

## **Addressing the Water Challenge**

# A presentation to the League of Cities 24 July 2015

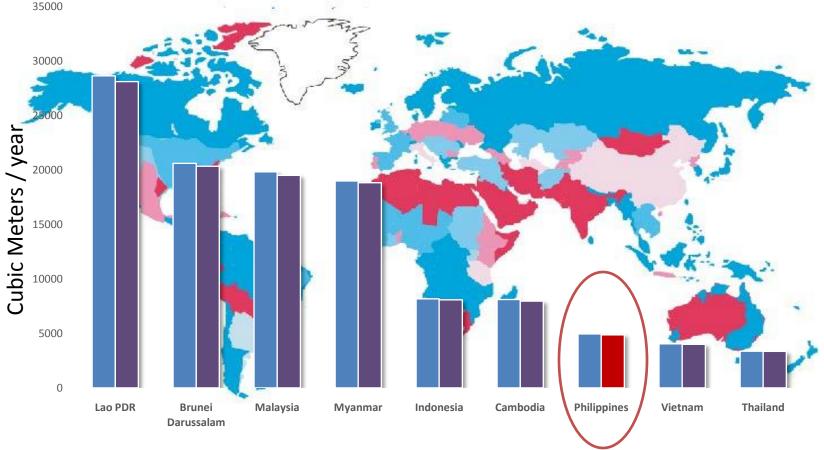
www.besecure.ph

#### **Be Secure Project**



Water Security for Resilient Economic Growth and Stability

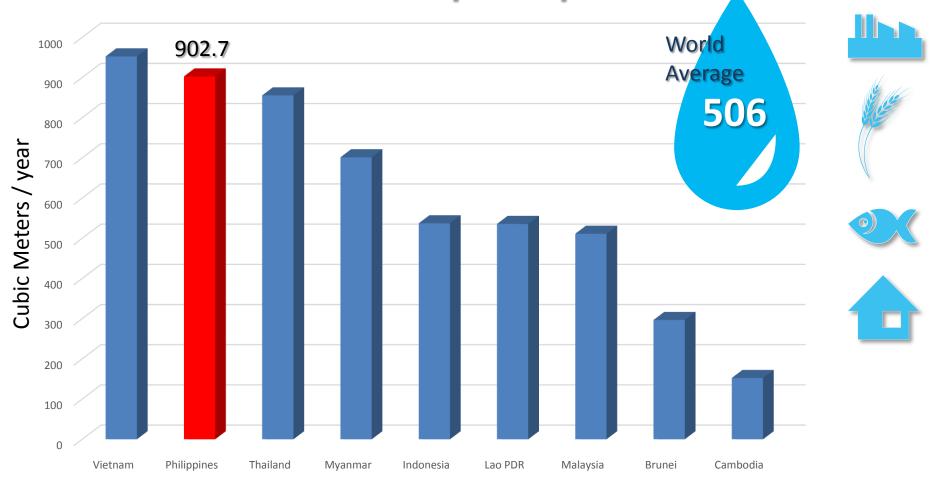
## Freshwater availability per capita

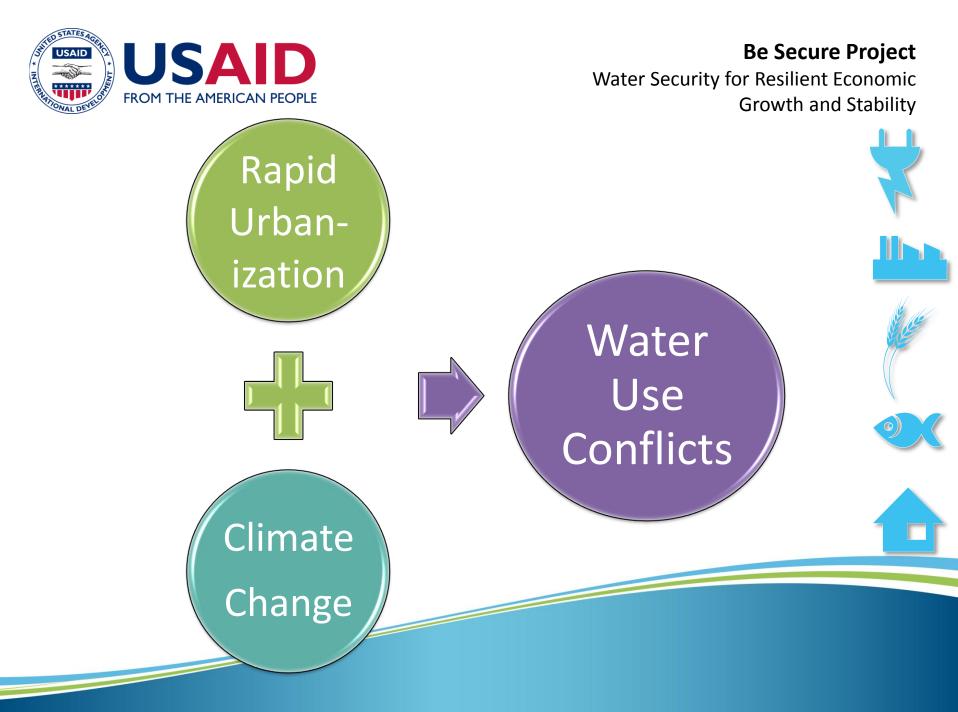


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#### **Freshwater withdrawal per capita**









## What is your water footprint? WATER DEMAND MANAGEMENT





• Objective: By 2020, safely return to communities and nature an amount of water equal to what we use in our finished beverages and their production.



### What is Demand Management?

- Managing consumptive demand itself to postpone or avoid the need to develop new resources
- Involves water conservation, and increased water use efficiency. This strategy requires a major paradigm shift from conventional supply management to the management of demand.

#### Secure Project

ent Economic nd Stability

#### **Developing new water sources is expensive**

**Conservation makes water available for others** 



Government Buildings Water Use

### Start with government buildings

What can a city do?





#### **Typical household consumption**



Slow,	steady	drip	:
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Fast drip :

**Steady Stream:** 

300 liters / week

800 liters / week

3,800 liters / week

#### Water Wasted from a Leaking Faucet



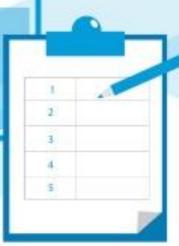
# OI EDUCATE YOUR EMPLOYEES.

Inform your teammates of water scarcity issues and the impact of water conservation practices.

# 02 KNOW YOUR WATER USAGE.

Read your water meter daily, weekly, or monthly to record your average water consumption and build incentive programs that can motivate conservation efforts.





## 3 MAXIMIZE THE EFFICIENCY OF ...... YOUR COOLING TOWER.

Eliminate once-through cooling equipment with municipal water by recycling the water flow to cooling towers, or replace the equipment with air-cooled equipment.

# O4 CHECK FOR LEAKS.

Leaks can account for more than 6% of a facility's total water use. Identify and repair leaks in your water distribution system to keep your facility from wasting large quantities of water.

# USED FOR CLEANING. 05

Adopt alternative cleaning practices. For instance, instead of steam cleaning your carpet, switch to dry power or spot cleaning.

## MINIMIZE WATER -- USED FOR LANDSCAPING.

 $\mathbf{06}$ 

Use turf and plants that are tolerant of drought conditions. Adjust sprinkler systems to irrigate landscape areas.

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## INSTALL SANITARY FIXTURES AND EQUIPMENT WITH CONSERVATION TECHNOLOGY.

Replace existing equipment with high-efficiency plumbing fixtures to save water. Low-flow plumbing fixtures are a one-time cost and easily implemented, allowing for long-term water conservation.



## What can a city do?

- 3. Develop ordinances for commercial users
  - Identify largest consumers
- 4. Develop ordinances for developers
  - Rainwater harvesting systems (helps flood management)
- 5. Develop ordinances for households
  - Watering hours