6 CLEAN WATER AND SANITATION

SDG6 TARGET 6.4

ARE WE USING OUR LIMITED FRESHWATER RESOURCES RESPONSIBLY?

Freshwater resources play a significant role in a country's socioeconomic development, and are utilized in agricultural, industrial, household, and other activities. **The improvement of efficient water consumption and water productivity is a key indicator to be monitored** by international and national policy makers, to adjust adaptive macroeconomic policies that affect demand and investment in water-related activities.

Triggered by rising global challenges of population growth and climate change, a country's stable water supply that is resilient to scarcity and shocks becomes one of the key enablers for a healthy socioeconomic development.

The exercise aims to provide a visual analysis to support World Bank leadership and program colleagues to effectively mainstream freshwater efficiency and productivity into different aspects of design and planning of a country specific project.

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Country

Annual Freshwater Consumption Volumes

Water efficiency and utilization breakdown by industrial, agricultural and domestic uses

Water scarcity and urgency

Indicators

Annual freshwater withdrawals, total (billion cubic meters) per capita (ER.H2O.FWTL.K3/SP.POP.TOTL)

Water productivity, total (constant 2015 US$ GDP per cubic meter of total freshwater withdrawal) (ER.GDP.FWTL.M3.KD)

Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (ER.H2O.FWST.ZS)

1

Highlight Country's water stress level and private-public investment on SDG 6 by regions.

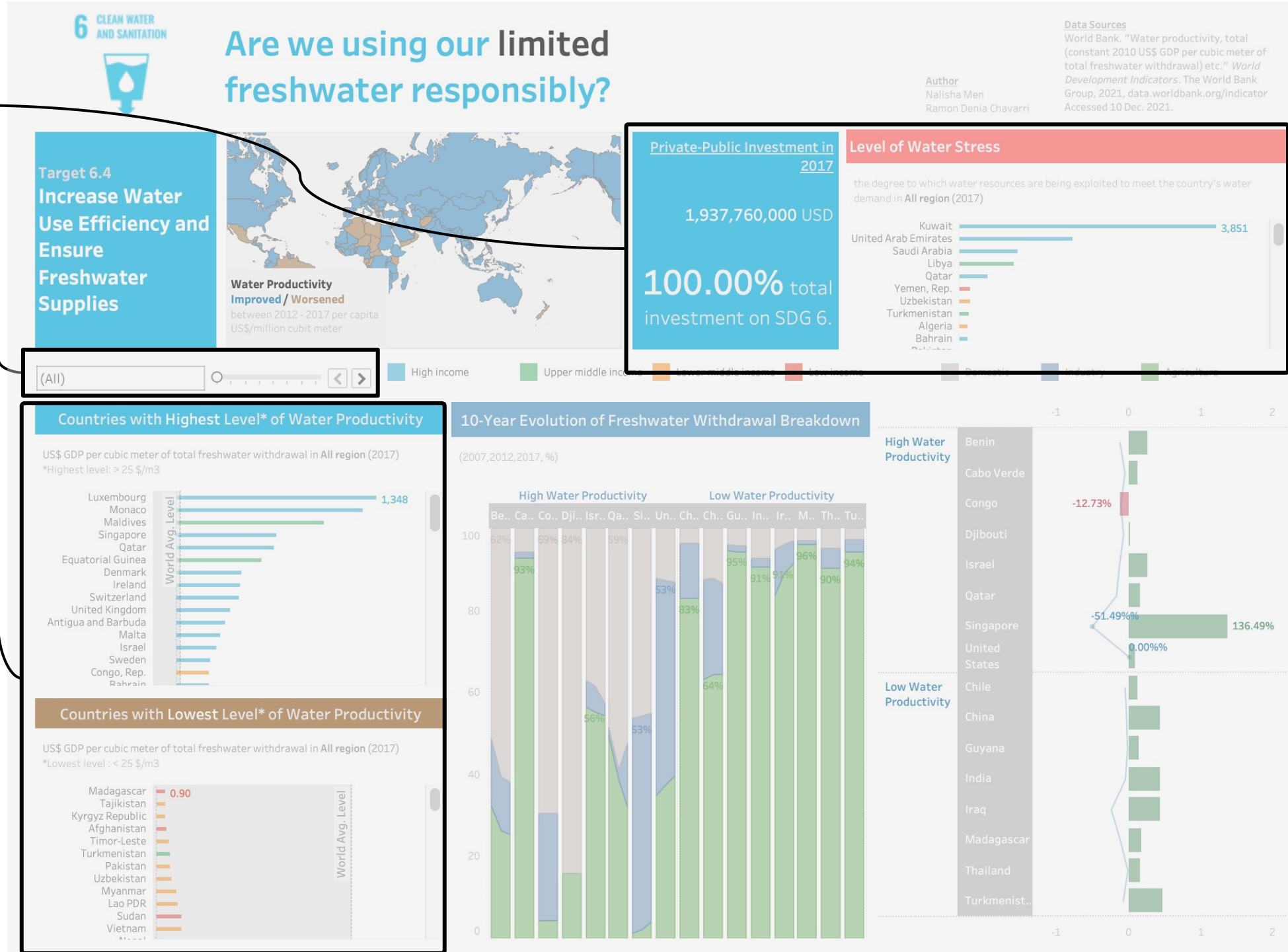
2

An interactive dashboard with a slide bar to zoom into each region.

3

Set a threshold to categorize countries into High and Low water productivity

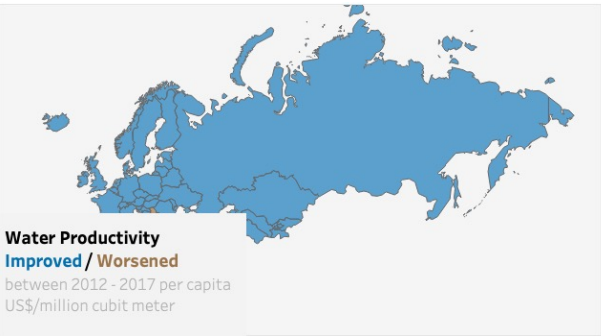
GLOBAL VIEW
WATER PRODUCTIVITY



Private-Public Investment in 2017

1,583,280,000 USD

81.71% total investment on SDG 6.



Private-Public Investment in 2017

25,000,000 USD

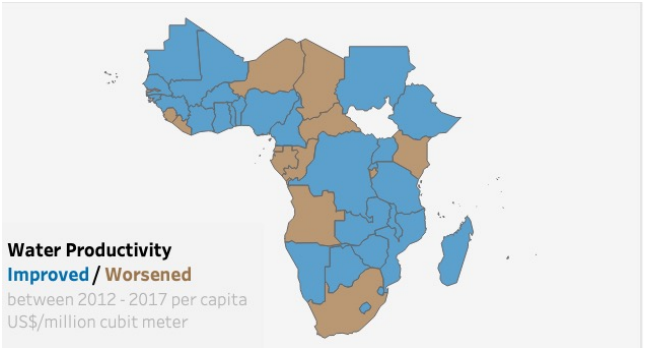
1.29% total investment on SDG 6.

From 2012 to 2017, some countries from four regions have worsened the water productivity.

Private-Public Investment in 2017

218,600,000 USD

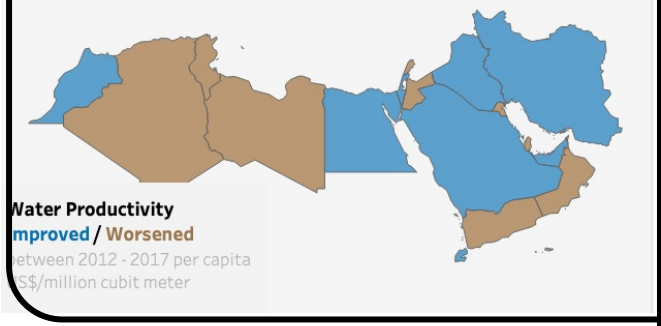
11.28% total investment on SDG 6.

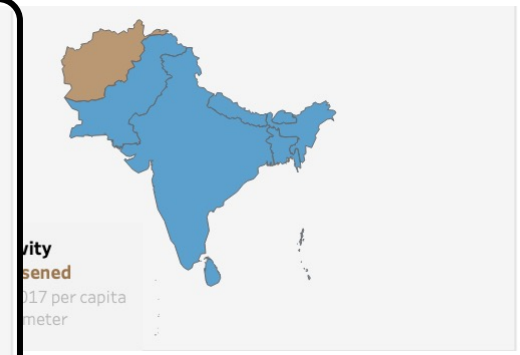


Private-Public Investment in 2017

60,000,000 USD

3.10% total investment on SDG 6.





Private-Public Investment in 2017

50,880,000 USD

2.63% total investment on SDG 6.

North America & MENA regions have NO investment water.

REGIONAL VIEWS

WATER PRODUCTIVITY IMPROVEMENT & PRIVATE-PUBLIC INVESTMENT

1

Evolution on proportions of freshwater uses

2007, 2012, 2017

COUNTRY VIEWS

ZOOM IN

1

Evolution on proportions of freshwater uses

2007, 2012, 2017

Domestic

Industry

Agriculture

Countries with high level of water productivity have shown different dynamics in agricultural and industrial uses of water:

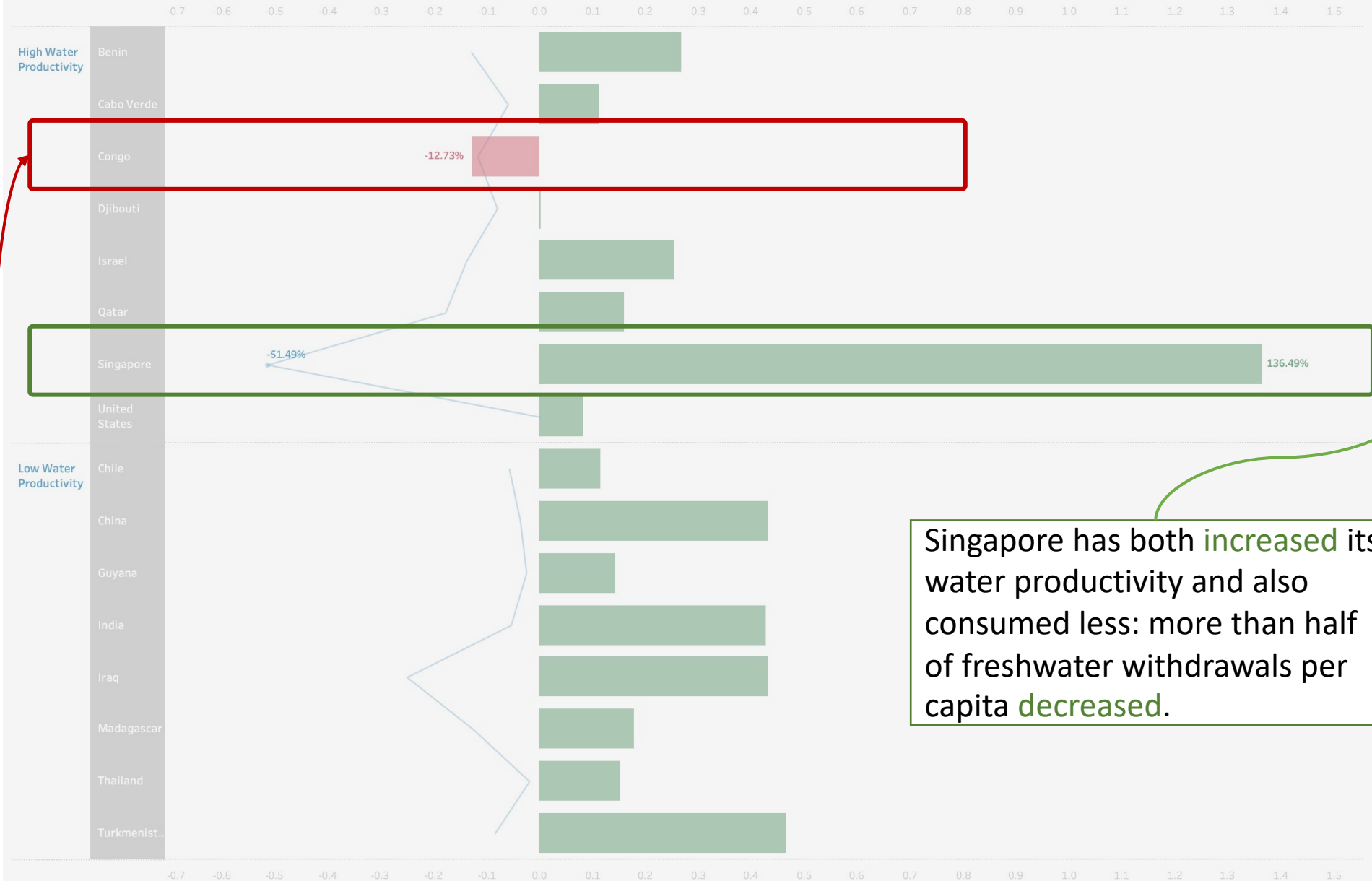
- Benin and Israel have both increased domestic use of water, with declining in both agriculture and industry;
- Qatar shows a drastic increase in industrial use of water alone;

Countries with low level of water productivity share a very low level of domestic water use, comparing to that of the high level countries, though sharing similar distribution like USA and Cabo Verde.

2

Evolution on productivity and freshwater withdrawal per capital

2012 to 2017



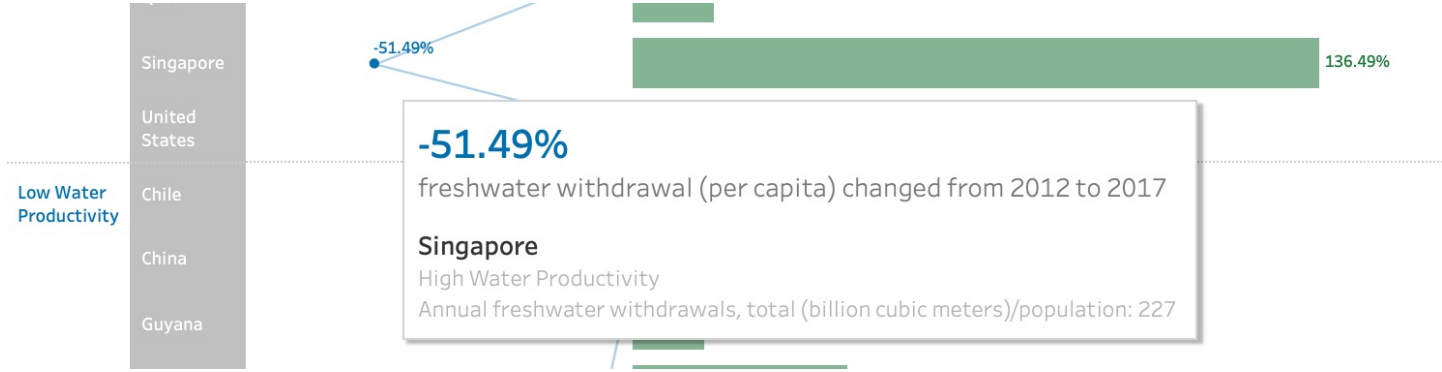
Freshwater has been consumed less in the past 5 years, but simultaneously productivity has also **decreased** 12.73 %.

Singapore has both increased its water productivity and also consumed less: more than half of freshwater withdrawals per capita decreased.

2

Evolution on productivity and freshwater withdrawal per capital

2012 to 2017



136.49%

water productivity changed from 2012 to 2017

Singapore
High Water Productivity
Water productivity, total (constant 2015 US$ GDP per cubic meter of total freshwater withdrawal): **676.0**
Annual freshwater withdrawals, total (billion cubic meters): **0.5**

Zoom in to Singapore, incentives to pay greater price (East Asia & Pacific region contribute to **81.71%** of public-private investment on SDG 6 in 2017) to improve the water performance may be forced by its **HIGH** level of wate

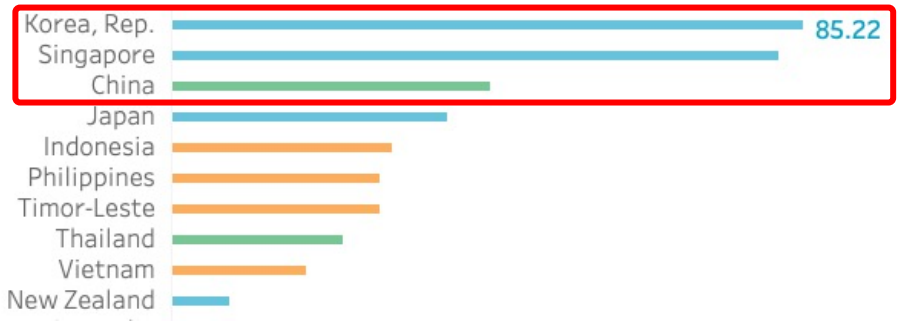
Private-Public Investment in 2017

1,583,280,000 USD

81.71% total investment on SDG 6.

Level of Water Stress

the degree to which water resources are being exploited to meet the country's water demand in **East Asia & Pacific region** (2017)



COUNTRY VIEWS

ZOOM IN

SDG 6.
RECOMMENDATIONS

Public-Private Investment	**Public Awareness**	**Industrial Transformation**
Prioritise private and public partnerships to invest in building water resilience in **Middle East and North Africa Region** where countries suffer from water scarcity and conflicts over limited resources	For countries like Singapore, public interventions to raise **efficient domestic water use** could soften the water scarcity by shifting towards a sustainable water consumption behaviour.	For most countries with a low water productivity level, it is urgently needed to **leverage macroeconomic tools** to incentive the adoption of water preservation technologies along the value chains, to reduce industrial and agricultural freshwater withdrawals.