

Serving the BOP: The WaterMarket

Camilo Palacios, Jennifer Esterle,
Saba Badran, Logan Potere,
Jennifer McCormick



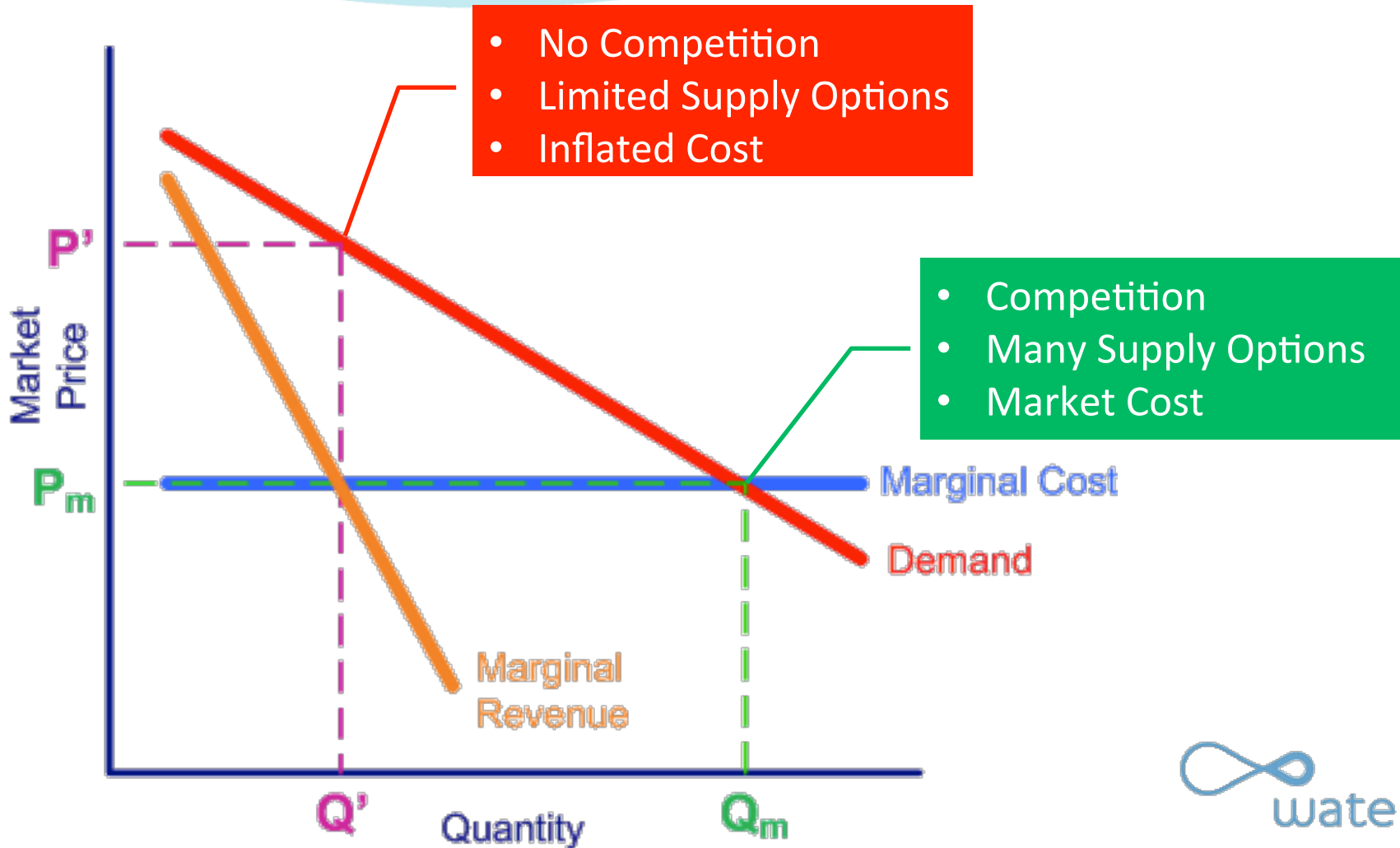
The Current Water Market

Progress

Obstacles



The Current Market for Water





WaterMarket

Three Purposes of WaterMarket



- To match buyers and sellers of water supply
- To expand microfinance opportunities
- To provide health advice regarding water and water related diseases

WaterMarket Menu

WaterMarket

The daily local water market information



Get your Own Hookup

Information about Microfinancing and Savings Plans that enable users to obtain Personal Water Access and Sanitary Devices

Facts about Water

Education, Tips, and Query about Water and Sanitation

WaterMarket

WaterMarket

The daily local water market information



Get your Own Hookup

Information about Microfinancing and Savings Plans that enable users to obtain Personal Water Access and Sanitary Devices

Facts about Water

Education, Tips, and Query about Water and Sanitation

WaterMarket

WaterMarket

The daily local water market information



Find the best water option for the day

Compare prices

Compare distances

WaterMarket

WaterMarket

The daily local water market information



Deposit into savings for personal hookup

View promoted loan options

WaterMarket

WaterMarket

The daily local water market information



Get your Own Hookup

Information about Microfinancing and Savings Plans that enable users to obtain Personal Water Access and Sanitary Devices

Facts about Water

Education, Tips, and Query about Water and Sanitation

WaterMarket

WaterMarket

The daily local water market information



Get your Own Hookup

Information about Microfinancing and Savings Plans that enable users to obtain Personal Water Access and Sanitary Devices

Facts about Water

Education, Tips, and Query about Water and Sanitation

WaterMarket

Get your Own Hookup

Information about Microfinancing and Savings Plans that enable users to obtain Personal Water Access and Sanitary Devices



Learn about financing a water hookup or toilet

Learn how to find the best rates

View promoted offers

Make a Payment

WaterMarket

WaterMarket

The daily local water market information



Get your Own Hookup

Information about Microfinancing and Savings Plans that enable users to obtain Personal Water Access and Sanitary Devices

Facts about Water

Education, Tips, and Query about Water and Sanitation

WaterMarket

WaterMarket

The daily local water market information



Get your Own Hookup

Information about Microfinancing and Savings Plans that enable users to obtain Personal Water Access and Sanitary Devices

Facts about Water

Education, Tips, and Query about Water and Sanitation

WaterMarket

Facts about Water

Education, Tips, and Query about Water and Sanitation



Education on Clean Water

Education on Sanitary Practices & Equipment

Tips on ways to stay Healthy

Query



The WaterMarket

Accessible

Sustainable

Scalable

Why it Works

Accessible

Sustainable

Scalable

Widespread & Affordable



- 1 of every 2 people in the world own a cell phone
- There will be 894 million mobile banking users by 2015*
- No requirement for specific technology (i.e. SMS, USSD, 3G)
- Minimal transaction cost to the user

Accessible

Sustainable

Scalable

Profit-Based Approach

- Transaction fees
- Market for complementary goods
- Advertising venue
- Market Data



- Time
- Access to water
- Reduced water cost
- Education

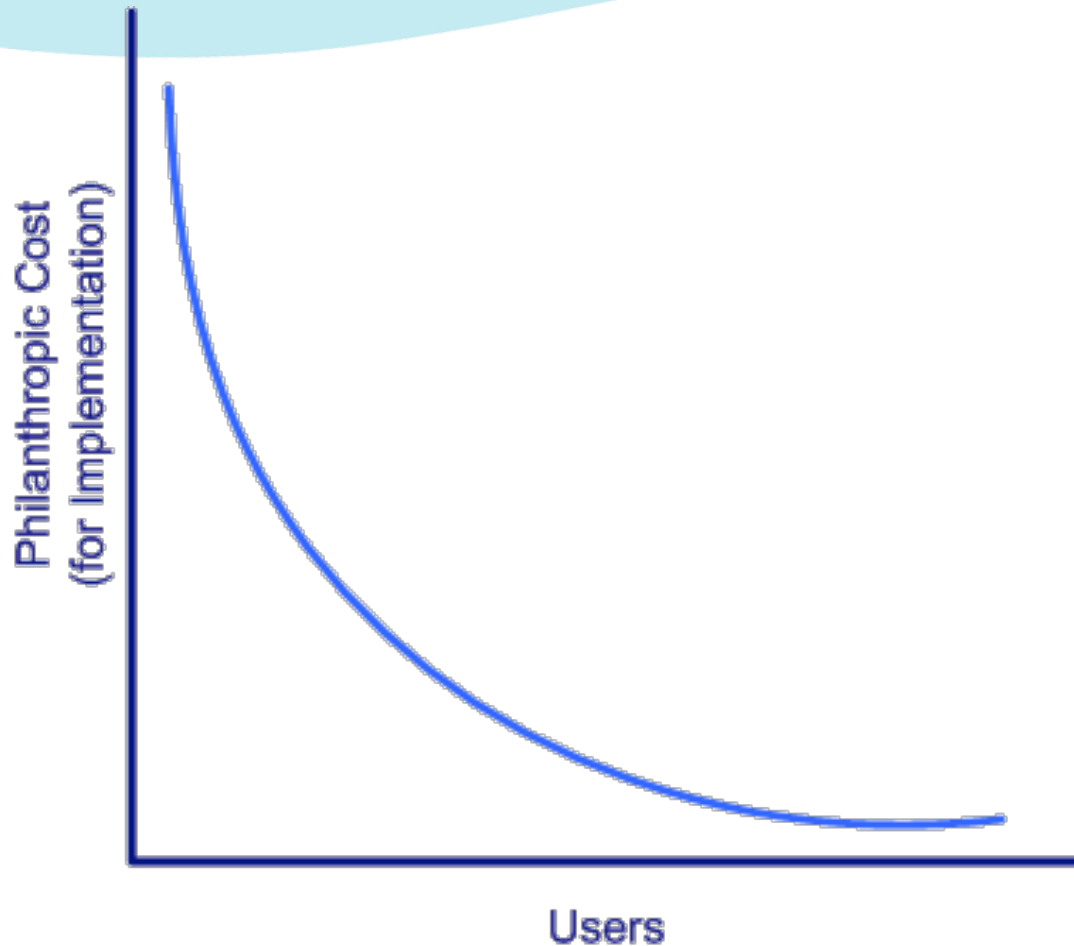
- Job opportunities
- Increase in income

Accessible

Sustainable

Scalable

Philanthropic Cost per Person



Accessible

Sustainable

Scalable

Existing
Infrastructure



Local
Partners



Scalability

Accessible

Sustainable

Scalable

Mechanisms serving the BOP



QUESTIONS

BACKUP SLIDES

WaterMarket Risks

Risk	Analysis
Insufficient Demand	Low cost for Failure
Exploitation of BOP through B-Market	Mitigate with Purchase Limits
Difficulties in finding mobile banking and cellular service partners	Low cost for Failure
Contaminated water in market	Mitigate with initial water test for seller

User Costs

- .03 USD per 20 sec session USSD [South Africa]
https://www.vodacomessaging.co.za/tariffs_ussd.asp
- .12 USD for money transfer to registered user(.60-1.21), .91 USD for non-user (1.21-30.21) [Kenya]
<http://www.safaricom.co.ke/index.php?id=255>

Unstructured Supplementary Services Data (USSD)

- Uses a session approach rather than a save & send approach like SMS
- Used for menu-based applications
- Used for location-based applications
- Phase 2 USSD allows a “push” application where the network can initiate a session
- Real Time
- Cheaper than SMS
- Supported by the same handsets as SMS (GSM)
- Communicates directly to the Home Location Register (HLR), so the services are the same even when in roaming
- Allows for voice channels?
- USSD is supported by WAP, SIM Application Toolkit and CAMEL enabling scope for many applications

Water Market Pilot: The case for India

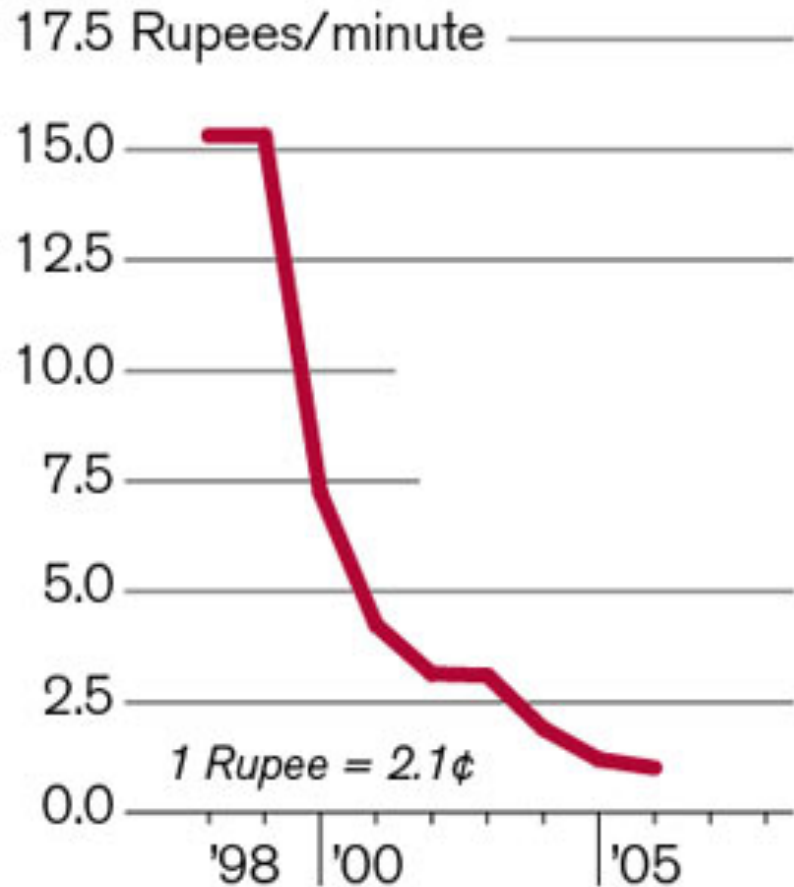


- Projected 97% cell phone use by 2014
- Large megacities
- 52% live in poverty
- An estimated 21% of the country's diseases are water related
- 128 million without water
- 839 million without sanitation

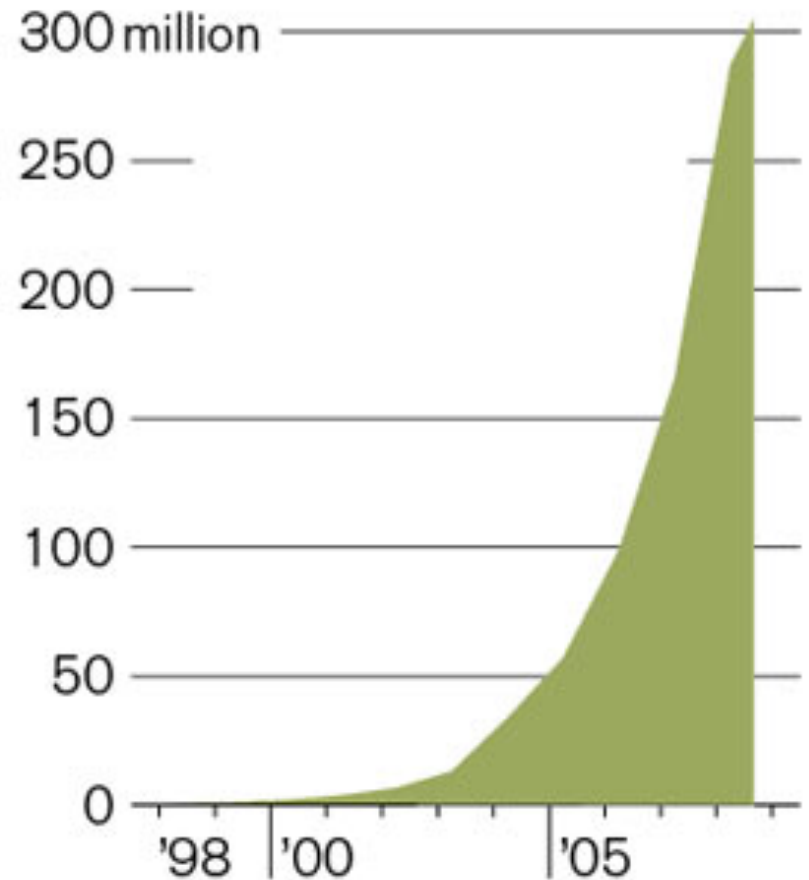
India Population Density Map



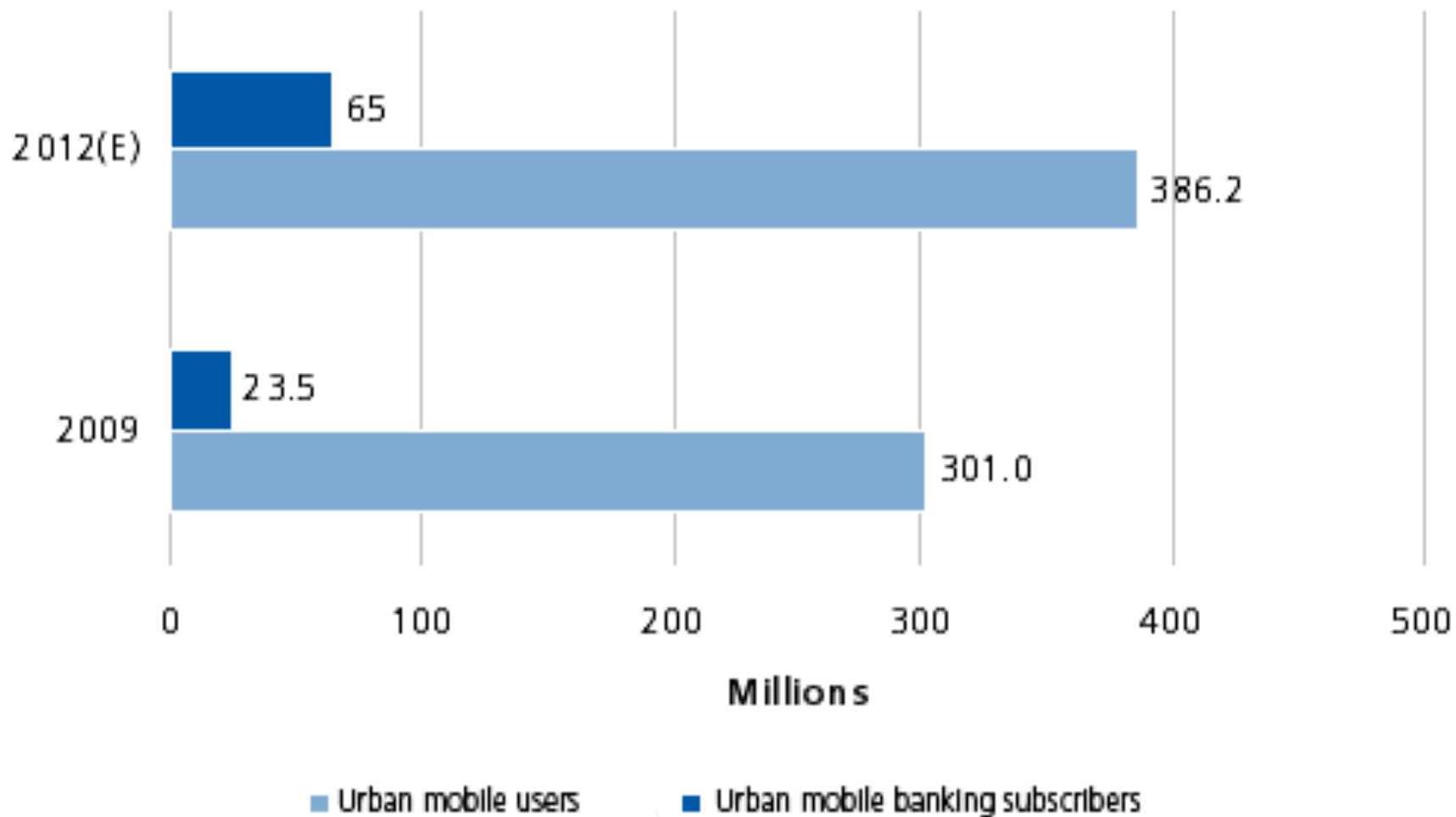
Mobile charges in India



Mobile subscribers in India through August 2008



Urban Mobile Banking



Water Testing

- Bacteriological medium is combined with a water sample
 - » Does not need to be boiled
 - » Does not need to be autoclaved
- Will cost under \$1, and possibly even as low as 10 cents

Initial Implementation

- Educate existing SHGs to publish rates
- Encourage SHG's to educate communities
- Create a network effect