

# Water on the Bottom of the Pyramid



Maxim Valkov | Norbert Juhász |  
Zsolt Abraham | Tsegahun Serbessa

Aalto University School of  
Economics



# Agenda

---

Identification of key Issues

PSS: Community based solution

Benefits in local and national level

Implementation of PSS

# Lack of access to clean water and sanitation are the main issues that humanity face with

**Availability of water**



**Drinkability of water**



**Sanitation Issues**



How to **create value** through a **sustainable water and sanitation system?**

Objectives are to provide safety water to more than 100 million people till 2016

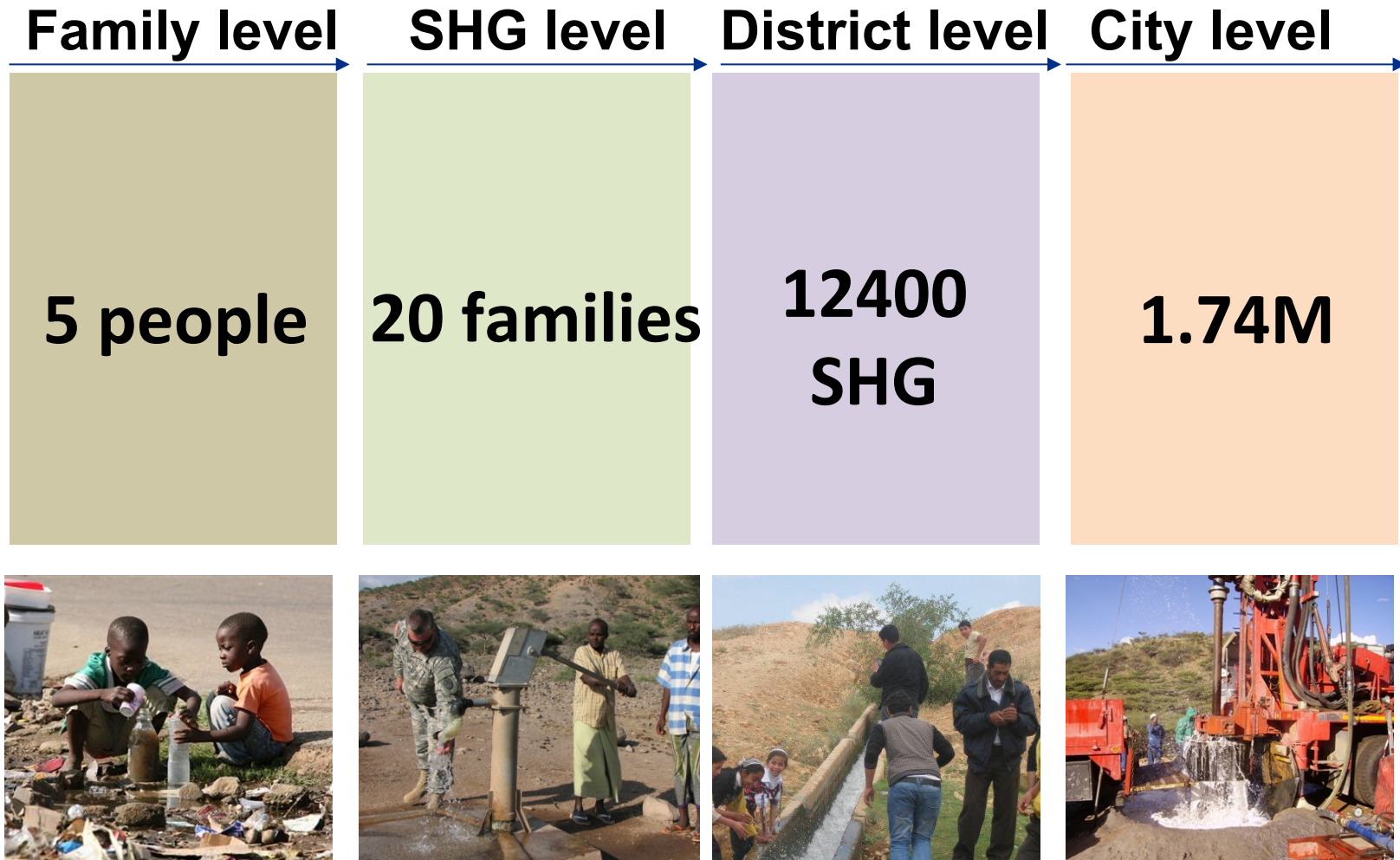
**40 cities**

**23 countries**

**100 million people**



# With PSS. 1.75 M people will have access to drinkable water in Addis Ababa



# Public Sanitation System is an incentive for the community to create the own SHG

## MODULE 1

- Access to drinkable water
- Water Posts on SHG level
- WPs are owned by local community



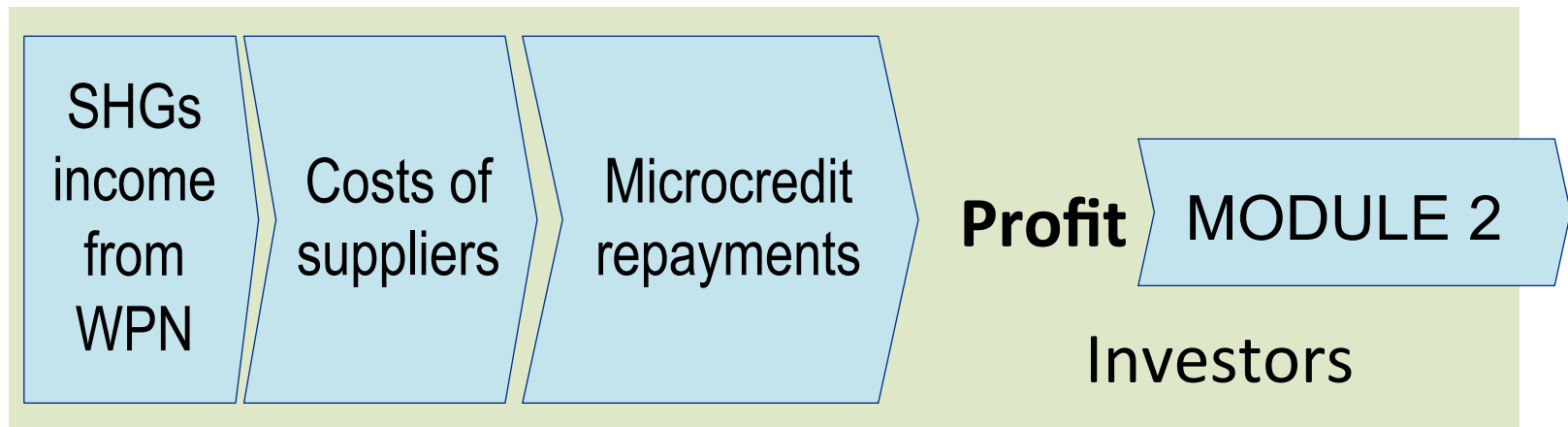
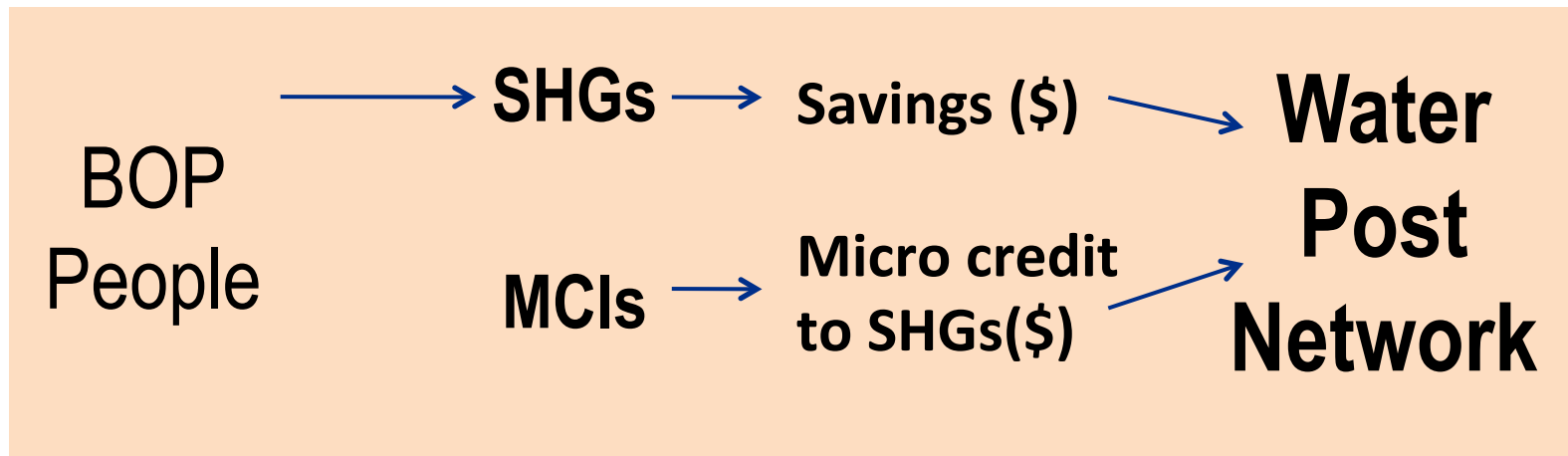
## MODULE 2

- New showers and toilets
- Education related to healthcare and sanitation
- Training of mothers and teachers



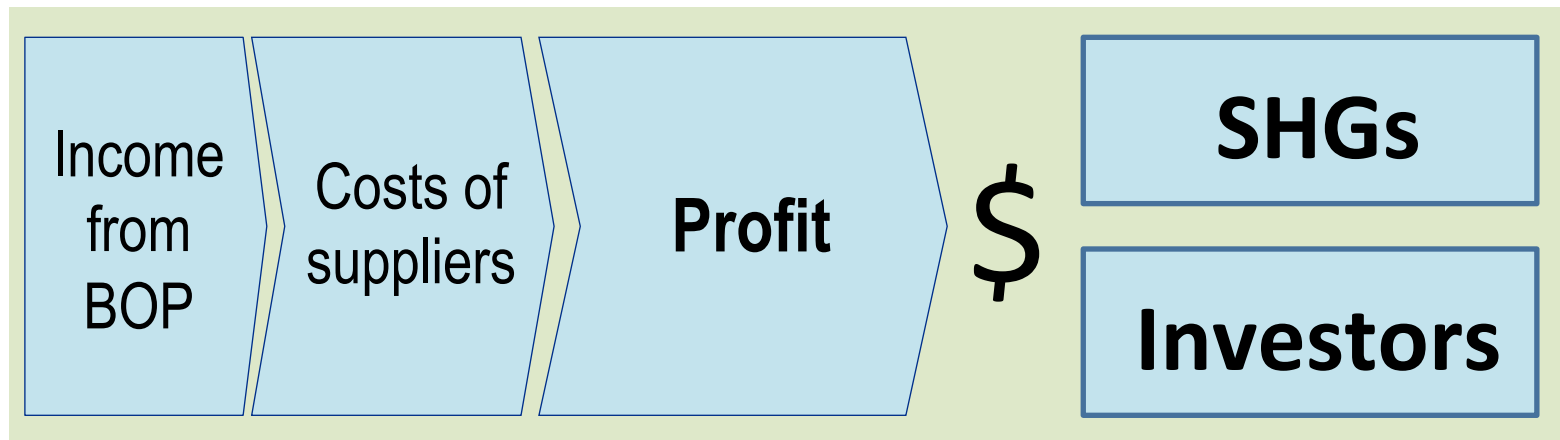
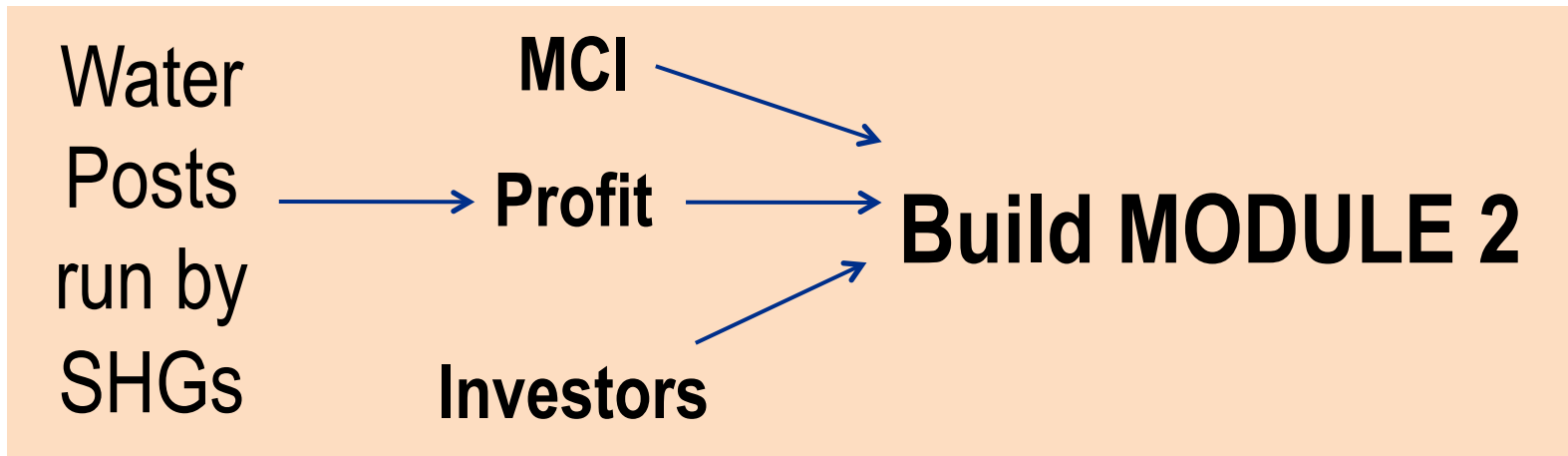
## MARKET OF WATER

# Establishment of water post network is based on the contribution of local community





# Establishment of water post network is based on the contribution of local community



# Module1 require 660\$/SHG, Modul 2 2400\$

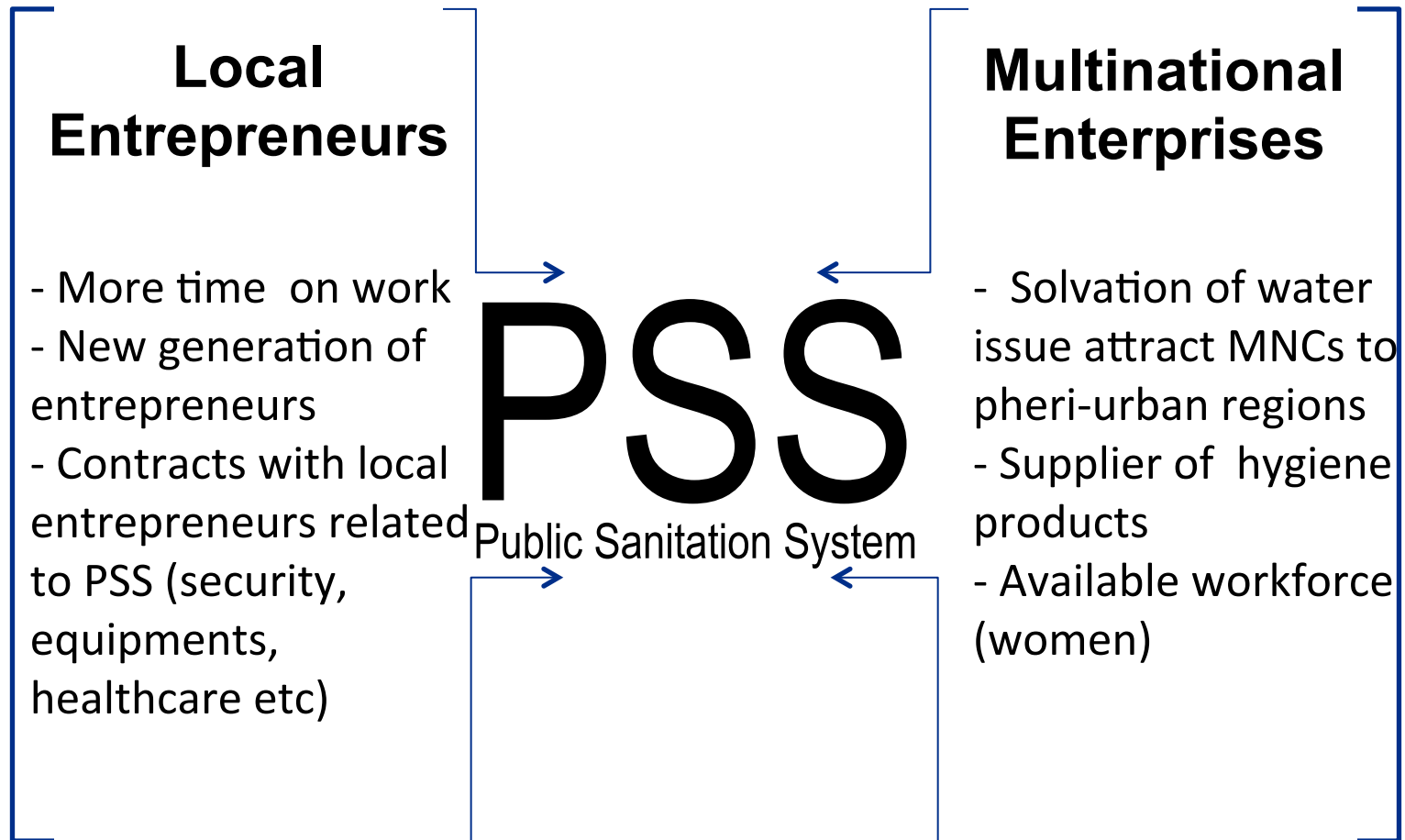
- Addis Abab, Ethiopia
- 3M people, 1.74M BOP

<b>MODULE 1</b>	<u>Savings on SHG level</u>		
	Own part	\$330	2\$ 75 cent in 6 months
	MCI	\$330	MCI repayment
		<u>\$660</u>	\$1.55/HH x 12 month (12% IR)

<b>MODULE 2</b>	Toilets + showers → Public Sanitation System		
	\$2400 / SHG		
	-Own part:	100\$	1/3 Ownership
	- MCI:	700\$	
	- Investment req.	1600 \$	2/3

**Expected payback time : 2 years +/-2m**

# Through PSS, MNEs have chance to achieve scale, local entrepreneurs can exploit the new opportunities



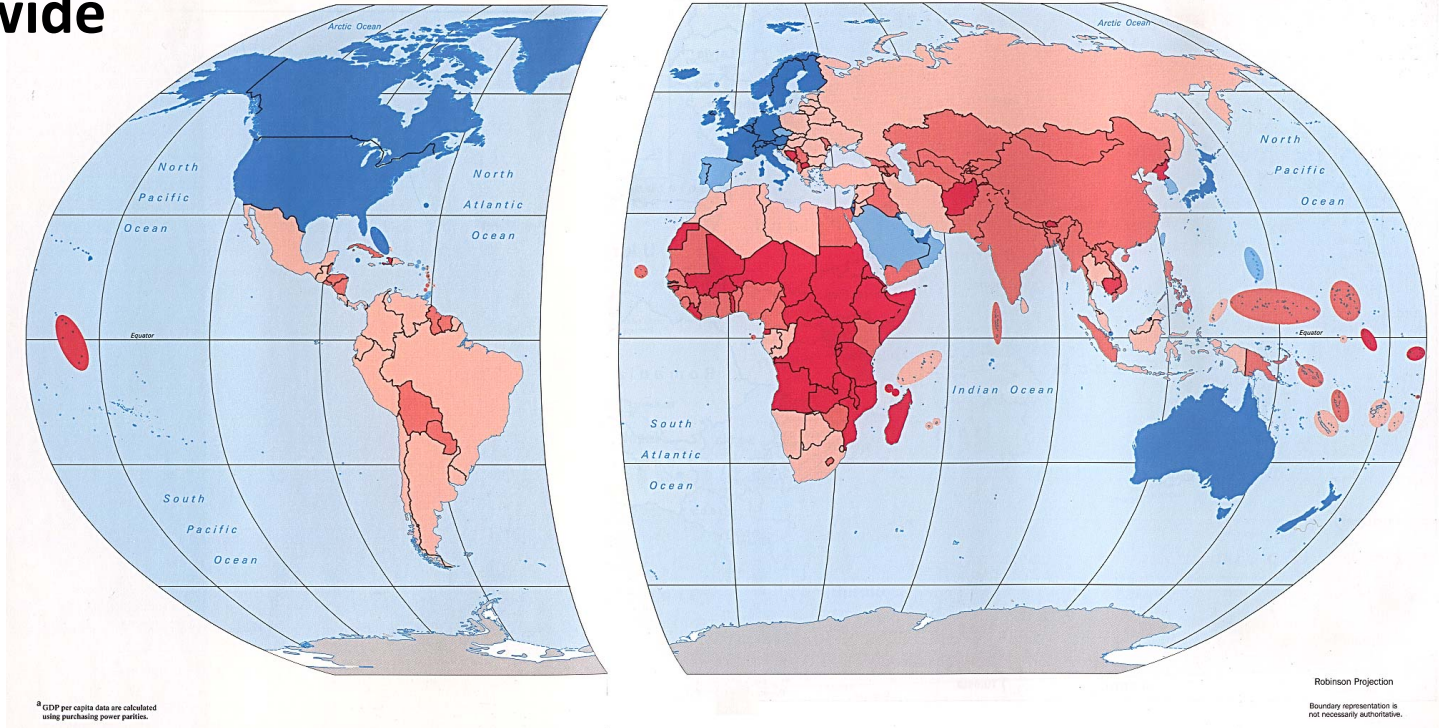
# Number of people who have drinkable water will reach 100 million in 4 years

	2012	2013	2014	2015
<b>MODULE 1</b>				
Number of Water Posts	10 000	50 000	80 000	150 000
<b>MODULE 2</b>				
Public Sanitation System		10 000	50 000	80 000
<b>PEOPLE</b>	5M	15M	25M	55M

**100M People**

# Adapt the Community based business model, to other countries, the project reaches 100M people

**1 250 000 new WaterPost worldwide**



**40 cities like:** Goa, Mumbai, Mexico City, Karachi, Kibera etc.

# Lack of trust, money and safety issues are the main risks that should be handled

---

- Security Issues
- Lack of funds from MCIs
- Lack of trust for savings
- Corruption
- Communication failure

Thank you for your attention!

# Q&A

