

# WORKSHOP: CLEAN WATER FOR RURAL AREAS



## CHALLENGES OF THE WATER SUPPLY IN RURAL AREAS IN VIETNAM

**PROF. DR. VIET-ANH NGUYEN**

**DIRECTOR, INSTITUTE OF ENVIRONMENTAL SCIENCE AND ENGINEERING  
(IESE), HANOI UNIVERSITY OF CIVIL ENGINEERING**

**VICE PRESIDENT, VIETNAM WATER SUPPLY AND SEWERAGE ASSOCIATION  
(VWSA)**

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# OVERVIEW OF RURAL WATER SUPPLY IN VIETNAM



- By 2022: 69.3% of rural population (12.37 million HHs) has access to clean water meeting standard QCVN 02:2009/BYT.
- 30.7%: No access! Meeting standard QCVN 01-1:2018/BYT: <40%?
- Among 18,109 water systems supplying water for 46% rural population:
  - ✓ 3,198 systems do not have adequate/sustainable O&M (35.7%).
  - ✓ 1,560 systems do not work at all (17.4%).
- Capacity of centralized water supply systems in rural areas:
  - $\leq 50\text{m}^3/\text{day}$ : 30,3%
  - $> 50 - 300\text{m}^3/\text{day}$ : 49,8%
  - $> 300 - 500\text{m}^3/\text{day}$ : 10,1%
  - $\geq 500\text{m}^3/\text{day}$ : 9,8%.

Source: NCERWASS 2022

# CHALLENGES IN RURAL WATER SUPPLY

- Water source: increasing pollution and deterioration; groundwater depletion; salt intrusion; etc.
- Income: in average is low in rural areas
- Local capacity and resources are limited
- O&M/SOP; Water safety plan implementation; Water quality control; NRW (10-50%)
- Small scale, discentered systems serving low-density populations
- Low tariffs and Cost recovery challenges
- Different ownerships and operation modes; Poor management after hand-over
- Top-down subsidiary and supports are not efficient and not sustainable
- The same technologies are used despite of various local conditions



# TRENDS IN RURAL WATER SUPPLY

- Privatization, equitization
- Expansion of municipal water utilities
- Inter-commune, inter-..., regional water systems
- Switching to alternative water sources



# OPPORTUNITIES FOR GERMAN PARTNERS



- Selection of right partners for technology demonstration and transfer, aiming at improved water service at reasonable costs
- Investment in water sector:
  - ✓ Equipment and accessories production
  - ✓ UPCOM (Unlisted Public Company Market), M&A (Mergers and Acquisitions)
  - ✓ (Joint venture) for Investment in urban/rural water supply
  - ✓ ...
- R&D for suitable technologies (more competitive) especially for water pollution control, desalination, smart water, etc.
- NGOs (small-scale systems, bottom up approach, vulnerable communities): fund raising, capacity building through field works, upscaling, policy advocacy, etc.



# SOME GOOD CASES



- Rainwater harvesting and treatment for drinking systems by IESE, HUCE and partners: in Hanoi, Ha Nam, Ninh Binh, Lao Cai, etc.
- Privatized rural water supply systems in Hai Duong province
- Expansion of municipal water supply systems in Hai Phong city
- Construction of fresh water reservoirs by MARD and provincial authorities in Mekong delta;
- Transfer of raw fresh water from upstream in Mekong delta



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**THANK YOU VERY MUCH  
FOR YOUR ATTENTION !**

**PROF. DR. VIET-ANH NGUYEN**

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HANOI UNIVERSITY OF CIVIL ENGINEERING**

**VICE PRESIDENT, VIETNAM WATER SUPPLY AND SEWERAGE ASSOCIATION (VWSA)**

**E-mail: [anhnv@huce.edu.vn](mailto:anhnv@huce.edu.vn)**