

Water quality coupled with a national socioeconomic survey in Indonesia

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Indonesia



STATISTICS INDONESIA



MINISTRY OF HEALTH



unicef 

WASH
FUTURES



Water, Sanitation & Hygiene Conference 2018

Collaboration for Universal WASH

 #WASHFutures18

Objective & Study Area: D.I. Yogyakarta Province

- To develop and test a water quality component into a well-established national socioeconomic survey
- To establish a baseline estimate for the SDG Target 6.1 on safe water (i.e. access to safely managed drinking water) in the study area as a model for other Provinces in Indonesia



Population: 3.6 million
Improved water source: 81%
Improved sanitation: 86%
Source: Susenas 2015

Sample collection in field



Drinking water source sampling



Household drinking water sampling



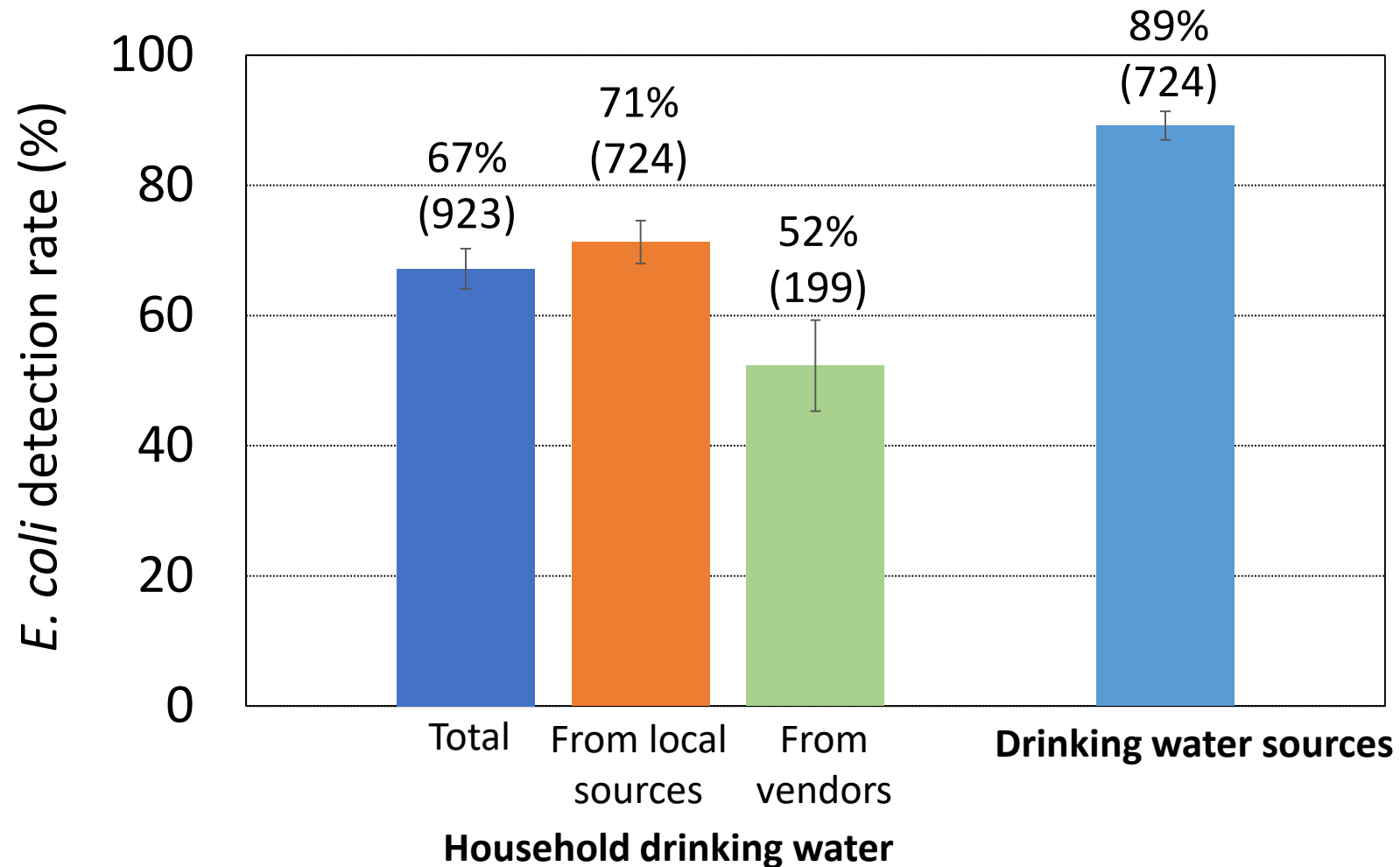
Interview using household questionnaire



Laboratory analysis



E. coli detection rate in household drinking water (HDW) and drinking water sources



Note: Error bar represent upper and lower 95% confidence interval.
Number in parenthesis denotes number of samples tested.



From improved drinking water source (MDGs) to safely managed drinking water (SDGs)

Drinking water access in study communities in Yogyakarta province (%)



Improved water sources (MDG)

Improved + on premises

Improved + available

Improved + no E.coli detection

Safely managed (SDG)



Source: SKA joint analysis with BPS

What happens after the study?

- Dissemination and advocate the result to national and local stakeholders
- Improve the existing national survey and amalgamation between socio economic survey and water quality monitoring survey to capture the progress of SDGs 6.1 safely managed water
- Mapping out the existing condition on water quality monitoring
- Develop water quality monitoring implementation strategy (design, piloting, and roadmap)
- Linkage between safe water monitoring and evaluation with
 - Water Safety Plan
 - Sanitation and hygiene promotion program (Indonesia Community Led Sanitation-Sanitasi Berbasis Masyarakat)



Main feature of the proposed water quality monitoring

- Based on the type of water provider
 - local water enterprise
 - CBOs, water kiosk, etc
- Water quality standard based on the purpose of water i.e. standard for drinking and cooking and standard for hygiene and sanitation
- Continual improvement (parameter to be monitored direct examination, triangulation)
- Reporting by online system (mobile apps)
- Link to program: Water Safety Plan, Indonesia-CLTS/STBM, etc

Tested and reported by
sanitarian to District
Health Office



*STREAMLINING SISTEM PENGAWASAN EKSTERNAL
PEMENUHAN STANDAR BAKU MUTU DAN
PERSYARATAN KESEHATAN AIR MINUM DAN
AIR UNTUK KEPERLUAN HIGIENE DAN SANITASI NASIONAL*

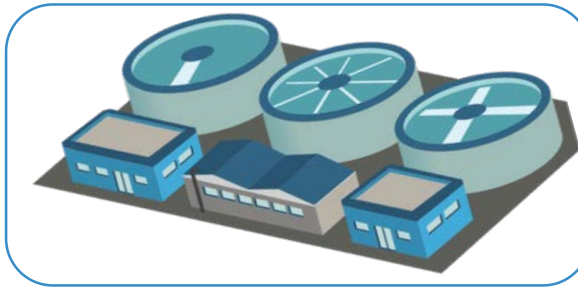


Roles each ministries in water quality monitoring

- ✓ Ministry of Environment and Forestry
- ✓ Ministry of Health
- ✓ Ministry of Energy and Mineral Resources

- ✓ Ministry of Public Work and Housing
- ✓ Ministry of Health
- ✓ Water Supply Operator

Water Treatment Plan



Piped water supply

Improved non-piped water supply



- ✓ Ministry of Health



Household

- ✓ Ministry of Health
- ✓ The National Agency of Drug and Food Control
- ✓ Community Based Operators (CBOs)

National Development Planning Agency
as coordinator for water quality monitoring work

Ways forward

- Many local governments have not conducted water quality monitoring
 - Low prioritization
 - Limited budget
 - Still focus on the development or rehabilitation of infrastructure
- Few laboratories with accreditation
- Limited sanitarian, water test kit, reagent
- No database for water supply systems especially for community-based water supply and water kiosk
- Too many indicator to monitor (existing regulation too stringent)

