

World Water Week in Stockholm, August 27, 2017

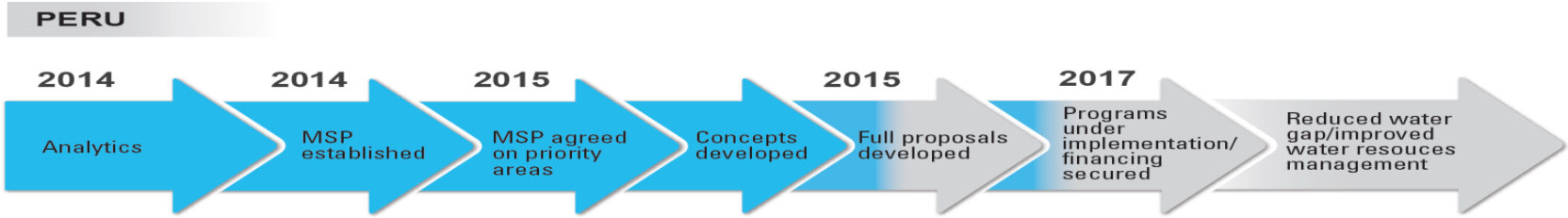
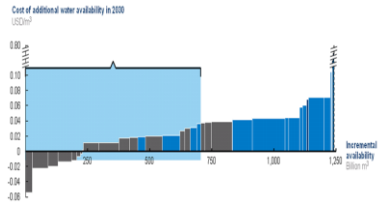


The 2030 Water Resources Group ACT process

Step 1
Analyze
 to inform and support better decisions

Step 2
Convene
 public-private-civil society stakeholders

Result
Transform
 to more efficient use of water, closing the gap between demand and supply.



Partnership progress in 2017



14 COUNTRIES/STATES

11 OPERATIONAL MULTI-STAKEHOLDER PLATFORMS WITH 600 PARTNERS

40 WORKING GROUPS DEVELOPING PROPOSALS

➔ MOVING TOWARDS IMPLEMENTATION

NUMBER OF ACTIVE PARTNERS IN STEERING BOARDS AND WORKING GROUPS IN ALL COUNTRIES

	PRIVATE	PUBLIC	CIVIL SOCIETY	TOTAL
2014	101	47	29	177
2015	121	74	102	297
2016	212	123	170	505
2017	240	160	200	600



In Bangladesh, working with 50 partners

ICC BANGLADESH
 INTERNATIONAL CHAMBER OF COMMERCE
 The world business organization

IWM
 Water Environment & Climate

PRAN

BANGLADESH ECONOMIC ZONES AUTHORITY

Bangladesh University of Engineering and Technology

ACI Limited

ঢাকা উত্তর সিটি কর্পোরেশন
Dhaka North City Corporation

Kingdom of the Netherlands

WWF

Global Water Partnership
 South Asia

Bangladesh Agricultural University
 বাংলাদেশ কৃষি বিশ্ববিদ্যালয়

brac

H&M

BANGLADESH RICE RESEARCH INSTITUTE

MCCI
 Since 1904

ঢাকা জল সরবরাহ ও পয়সাখরার কর্তৃপক্ষ
Dhaka Water Supply and Sewerage Authority

FBCCI

দি ফেডারেশন অফ বাংলাদেশ চেম্বার্স অফ কমার্স অ্যান্ড ইন্ডাস্ট্রি
The Federation of Bangladesh Chambers of Commerce & Industry

WORLD BANK GROUP

WARPO
 পানি সম্পদ পরিকল্পনা সংস্থা

Institute of Business Administration
 University of Dhaka

বরেন্দ্র বহুমুখী উন্নয়ন কর্তৃপক্ষ
Barind Multipurpose Development Authority

BUID
 dialogue • research • advocacy

dbi

Sigma group

BKMEA
 BANGLADESH KNITWEAR MANUFACTURERS' EXPORTERS ASSOCIATION

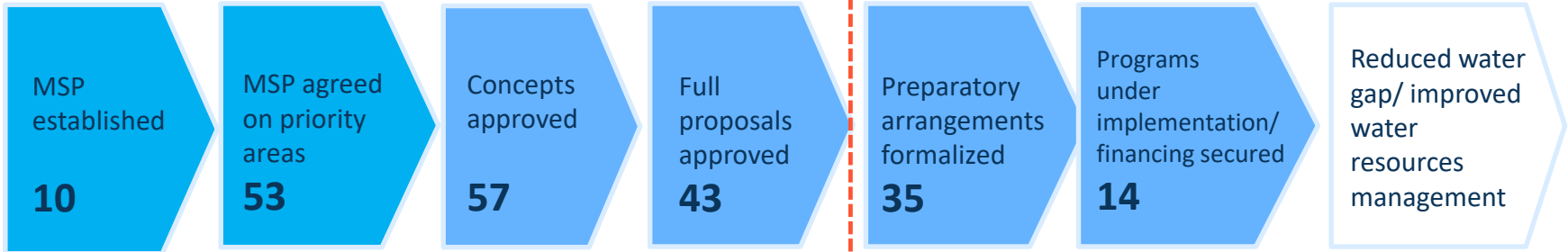
SIWI

Nestlé

- Government of the People's Republic of Bangladesh
Ministry of Water Resources
- Government of the People's Republic of Bangladesh
Local Government Division
Ministry of Local Government, Rural Development & Cooperatives
- Government of the People's Republic of Bangladesh
Ministry of Industries
- Government of the People's Republic of Bangladesh
Ministry of Environment and Forests
- Government of the People's Republic of Bangladesh
Ministry of Land
- Government of the People's Republic of Bangladesh
Ministry of Shipping
- Government of the People's Republic of Bangladesh
Bangladesh Agricultural Development Corporation (BADC)
- Government of the People's Republic of Bangladesh
Bangladesh Rice Research Institute
- Government of the People's Republic of Bangladesh
Bangladesh Agricultural Research Institute (BARI)
- Government of the People's Republic of Bangladesh
Bangladesh Water Development Board (BWDB)
- Government of the People's Republic of Bangladesh
Barind Multipurpose Development Authority (BMDA)
- Government of the People's Republic of Bangladesh
Department of Agriculture Extension (DAE)



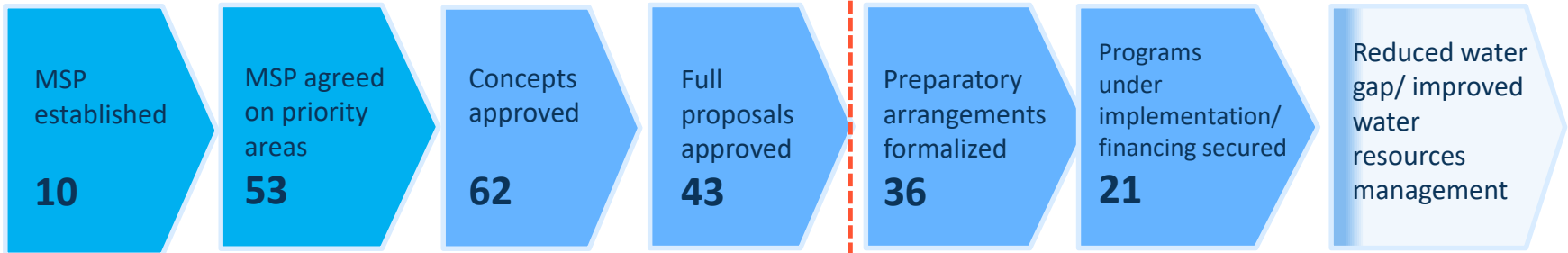
2016, reported



June 2017

2030WRG has strong influence

2030WRG has less influence



Bangladesh: Textile

Maintaining growth of key export sector requires technology promotion and private sector investment

Economic/ Social Context

Bangladesh's exports of ready-made garments:

- **83% of Bangladesh's export earnings**
- **13% direct contribution to GDP**
- **4 million workers, 80% women**

The Water Challenge

- **High water use** (2-3 times global benchmark)
- **Heavy pollution:** ~40-80% of factories treat wastewater
- **Projected water gap** during dry season of ~**26% by 2030**
- **Groundwater** falling up to **3 meters/ year** in Dhaka

Possible Solutions & Private Sector Role

- **Water-efficient technologies / wastewater treatment & reuse**
 - **Standards enforcement**
 - **Policy / incentives** from the government
- Private sector role:** Technology, stewardship, finance

2030 WRG Role

- **Technical and Knowledge Partnership** with BEZA*
 - **PPPs for wastewater treatment**
 - **Institutional Strengthening; incentive schemes**
- Partners:** H&M, leading brands, BGMEA**, Government of Bangladesh, others



Potential Impacts

Industry, 2030 WRG and other initiatives by 2021

- **20% water** use reduced
- **Industry-wide wastewater reduction**
- **~ 3 million additional jobs** through sector growth (80% women)
- **\$500 million investment** by private sector (technologies)



Mongolia: Mining

Engagement has facilitated a focus on demand-side linked, proactive mine water management

Economic / Social Context

Mining industry accounts for:

- **20% of GDP**
 - **85% of export value**
 - **70% of heavy industry**
- 300 operational mines** in Mongolia

The Water Challenge

- **Water demand** estimated to **exceed** available resources between 2021-2030
- **Competing water demands** create conflicts between mining sector, herders, and communities

Solutions & Private Sector Role

- **Water-efficient technologies / wastewater treatment & reuse**
- Financial and Non-Financial Incentives
- Regulatory Improvement for mine water management

2030 WRG Role

- Establishment of Multi-Stakeholder Platform
- Influencing **dialogue**, bringing **new insights** and **awareness building** on demand-side water management solutions based on hydro-economic analysis
- **Incentives** for water efficiency/ wastewater treatment
- **On-site implementation by mining companies**



Potential Impacts

- 8 mining companies signed **Voluntary Code of Practice** on mine water management
- Prioritization of **demand-side management**, reversing expensive >\$1 bn Orkhon Gobi surface water transfer
- **Incentives** and regulatory improvement
- **Water efficiency and wastewater treatment** at mine sites



South Africa: achieving large scale savings in irrigation water delivery

Over one million cubic meters of water saved per week through the roll out of an innovative, automated and low cost system to match bulk supply of irrigation water with demand in real time

Economic Context

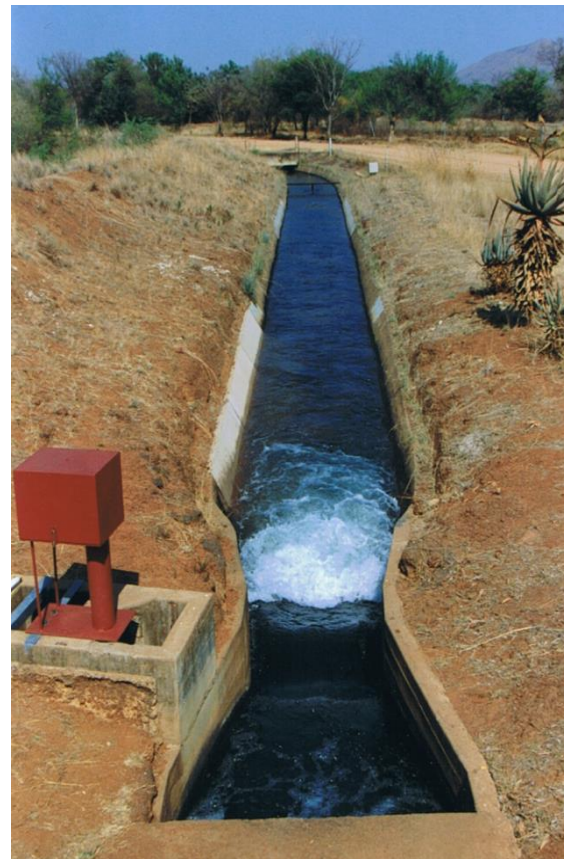
- SA is highly arid: only 13% of land viable for crop production
- Yet agriculture provides 11% of exports and is crucial for food security for a growing population

The Water Challenge

- 60% of South Africa's scarce water is used in the agriculture sector
- 35% lost in river and canal conveyance system alone

Solution

A "Water Administration System" (WAS) has been developed to automate the matching of supply and demand of water for irrigation systems in real time, enabling irrigation users to optimize their water usage, water distribution, and water accounts.



Impacts

- Reduced water use by **64 million cubic meters** per year across only six irrigation schemes
- Savings already represent **3% of the national water gap** > large potential for scale up
- Decreased admin time from 3 days to ½ day per week, allowing for greater maintenance and further reduction in water losses

2030 WRG Role

Through the SWPN, 2030 WRG is supporting the roll out of the WAS across some of the largest irrigation systems in SA, including the monitoring, verification and publication of resulting water savings



Peru: Groundwater Tariffs

Valuing a critical scarce water resource in a desert

Economic Context

- Erratic, low rainfall and Lima is the world's 2nd largest desert city
- Utility **Sedapal** serves **9.3M** people
- Most industry in high water stressed areas

The Water Challenge

- Water demand will almost **double by 2040**
- **50%** of groundwater is already used up
- **Groundwater** quality decline
- **Climate change** effects

Solution

- **Reduce water footprint** using water-efficient technologies + reuse
- **Conserve groundwater quality** by wastewater treatment
- Tariffs/incentives from the government raise **funds for monitoring & remediation**



Impacts

- Water use reduced, aquifer levels stabilized
- Economic growth safeguarded, protecting jobs and investment
- Tariffs to be extended to non-industrial users and other regions
- Aquifers monitored and recharge and remediation projects implemented

2030 WRG Role

2030WRG support to the regulator SUNASS led to the innovative **Groundwater Management and Monitoring Tariff (GMMT)** enacted March 2016, to be implemented by utilities in Lima and Trujillo and other regions following.

