness group, 53% have no education (the most of any group), 33% have some or completed primary school, and 9% have some or completed secondary school.

47% of heads of households in this persona group can read a newspaper—the lowest percentage of any persona groups.

Employment: Head of house: 23% worked on another farm as wage labor and 19% work as skilled artisan. 50% of spouses did not work in this persona group.

Identification: 88% of this persona group are Hindu; 70% are classified as OBC caste (the highest of any group).

Living situation: Ramaswamypalli was chosen because the RTI report had SEC R3 respondents from this location. Average family size was 4.4 in this persona group, but this group had the highest percentage of three-person households (22%).

Home: 87% of this group owns their home. Mean size is 2.4 rooms. Materials were chosen as common for semi-*pucca* houses. The persona group was much more likely to own a *pucca* house; however, 10% of the survey population owned semi-*pucca* houses so one family was chosen to represent.

Kitchen: 34% of this persona group had kitchens outside (highest of any group) - 88% of homes with outdoor kitchens had traditional stoves.

Sanitation: 42% of this persona group had no facilities (highest of any group). 28% composted. This group had the lowest rate of using a solid waste pit.

Key assets: Televisions and bicycles were the top two valued items. 82% owned a television; 76% owned a bicycle. See note on other detail sheets of durable goods calculation.

Most important improvement over the next 10 years: These are the top three areas for improvement reported by minimal awareness groups in all locations; percentages reflect the number who identified the area for improvement.