

# Approaches and lessons on rural sanitation service provision – Danube region and global perspectives

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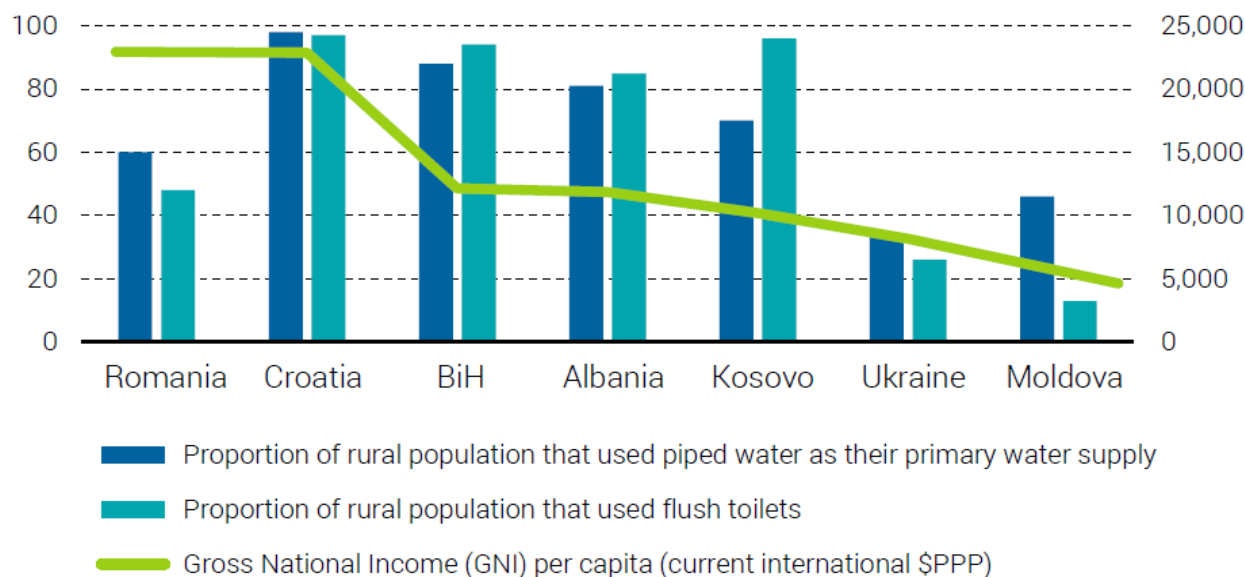
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Water

# Universal access to sanitation - a human development perspective

*World Bank, 2017 Beyond Utility Reach? A Review of Rural Water Supply and Sanitation Services in Seven Countries of the Danube Region*

*World Bank, 2019 A State of the Sector – Update 2018. Water Supply and Wastewater Services in the Danube Region*

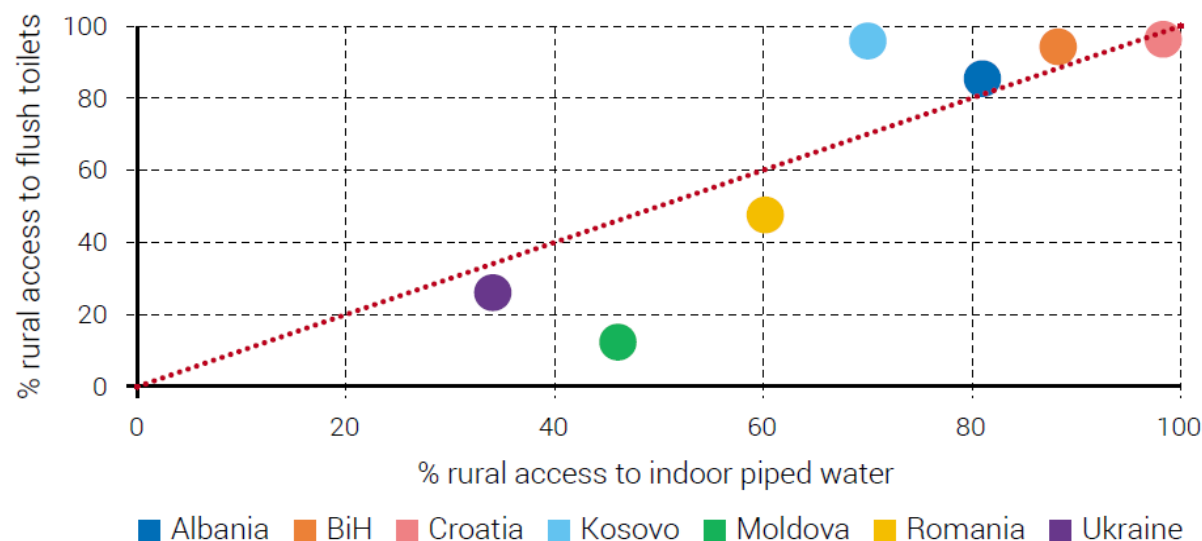
# Rural access to piped water and a country's wealth relate to the sanitation service rural people enjoy



**FIGURE 2.3:** RELATION BETWEEN WSS ACCESS LEVELS AND COUNTRY'S GNI PER CAPITA

SOURCES: ALBANIA: HBS 2015; BOSNIA AND HERZEGOVINA: MICS 2012; CROATIA: EU STATISTICS ON INCOME AND LIVING CONDITIONS 2012; GNI AND POVERTY INDICATORS: KOSOVO AGENCY OF STATISTICS 2017; WORLD BANK 2017D; KOSOVO: MICS 2014; MOLDOVA: HBS 2015; ROMANIA: HBS 2016; UKRAINE: MICS 2012; STATE STATISTICAL OFFICE 2016; WSS FIGURES: JMP 2017.

Note: GNI = gross national income; HBS = Household Budget Survey; MICS = Multiple Indicator Cluster Survey; PPP = purchasing power parity.



**FIGURE 4.14:** RURAL FLUSH TOILET ACCESS IN RELATION TO INDOOR PIPED WATER ACCESS, BY COUNTRY

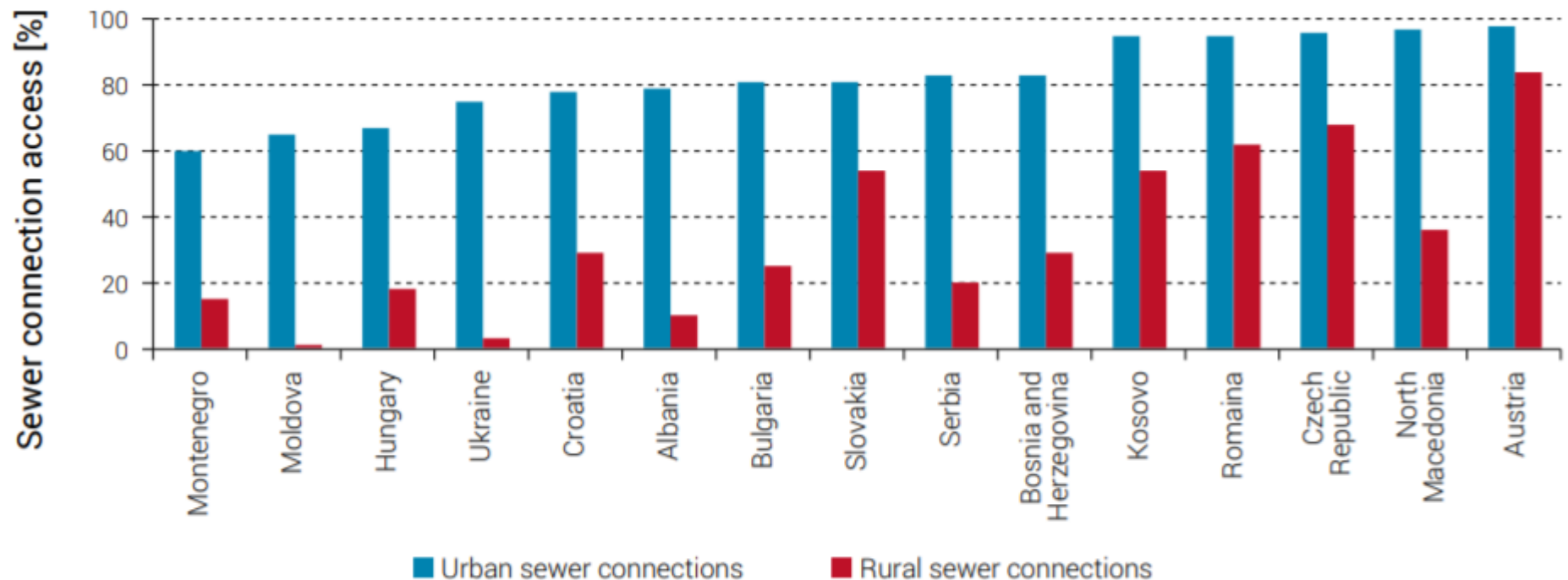
SOURCES: ALBANIA: HBS 2015; BOSNIA AND HERZEGOVINA: MICS 2012; CROATIA: EU STATISTICS ON INCOME AND LIVING CONDITIONS 2012; KOSOVO: MICS 2014; MOLDOVA: HBS 2015; ROMANIA: HBS 2016; UKRAINE: MICS 2012; STATE STATISTICAL OFFICE 2016.

Note: EU = European Union; HBS = Household Budget Survey; MICS = Multiple Indicator Cluster Survey.

**A decent living standard should go beyond unhygienic pit latrines – despite this often being “acceptable” or “traditional**



# The urban-rural gap is understandably even higher for sewer connections than for flush toilet access



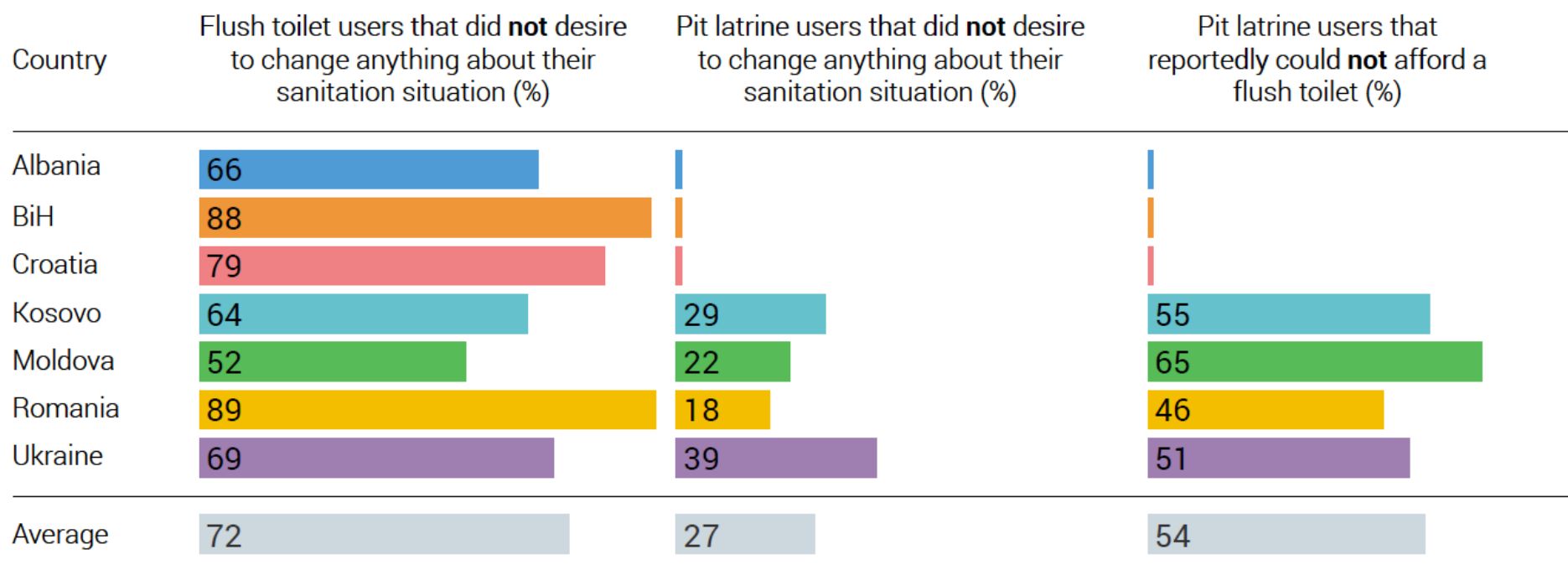
SOURCES: DATA FOR KOSOVO FROM MICS 2014; DATA FOR ROMANIA FROM HBS 2016; DATA FOR ALBANIA FROM NAWSSWI; WHO/UNICEF JMP DATABASE 2017.

- “Networked” rural wastewater solutions may not be affordable or economically optimal for rural areas (settlements below 2,000 p.e. or even larger)
- Individual on-site sanitation (IAS) – at least for some countries – to be a substantive solution to achieve the SDGs (based on site specific analysis)



# What do rural people want?

- Pit latrine users are generally **unsatisfied** while flush toilets user **much more satisfied** with their sanitation solution
- Most rural user wish to improve their **overall bathroom situation**: toilet, shower, and in some case the disposal



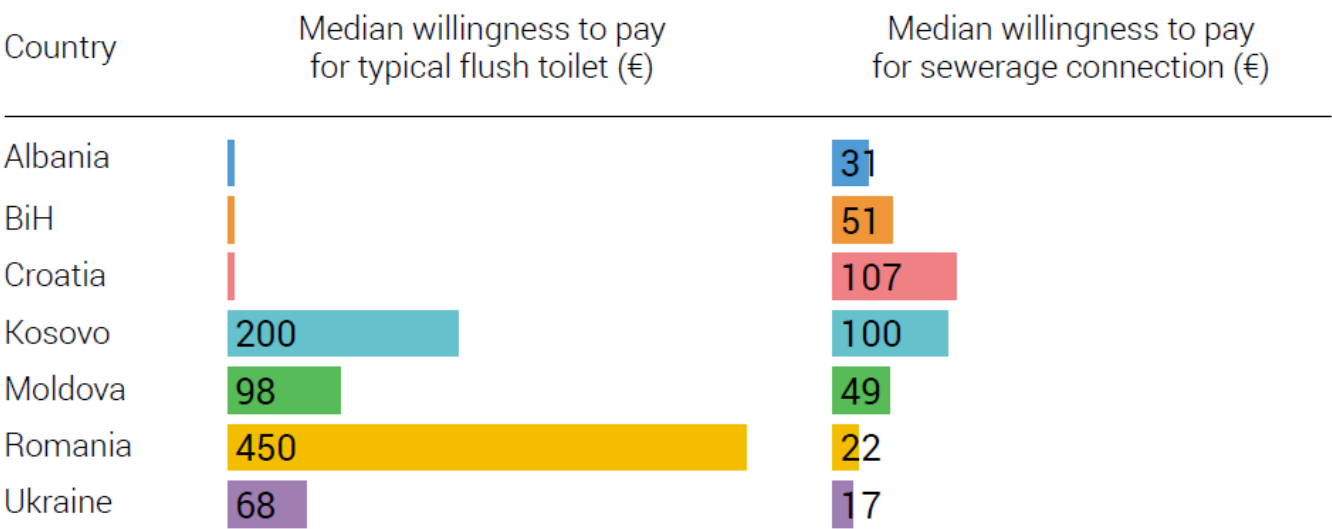
SOURCES: COUNTRY-SPECIFIC HOUSEHOLD SURVEYS.

Note: No data was reported on pit latrine characteristics for Albania, Bosnia and Herzegovina, and Croatia because very few households use pit latrines and the sample size was extremely small.

# On-site sanitation corresponds with user preferences, but affordability is a constraint without public financial support

## Access, aspirations and satisfaction

- ▶ Piped water in the home is an important driver for flush toilet access, but not the only one.
- ▶ Access to flush toilets is generally high, with Romania, Ukraine, and especially Moldova being a notable exception. Accessibility, convenience, and privacy are higher for flush toilets due to the in-door location.
- ▶ Most households using flush toilets are satisfied with their sanitation facilities and conditions, while most pit latrine using households are not.
- ▶ Affordability is a main barrier preventing households using pit latrines from upgrading to flush toilets; households' willingness to pay is fairly high, indicating a latent demand.
- ▶ Sewerage coverage is low, except in Kosovo, and most households have on-site fecal sludge containment facilities; households' willingness to pay is substantially lower for sewer connection than for flush toilets.



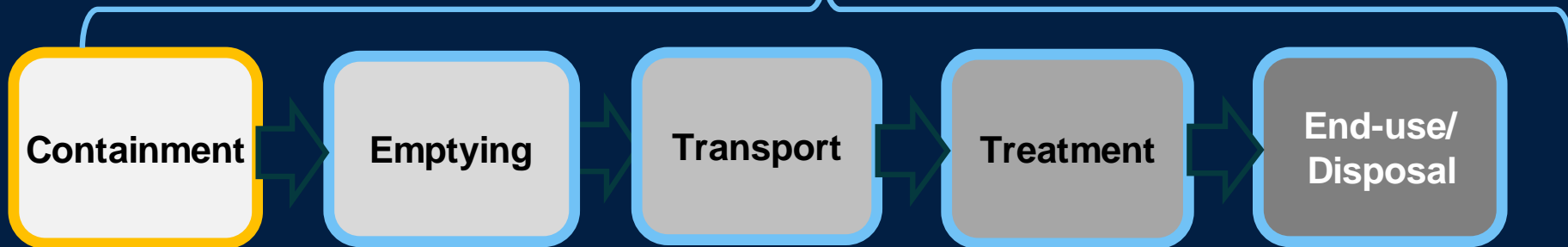
**FIGURE 4.16:** WILLINGNESS TO PAY FOR FLUSH TOILETS AND SEWERAGE CONNECTION AMONG HOUSEHOLDS WITHOUT SUCH ACCESS, BY COUNTRY

SOURCES: COUNTRY-SPECIFIC HOUSEHOLD SURVEYS.  
Note: No data for households'

# But the sanitation service chain in rural areas is broken

MDG focus

SDG focus





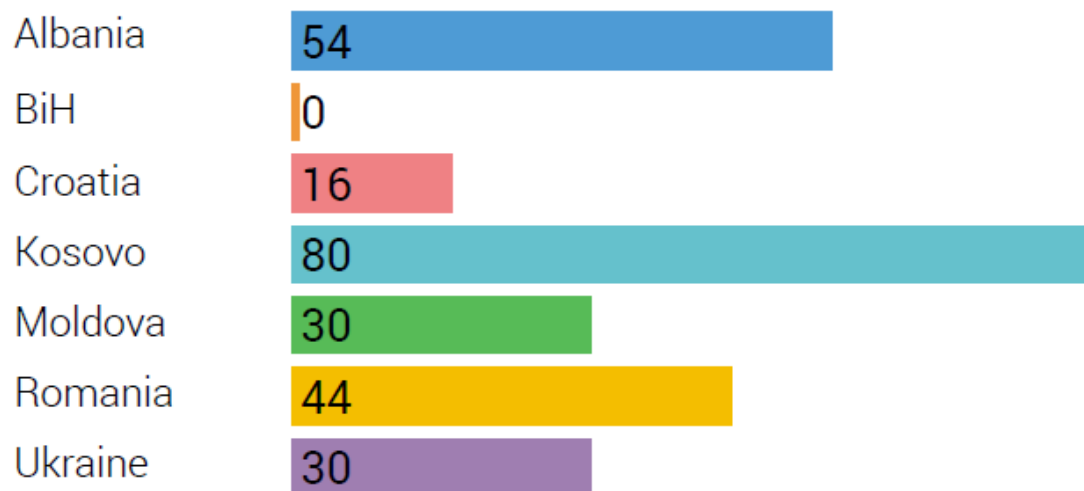
# Emptying practices widely vary...pit latrine owners mostly rebuild while soak pits or septic tanks are not emptied much

## Emptying practices and role of service authorities and providers

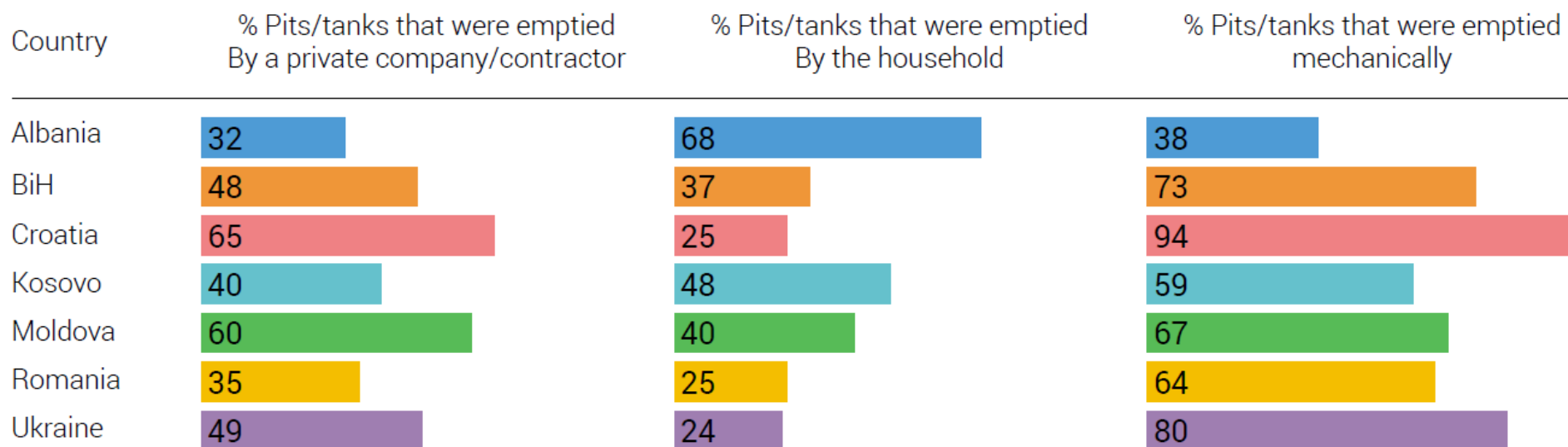
- ▶ In Kosovo and Albania, most households have never emptied their tanks or pits, while the majority in Romania, Moldova, Ukraine, Croatia, and Bosnia and Herzegovina have.
- ▶ Most households that have emptied their pit or tank have done this mechanically, mostly using a local private service provider; except in Albania where most emptying is done manually.
- ▶ Local governments have little involvement in rural sanitation; nor do they actively promote and supervise flush toilet or septic tank construction; nor are they able to offer emptying services. Only in Ukraine do municipal utilities offer emptying.

Country

Flush toilet and pit latrine users  
with a pit/tank that had never emptied it



# There is demand for emptying by informal market actors, however without regulation and enforcement



- Local governments have little involvement in rural sanitation promotion and information provision
- There is no supervision of construction and/or a vacuum in normative documents for approved sanitation technologies
- Emptying services informal mostly and disposal in septage/treatment sites not enforced or incentivized
- Scheduled emptying services not a part of the standard service of utilities

# **Future Directions and Global lessons rural sanitation programs**

# Challenges on rural sanitation in Danube region have a lot in common with low- and middle-income countries

Rural areas are often neglected and are at a disadvantage compared to urban areas

Tailored approaches are needed to reach the most vulnerable

2.3 billion people still lack basic sanitation services, out of which 70% live in rural areas

Lack of affordable, aspirational solutions that reach rural markets

**Institutional Fragmentation**

**Low government priority**

**Sustainability**

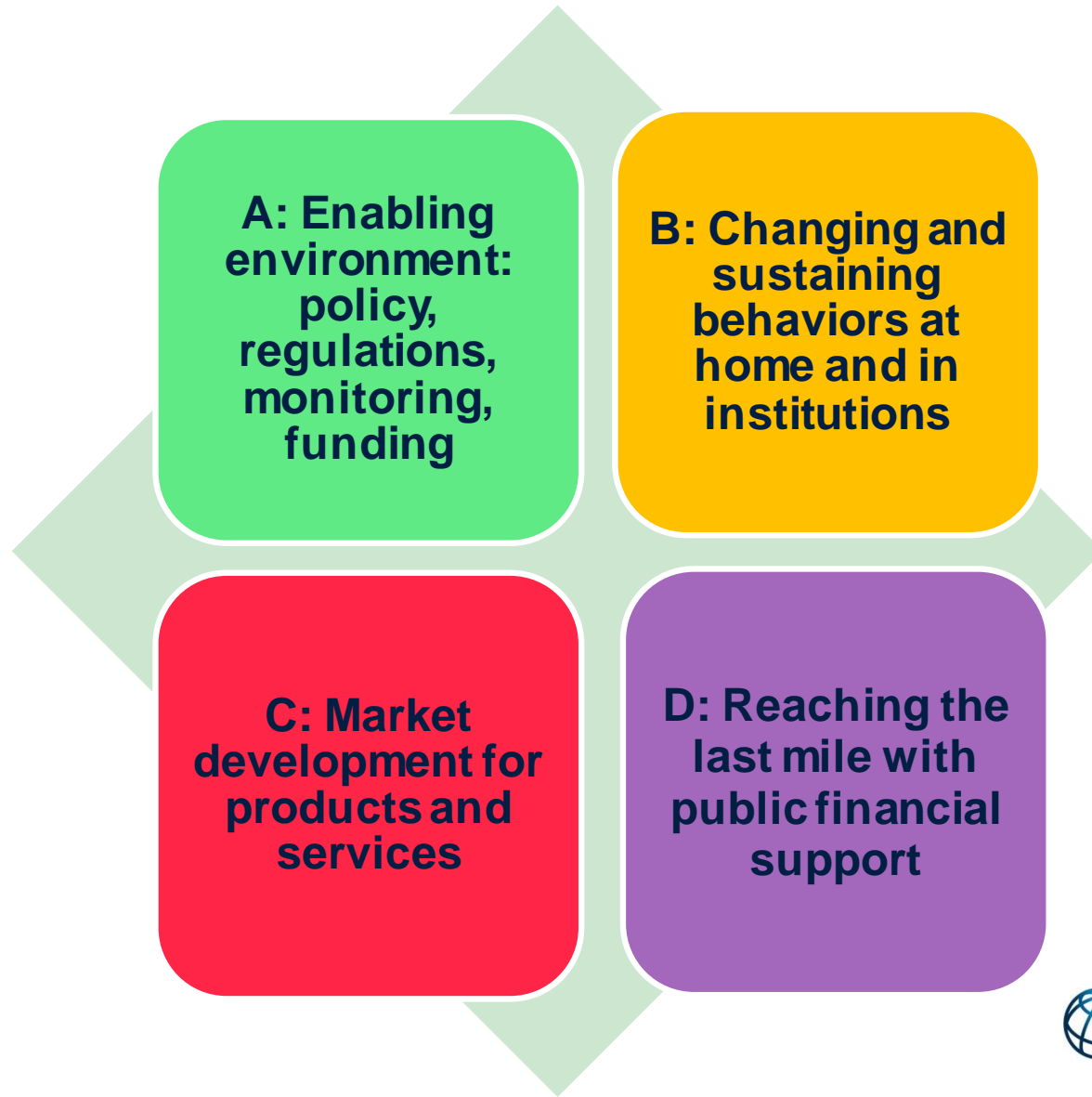
**Reaching the last mile**

Lack of ownership and subsequent financing  
Often seen as a private issue

Sustaining safe sanitation practices through behavior change and social norms

Arrangements for O&M and emptying

# Developments are reflected in revised Rural Sanitation Building Blocks



# A. Enabling Environment

- Government ownership and leadership in sanitation programming
- Capacity building of government institutions at all levels, including local self-governments
- Policy and regulatory framework
- Area-wide approaches
- Secure financing for the different components
- Monitoring outcomes and benchmarking





## B. Behavior change through multiple channels: local government, community and house-to-house engagement, businesses and providers

**Wet Latrine** **Soakage Pit** 03

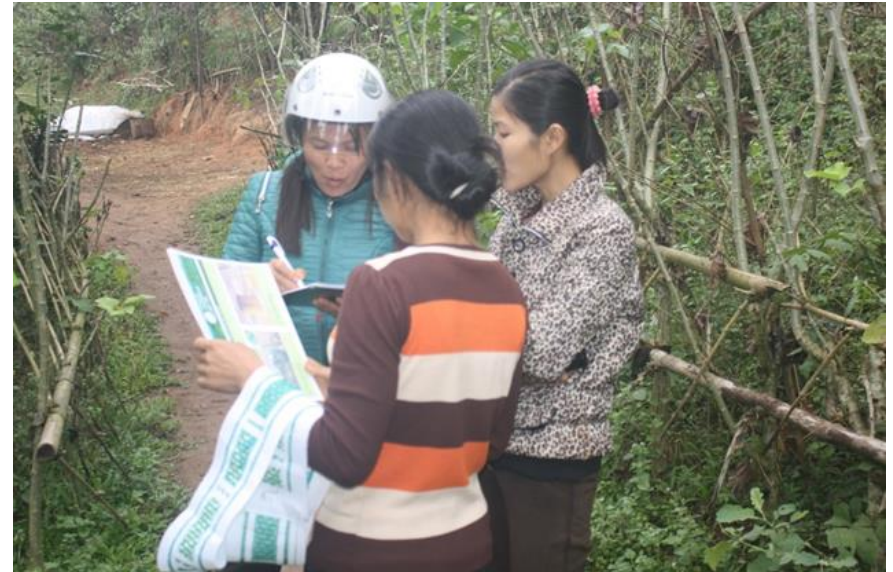


**Built with concrete rings. Volume: 0.8m³**  
**From 1,200,000 VND**  
**REASONABLE PRICE**  
**VERIFIED TECHNOLOGY**

**Built with bricks. Volume: 1 m³**  
**From 1,300,000 VND** (Cement bricks)  
**From 1,700,000 VND** (Red bricks)

The listed prices already include: i) ceramic pan, ii) family's labour as supporting masons, excluding: i) materials' transportation cost, ii) 2 labour units' cost

Pros	Use	Caution
<ul style="list-style-type: none"> <li>Clean, modern</li> <li>Easy and convenient use</li> <li>One time investment, long time use</li> </ul>	<ul style="list-style-type: none"> <li>Rush after each use</li> <li>Don't toss sticks or hard paper into the pan</li> <li>Don't pour detergent into the tank</li> </ul>	<ul style="list-style-type: none"> <li>Suitable for areas with stable water supply</li> <li>The pit must be built at least 10m away from any water source</li> <li>Consult your local health worker for construction advisors and hire trained masons to ensure the construction's technical quality</li> </ul>



**ĐỪNG ĐỂ TRẺ EM PHẢI TẮM TRONG NƯỚC BẮN TỪ CẦU CÁI!**




**BẠN TƯỜNG THẢI PHÂN XUỐNG SÔNG RẠCH LÀ BÌNH THƯỜNG?**

**Không hề!** Phân người tan ra, làm ô nhiễm nguồn nước. Trẻ em tắm sông, tắm ao có thể bị phân bám vào mũi miệng, dính lại trên da. **Rất dễ bẩn và có thể gây bệnh.**

Hãy bảo vệ con cái mình!  
 Đừng thải phân xuống sông rạch!

 **CÓ CẦU TIÊU MÂY NHÀ NHÀ AN TÂM**





# C. Sanitation Market Development

- Product and market development aligned with approved standards
- Entrepreneur training
- One-stop shop models to simplify to customer journey
- Access to business credit
- Complementary output-based subsidies for households

**HẦM CẦU TỰ HOẠI SỬ DỤNG BỐN NHỰA CHUYÊN DỤNG**  
**HIỆN ĐẠI, BỀN BỈ!**



**ƯU ĐIỂM**  
Rất gọn nhẹ và dễ vận chuyển, lắp đặt  
Phù hợp với các gia đình thiếu đất  
Độ bền cao  
Thích hợp với mọi loại địa hình, kể cả vùng ngập lũ

**LƯU Ý**  
Khuyến cáo không treo bồn nhựa dưới khung sàn nhà

**CHỈ TỪ 1,2 m³**  
**CHỈ TỪ 1,0 m³**

**CHỈ TỪ 3.700.000đ**  
**CHỈ TỪ 3.850.000đ**

Giá trên đã bao gồm toàn bộ nguyên vật liệu (bồn cầu, ống nối và vật liệu xây dựng khác). Chưa bao gồm phí vận chuyển và công lắp đặt.



## D. Reaching the rural poor requires a tailored approach to overcome multiple barriers

*If the major constraint is:*

**Poverty**

**Access to credit**

**Behavior or social norms**

**Market failure**  
(no suppliers offering an affordable product)



*Then...*

**Subsidy, Incentives,  
Cash Transfers**

**Microfinance**

**Behavior change  
interventions**

**Vendor support,  
Micro Credit**

# Lessons Learnt from India – World's Largest Rural Sanitation Program

## POLITICAL LEADERSHIP

Political will and leadership from the top is critical



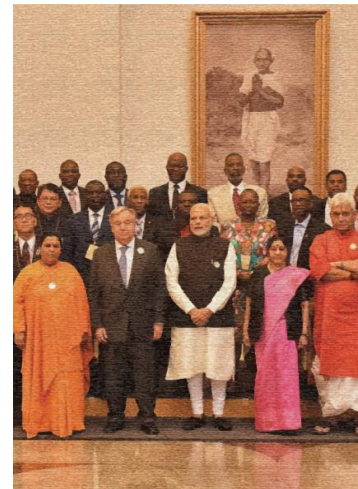
## PUBLIC FINANCING

Put your money where your mouth is (Over \$20 billion committed)



## PARTNERSHIPS

Engage with Dev. Partners, NGOs, pvt sector, civil society, media



## PEOPLE'S PARTICIPATION

Sanitation not a government programme, but a people's movement



# Going forward

**Develop a rural sanitation strategy based on guiding criteria for the use of individual appropriate systems and sewerage.**

**Decouple technologies from service levels to identify solutions beyond centralized wastewater collection and treatment**

**Accelerate self-investments to help households move up the sanitation ladder through a comprehensive rural sanitation program**

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