

In preventive health since 2008



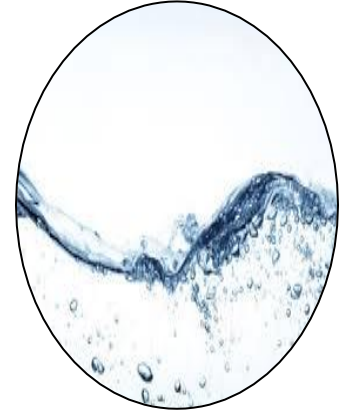
The Larger Purpose



Accessible



Affordable



Pure

"Water for all, particularly the underserved"

Session Focus-

Market-based mechanisms for providing clean drinking water at Lower Levels of Pyramid.



The Knowledge of Market based Mechanisms...



Present in:

- > 180 Locations
- 7 States
- 1 UT

Safe Drinking Water:

- Affordable rates
- to the underserved

In Partnership with:

- Local entrepreneurs,
 - Corporates,
 - Government
- to provide access

Current Water Scenario

India rank **120** / 122 nations

30% of women walk **> 500** meters

70% of India's water supply is polluted with **sewage effluents**

Groundwater in 1/3rd of **600** districts is unfit for drinking

443 million school days lost per year

70% in low income communities drink water from untreated source



Water-Health Risk Association

37.7 Million
affected by water borne
diseases*

73 Million
Work days lost due to
waterborne diseases
Resulting economic
burden is \$600 million
/year

1.5 Million
Children die due to
diarrhea .(1600
Diarrheal deaths daily)

62 Million
Affected by dental,
skeletal and/or non-
skeletal fluorosis.



Market Mechanisms for different socio-economic levels



Upper class
find their own
solutions



Middle and Lower
Middle can pay/fund
part of cost



Base of the pyramid needs to be
subsidized/supported

Consumer Segments



Villages



Slums



Public Spaces



Hospitals

Schools



Govt. Projects



Technology to suit Water Profile



Water Treatment Plant

- Purification process structured to suit local water profile
- Removes ionic and biological contaminants
- Remote and Auto Controls

How Community Level Water Purification Installations are created

1.



Promote Water Franchisees in rural as well as urban areas

2.



Delhi Transport Corporation

**HDFC
ERGO**

GENERAL INSURANCE



Michael & Susan Dell
FOUNDATION



DELHI JAL BOARD

Joins hands with Corporates, Government and Multilaterals

Expenditure

Village Level Cost Sample

CAPEX* (in rupee lakhs)



Purification Plant **2.50**



Borewell **0.80**



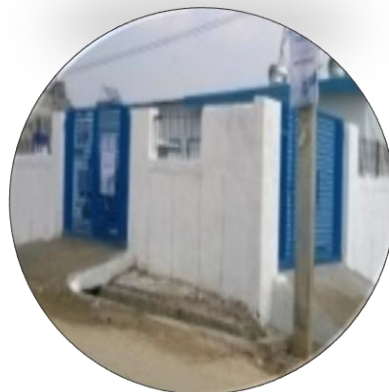
Delivery Vehicle **3.50**



Water Chiller **0.60**



Power Connection **0.25**



Site Preparation **0.80**



Bubble top & Water Campers **0.50**

Ball
Park Rs
9 lakhs

Expenditure

Village Level Cost Sample

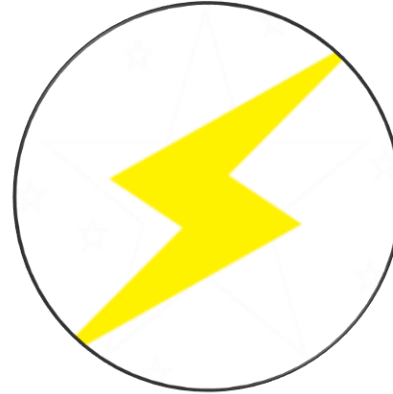
OPEX* (Per Month)



Machine Maintenance
6000 INR



Driver and Helper Salary
8000 INR



Electricity Cost
5500 INR



Operator Salary
5000 INR



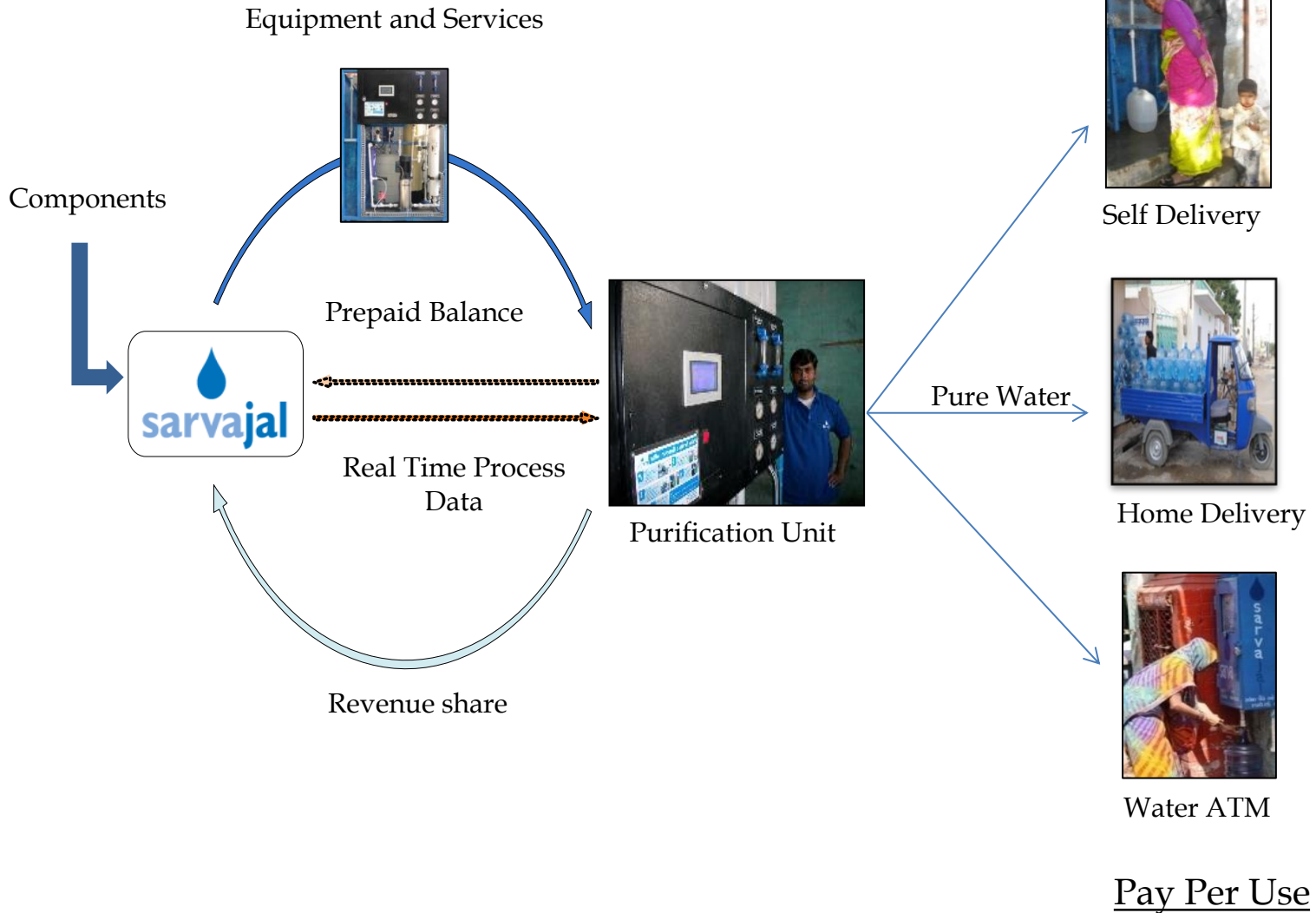
Diesel Costs
2600 INR



Franchisees Expectation
12900 INR

Ball Park
Rs 40000

Revenue Cycle

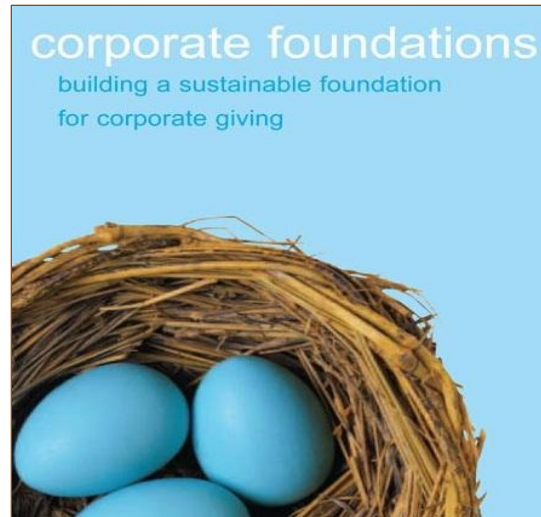


Revenue Cycle

Who Pays CAPEX



Village Entrepreneur



Corporate Foundation



Government Partner

How?

- One Go
- Lease
- Charge Consumers

Revenue Cycle

Who Supports OPEX



Franchisee



CSR Partner



Government Subsidy



Market:
End Users Pays as per need
/perception.

Market Payment Mechanisms



To Village Entrepreneur
From Consumers

- Punch Card
- Credit/Cash
- Pre Paid



From Entrepreneur to
Suppliers

- Volume Based
- Flat

Remote Monitoring Technology



“Soochak” Controller

- Patented
- Real time monitoring
- ↑ efficiency ↓ machine downtime



Sarvajal Enterprise Management System

- Information processing ERP
- Enables quicker response to machine related issues.
- Tracks vital health parameters

“Enables remote monitoring of volume – hence price adjustment”

Water ATM – Dispensing technology



Water ATM Device

- Automated water vending machine
- Cloud connected, Real time online monitoring of each transaction
- 24 x 7 access

- Solar power
- RFID card

“Ability to price and charge consumer differentially”

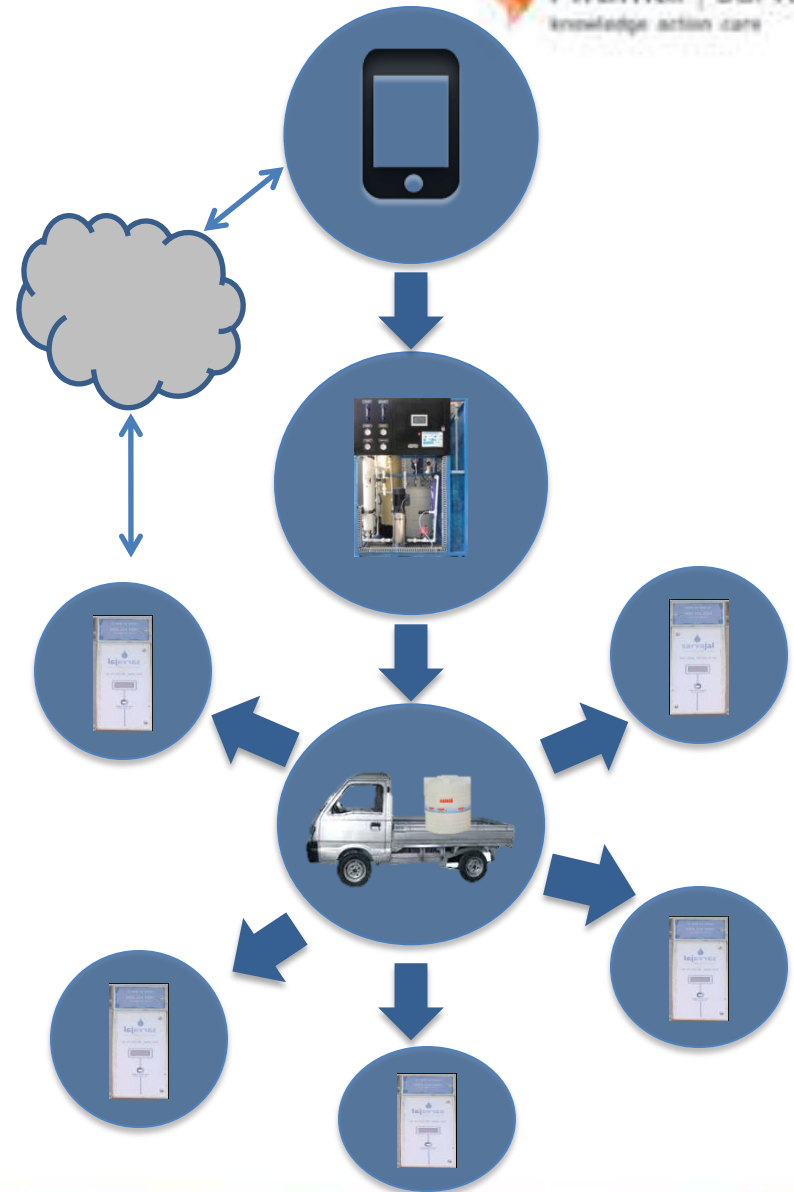
Water ATM – Dispensing technology



- Targeted Consumer Subsidy
- Automated debit at dispensing point
- Differential prices
- RFID Card recharge

Hub-&-Spoke Model

- Central purification plant and remotely located Water ATM units
- Helps expand reach and social impact
- Price transparency and Quality Accountability
- Reduces fuel costs
- Each transaction is remotely tracked
- Generates additional livelihood opportunities



Cost Break Up for 1 Litre of Water-Sample

Per Litre Price Break Up

	Water Charge		Delivery Cost		Chiller Cost
RO	30p	+	20p	+	25p
LF	30p	+	20p	+	25p



Expense Recovery



100
House
Holds

Cover OPEX

150
House
Holds

Cover OPEX and
Some CAPEX

200
House
Holds

*Recover All
Costs*

Approximately in 2-3 years* depending on Price and Volume.

Case Study



Case of Piramal Sarvajal Franchisee in Padampur (Rajasthan)

Satpalji's Journey:

September 2012- Launched his Sarvajal Franchisee in Padampur.

April 2013- Brought second delivery vehicle. Total team of five people working for Franchisee.

January 2014- Set Up Sarvajal Water ATM for 24*7 access for all consumers

March 2014- Expanded production capacity with second purification unit

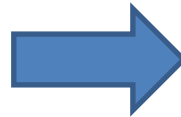
Local community mobilizes Local Market



Community Involvement



Feeling of Ownership



Drives the Market



Makes it Sustainable

Case Study

Three-Tier Demand & Supply Cycle

Primary

Served **~7 lakh liters** of water since Oct 2013



Secondary

Over **INR 2.5 Lakhs** of water revenues have been generated

Leveraged existing physical infrastructure worth **~ INR 7 lakh**



This solution has also created **3 new livelihoods**



Tertiary

↓ **65 paisa per liter**



3 competitors replicated model, **50%** more HHs!



Impact



Prices controlled
by Market



Inspires Others



Maintains Local
Ecosystem

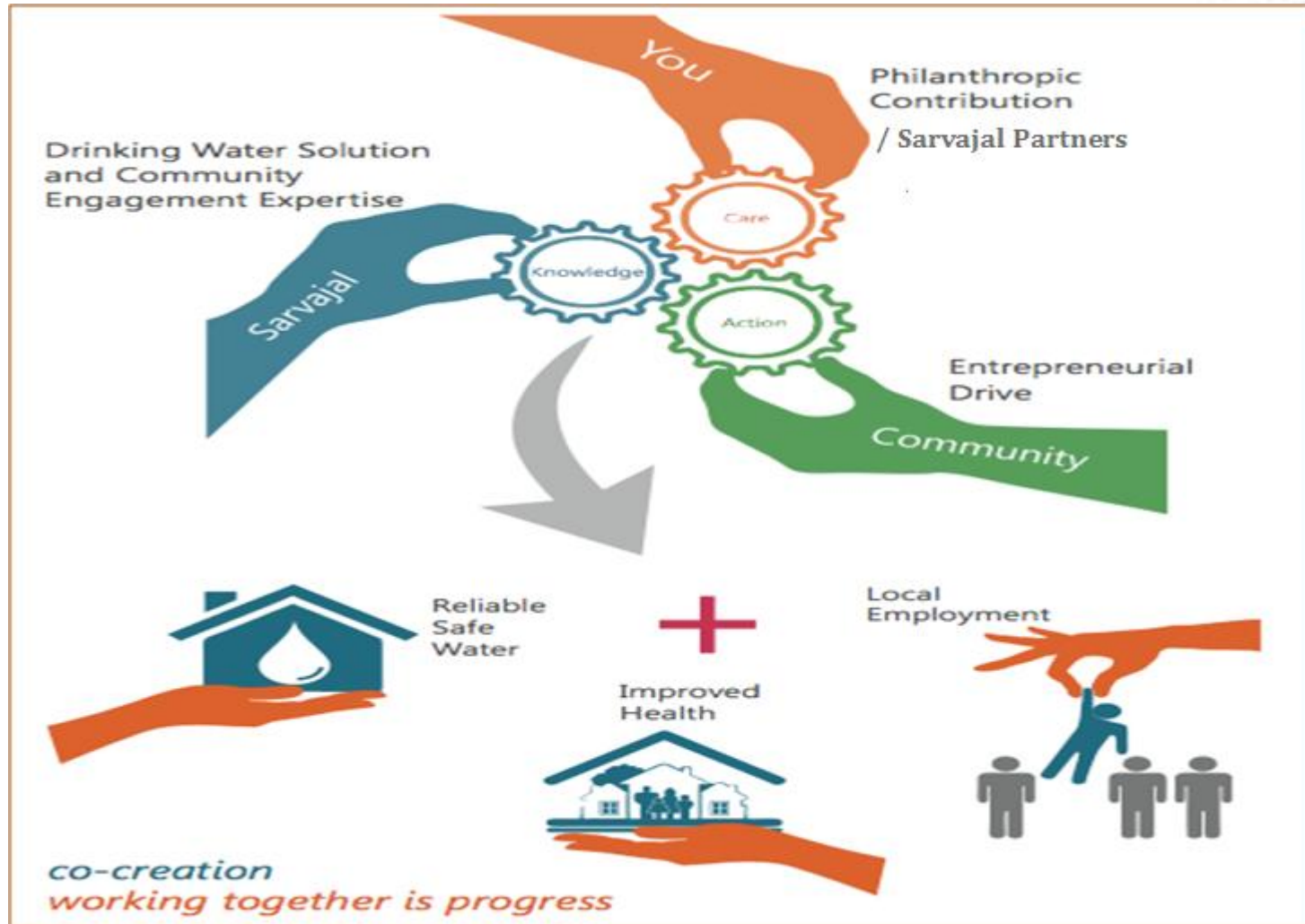


Creates Livelihood



Improves Health

Relative Roles of the Contributing Partners



Sarvajal Partners with Village Franchisees, Corporates (for their CSR program), Government for creating solutions

Reach Us at:
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Safe Drinking Water = Good Health = Smiles !