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Viet Nam

National Nonrevenue Water Reduction Program

Asia Water Week, Manila ADB, March 2013

Hubert Jenny, Asian Development Bank

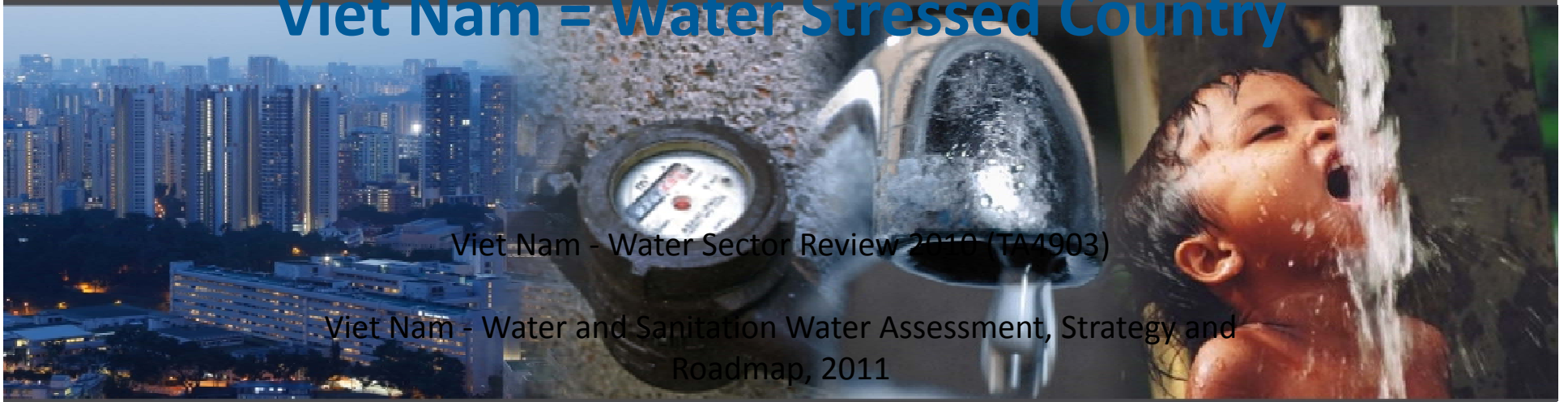
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Asia Water Week 2013

13-15 March • ADB Headquarters, Manila, Philippines

Viet Nam = Water Stressed Country



Viet Nam - Water Sector Review 2010 (TA4903)

Viet Nam - Water and Sanitation Water Assessment, Strategy and Roadmap, 2011

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Legal Background

- Decree 117/2007/ND-CP Water Supply, Supplemented by Decree 124/2011/ND-CP
 - Full Cost Recovery with Service Contract
 - Connection Cost within tariff
- Decision 1929/2009/QD-TTg: Orientation Plan Urban Water Supply 2025 with vision 2050:
 - Targets: NRW, Coverage (2015, 2020, 2025)
 - Urban Water Consumption = 120 l per capita
- Decision 2147/2010/QD-TTg: National UFW and NRW Program to 2025 (Hard targets)
- Law Water Resources 2012
 - Polluters Pay Principle
 - Payment for water intake



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Viet Nam Water Supply Sector

- Urban Coverage (108 Cities and Towns):
 - Improved source = 98% ; Piped water = 73%
 - 440 Communes (Total 646 – Population 4,000 to 50,000) without piped water supply
- Average Tariff: \$0.25 (block, lifeline, connection)
- 68 water supply companies (mostly provincial)
 - 7 WSC: NRW < 16%
 - 8 WSC: NRW < 20%
 - 45 WSC: NRW < 35%
 - 8 WSC: NRW > 35%



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Benchmarking (2002 – 2009)
NRW National Average: 30%

Everybody lies!

Context low water pressure!



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National UFW / NRW Program

- **Executing Agency = Ministry of Construction**
 - 2010 – 2025: CAPEX = \$500 M / TA = \$15 M
- **ADB = Key Partner**
 - Capacity Development TA (2013): \$1.1 M
 - Business Plans (KPI)
 - NRW Methodology and Pilots, including IEC
 - CAPEX \$250 M (OCR Libor based Loan): 2011 – 2020
 - NRW dedicated Projects under MFF0054-VIE Water Sector Investment Program (\$1 billion)



National UFW / NRW Program: Schedule

- **2013:**
 - Define Methodology
 - Set-up Steering Committee
 - Select pilot cities
- **2014 – 2015: Phase 1 = \$250 M (ADB)**
- **2016 – 2020: Phase 2 = TBD**
- **2020 – 2025: Phase 3 = TBD**



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National UFW / NRW Program: Targets / Benefits

- **Orientation Plan / National NRW Program:**
 - 2015: NRW < 25%
 - 2020: NRW < 18%
 - 2025: NRW < 15%
- **Benefits:**
 - Increased Yearly Revenues: \$100 M (2015); \$300 M (2020); \$800 M (2025)
 - Additional water capacity +1.3 million m³/d, resulting in delays CAPEX for production
(VN Production Water Supply # 6 million m³/d)



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National UFW / NRW Program: Activities

- **Methodology “KNOW YOURSELF”**
 - Water Balance (Baseline)
 - Assets Inventory and Management: GIS/SCADA
 - Hydraulic Modeling
 - Define Pressure Zones (DMZ)
 - Define DMAs from large (> 10,000 connections) to small (<1,000 connections) – Mobile DMAs
 - Caretaker Concept: 1 staff responsible for a specific geographic area: Metering, customer service, O&M, including NRW detection



National UFW / NRW Program: Public vs. Private

- **Public: ODA Financing**
 - **Private: Concession, BOT/BOO**
 - **PPP: Technically & Financially Sustainable**
- NRW Projects: STRONG POTENTIAL**
- **PRIVATE => TECHNICAL KNOW HOW: Service / Expertise: Leak detection, metering, works supervision, ...**
 - **PUBLIC => TECHNICAL KNOW WHO: Construction permit, resources allocation, ...**



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National UFW / NRW Program: PPP Financing

- **PUBLIC SECTOR:**
 - ODA: Long Term Assets (Pipes & Accessories, ...)
- **PRIVATE SECTOR:**
 - Equity / Commercial Loan: Short Term Assets (Leak detection equipment, meters, ...) depreciated over the duration of the contract (5 – 10 years)
 - Service Fees (ADB Guarantee possible through standby loan) plus right of use of long term assets
- **KEY SUCCESS FACTORS: Affordability and Incentives to minimize CAPEX**



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Thank You



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