

# ***Beyond Utility Reach?***

## **Addressing services in rural areas**

Susanna Smets, Snr Water Supply and Sanitation Specialist

Danube Water Conference, 17-18 May 2017

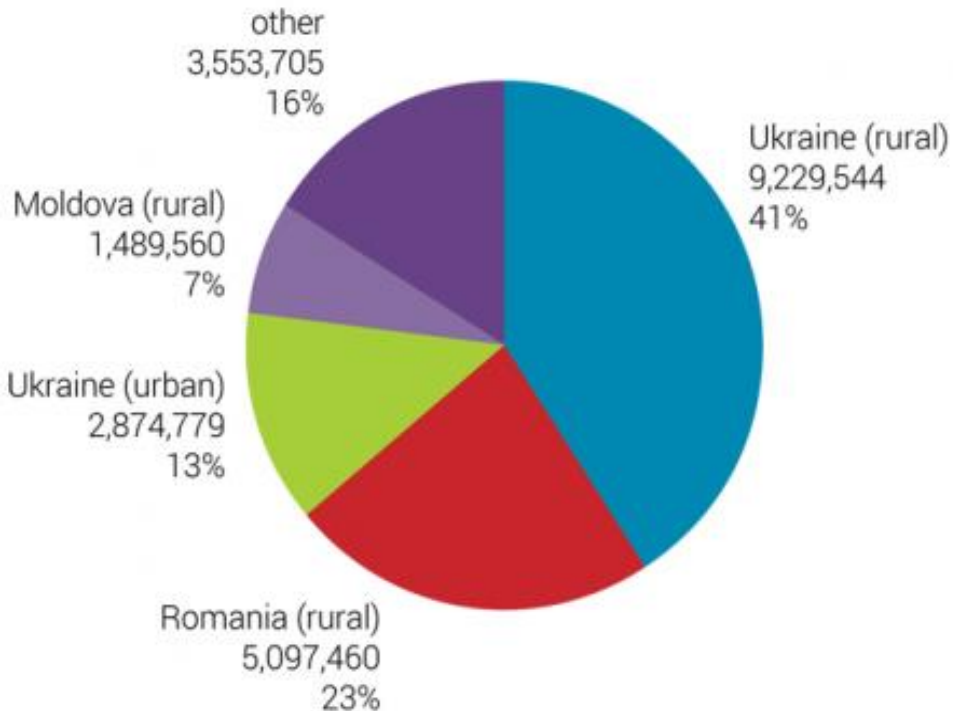


# Universal access remains a challenge in many countries of the Danube region

Out of all the population in the 16 Danube countries

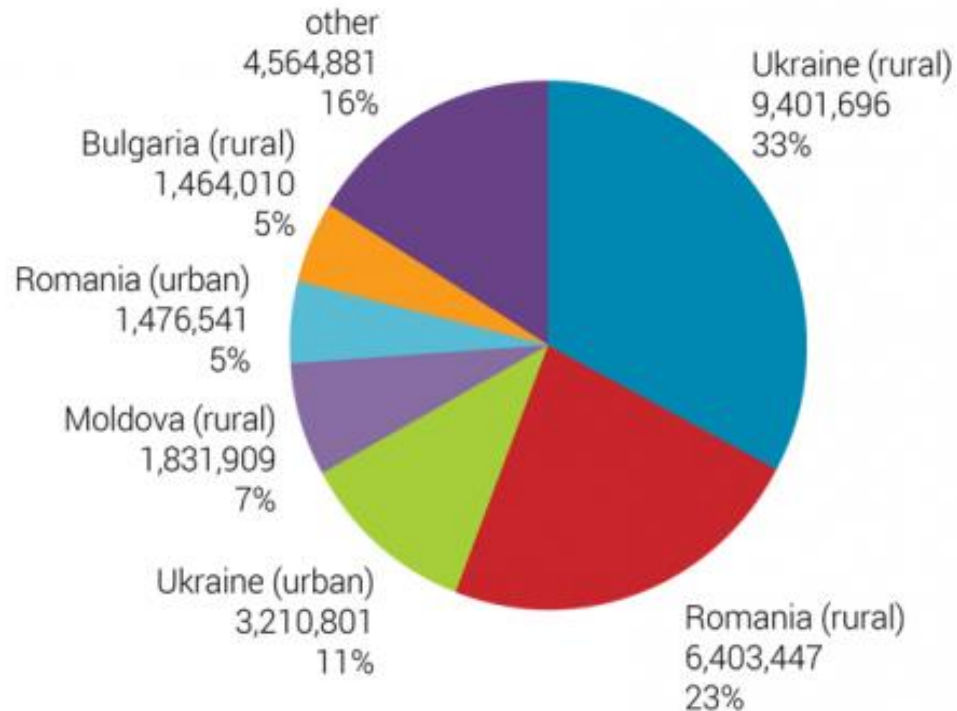
22.5 million

Without piped water

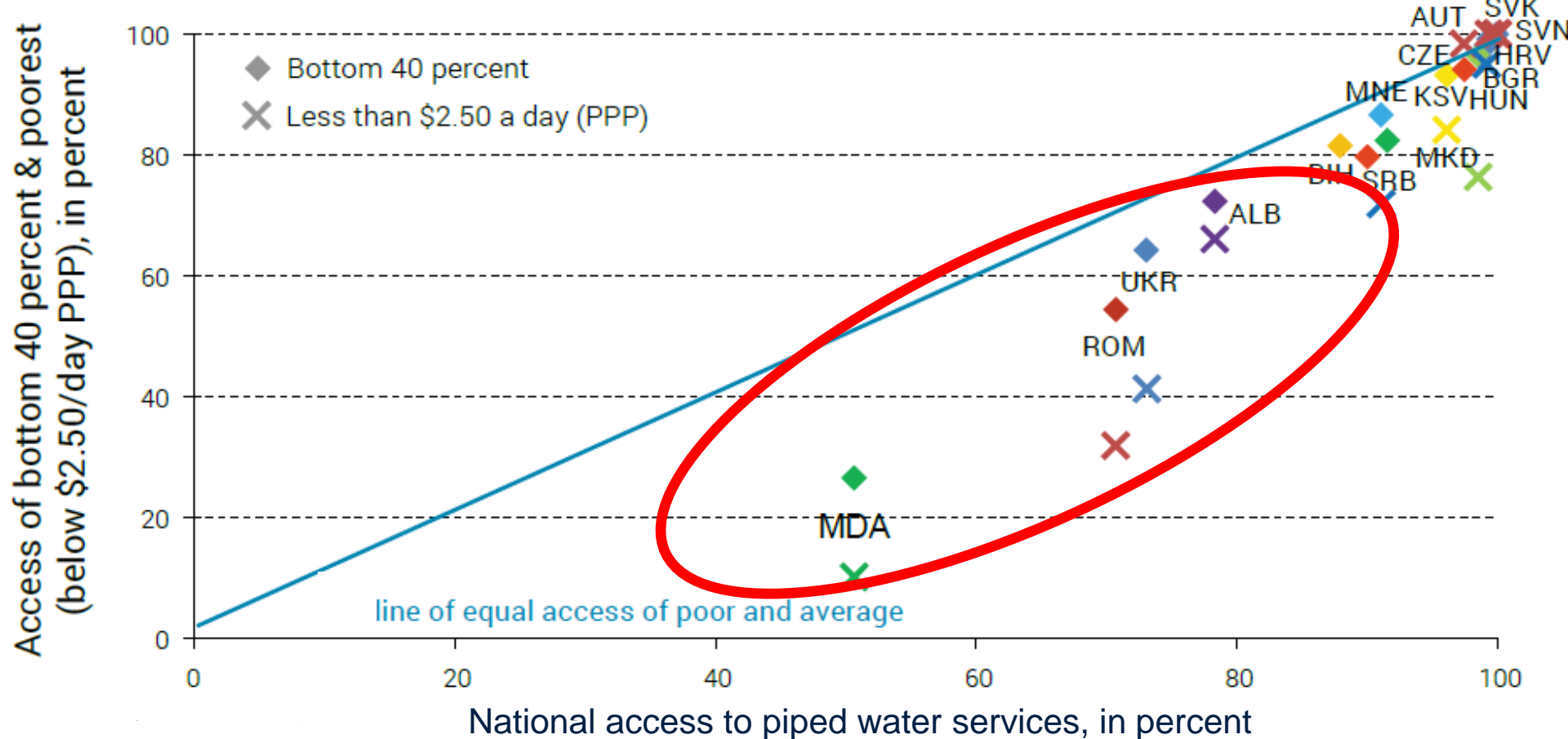


28 million

Without flush toilets

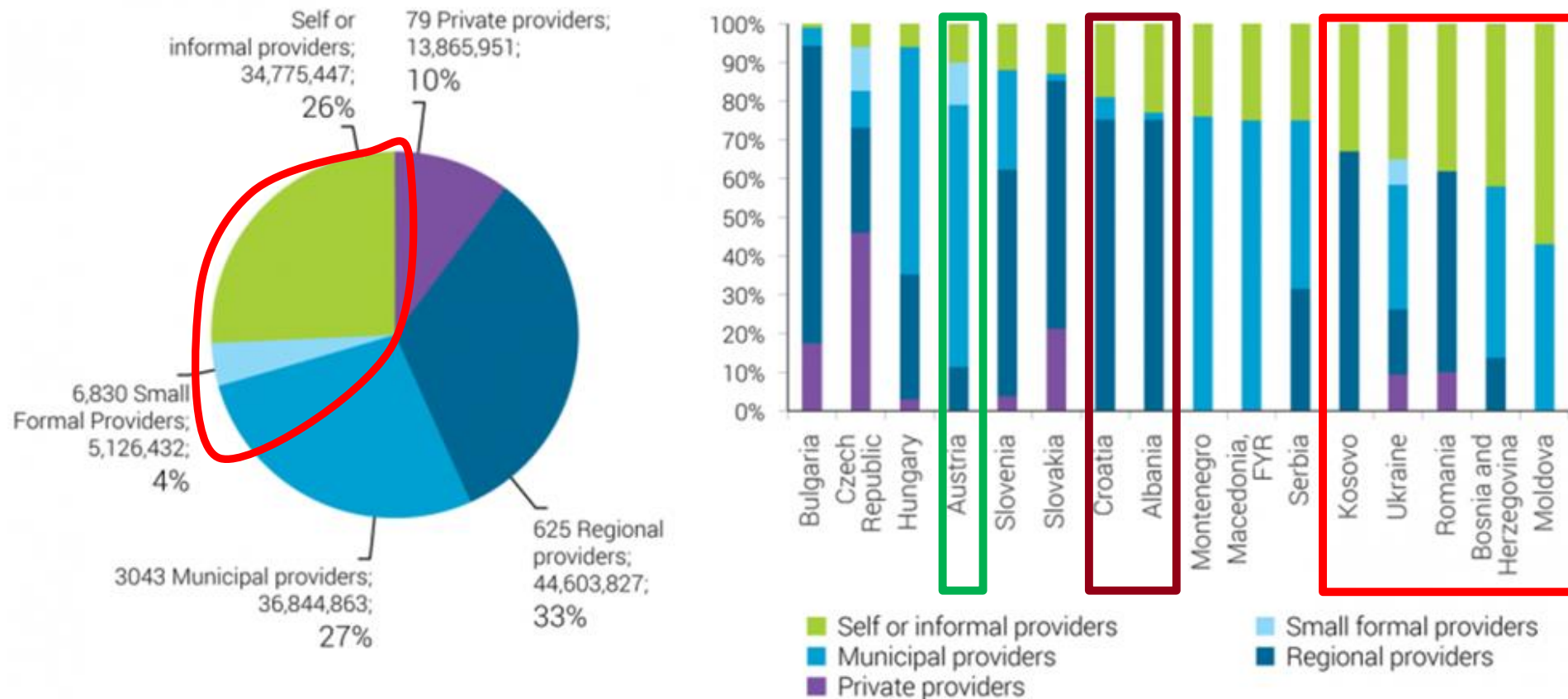


# Inequalities mostly concern the urban-rural divide driven by poverty



# A seven-country study to better understand various service delivery models and self-supply in rural areas

*Analyze service provision beyond utility reach – although not always!*  
*Recommend pathways to improve service level and access in rural areas*



# Is Rural Different?.. A global analytical framework to consider conditions for sustainability service provision

## COUNTRY CONTEXT:

economic development, population growth and urbanization, decentralization, geography and hydrology, aid dependency

## SECTOR GOVERNANCE:

political prioritization, aid effectiveness, private sector participation, human rights and inclusion, institutional arrangements and service delivery models, service levels

National Sector Level

Service Authority Level

Service Provider Level

Community-Based Management

Direct Local Government

Public Utility Provision

Private Sector

Self-supply

Institutional Capacity

Financing

Asset Management

Water Resource Management

Monitoring and Regulation

# A wide variety of management models could be found across the seven countries

**Methodology:** service level outcomes, satisfaction, performance and conditions for services

- **Institutional review and secondary**
- **Primary data (focus on regions) - sample**

- Local governments: 15-20 per country
- Water supply operators: 15-20 per country
- Households - connected and not connected

- **Rural localities** from around 500-3000

## **Different management models:**

1. Community based management – for small systems
2. Direct local government (avg. 650 con.)
3. Small municipal enterprise ( avg. 800 con.)
4. Private operator (up to 1000 con.) – water supply only
5. Regional or urban utility – stand alone systems
6. Regional or urban utility – connected systems

**Preliminary findings going through data validation and further consultation with country stakeholders:**

**Albania, Croatia, BiH, Moldova, Ukraine... Kosovo and Romania data entry in process**

**Report by end of September 2017**

# Household perspectives on water supply services

# Consumption levels and tariff indicates ability to pay in rural areas under different service provider models

## Actual water consumption and payment – as per invoices

	Moldova		Ukraine		Albania		Croatia		BiH		Average	
	lpcpd	€/m3	lpcpd	€/m3	lpcpd	€/m3	lpcpd	€/m3	lpcpd	€/m3	lpcpd	€/m3
Rural/Smal Municipal Enterprise	79	0.46	119	0.54							99	0.50
Direct Local Government	72	0.37			95	0.86			na	na	84	0.62
Community-Based Management	84	0.40			50	1.04	170	0.53	187	0.43	123	0.60
Small private service provider	111	0.49							171	0.50	141	0.50
Regional/Urban Utility - stand-alone					105	0.45	128	1.34	188	0.58	140	0.79
Regional/Urban Utility - connected	95	0.40					118	1.34			107	0.87

*Note: Albania: schemes (in transition) managed by previous commune structure*

*considered “direct local governments; schemes implemented by Albania Development*

*Fund considered “community-based management while in transition*



**WORLD BANK GROUP**

Water



# However metering and billing practices by local service providers have shortcomings

**Percentage of household that have a metered service and receive a formal invoice?**

	Moldova		Ukraine		Albania		Croatia		BiH		Average	
	meter	invoice	meter	invoice	meter	invoice	meter	invoice	meter	invoice	meter	invoice
Rural/Small Municipal Enterprise	88	64	74	53							81	59
Direct Local Government	99	49			48	53			100	100	82	67
Community-Based Management	81	36			56	65	73	100	61	50	68	63
Private service provider	98	53							83	92	91	73
Regional/Urban Utility - stand-alone					77	78	99	92	95	92	90	87
Regional/Urban Utility - connected	100	100					99	100			100	100

# Service hours under local management models are adequate but with service outages... and utility-managed stand-alone schemes problematic

## Household reported hours of supply and estimated number of days with service outage over the past year

	Moldova		Ukraine		Albania		Croatia		BiH		Average	
	hours	outage	hours	outage	hours	outage	hours	outage	hours	outage	hours	outage
Rural/Smal Municipal Enterprise	23.5	11	22.5	13							23	12
Direct Local Government	23.5	10			10.7	19			7.5	9	14	13
Community-Based Management	23.8	7			15.9	76	24	1	15.8	4	20	22
Small Private Service Provider	23.8	7							21.1	4	22	6
Regional/Urban Utility - stand-alone					8	52	24	3	23.2	4	18	20
Regional/Urban Utility - connected	23.7	5					24	0			24	3

*Note: Albania: schemes (in transition) managed by previous commune structure*

9 *considered "direct local governments; schemes implemented by Albania Development*

*Fund considered "community-based management while in transition*



**WORLD BANK GROUP**  
Water

# Local service provider do a good job in customer outreach – regional utilities managing stand-alone schemes less responsive

## Percentage of household reported to be at least *somewhat satisfied* with service provider complaint handling and information sharing

	Moldova		Ukraine		Albania		Croatia		BiH		Average	
	complaint	info	complaint	info	complaint	info	complaint	info	complaint	info	complaint	info
Rural/Small Municipal Enterprise	90	80	84	88							87	84
Direct Local Government	82	80			77	58			100	100	86	79
Community-Based Management	95	88			63	59	95	89	85	84	85	80
Small Private Service Provider	95	84							71	59	83	72
Regional/Urban Utility - stand-alone					38	32	70	50	95	89	68	57
Regional/Urban Utility - connected	92	59					99	78			96	69

Note: at least somewhat satisfied are people that rated their satisfaction 3 or higher on a scale from 1 to 5

# Operator practices

- System age in similar range across countries and management model (> 25-30 years old)
- Local service provider models with typical connection range from 300-1000; urban/regional utilities 10,000 and above

# Accountability relationship between rural providers and local governments shows room for improvement

**Percentage of service providers that have signed a service agreement with local government and have contracts with customers**

	Moldova		Ukraine		Albania		Croatia		BiH		Average	
	agree- ment	customer contract	agree- ment	customer contract	agree- ment	customer contract	agree- ment	customer contract	agree- ment	customer contract	agree- ment	customer contract
Rural/Small Municipal Enterprise	54	93	30	88							42	91
Direct Local Government	67	100			100	na			50	50	72	75
Community-Based Management	54	54			60	na	0	40	25	53	35	49
Small Private Service Provider	100	100							100	50	100	75
Regional/Urban Utility - stand-alone					100	na	60	na	100	100	87	100
Regional/Urban Utility - connected	100	100					75	na			88	100

*Note: data for Albania and Croatia in verification*

# Basic Asset Inventories are mostly absent for rural providers, except for private sector and utilities

## Percentage of service providers that state they have an updated asset inventory

	Moldova asset inventory	Ukraine asset inventory	Albania* asset inventory	Croatia asset inventory	BiH asset inventory	Average asset inventory
Rural/Small Municipal Enterprise	61	94				78
Direct Local Government	67		100		50	72
Community-Based Management	31		100	40	31	51
Small Private Service Provider	100				100	100
Regional/Urban Utility - stand-alone			100	100	100	100
Regional/Urban Utility - connected	100			100		100

*Note: data for Albania refers to practice of the municipal company taking over the scheme; assets have been recently identified (mostly not yet transferred)*

# Reporting on technical and financial data is limited for local service providers – urban utilities lack data for their stand-alone systems

## Percentage of service providers that could provide basic information on water produced/sold, and on revenues/costs

	Moldova		Ukraine		Albania		Croatia		BiH		Average	
	Prod & Sold m3	Cost and Revenues	Prod & Sold m3	Cost and Revenues	Prod & Sold m3	Cost and Revenues	Prod & Sold m3	Cost and Revenues	Prod & Sold m3	Cost and Revenues	Prod & Sold m3	Cost and Revenues
Rural/Small Municipal Enterprise	54	82	50	19								
Direct Local Government	100	100			0	na			0	0		
Community-Based Management	38	46			20	na		20	8	53		
Small Private Service Provider	100	100							100	50		
Regional/Urban Utility - stand-alone					60	na	na	na	30	66		
Regional/Urban Utility - connected	100	100					na	na				

*Note: Croatia and Albania to be verified*

# Community-based services providers hardly get external support, followed by small private and municipal enterprises....Urban/Regional utilities have best access to such services

## Percentage of service providers receiving some form of external support or assistance in past two years

	Moldova external support	Ukraine external support	Albania external support	Croatia external support	BiH external support	Average external support
Rural/Small Municipal Enterprise	64	69				67
Direct Local Government	67		40		0	36
Community-Based Management	15		60	33	31	35
Small Private Service Provider	0				100	50
Regional/Urban Utility - stand-alone			60	75	50	62
Regional/Urban Utility - connected	100			75		88



# Water quality surveillance by external entities does not adequately cover local water providers, and internal quality monitoring practices are weak

**Percentage of service providers that reported to have at least annual water quality monitoring by external public health agency, and by themselves**

	Moldova		Ukraine		Albania		Croatia		BiH		Average	
	external	operator	external	operator	external	operator	external	operator	external	operator	external	operator
Rural/Small Municipal Enterprise	86	25	67	19							77	22
Direct Local Government	67	0			100	0			50	na	72	0
Community-Based Management	85	23			100	0	100	0	62	75	87	33
Small Private Service Provider	100	100							100	100	100	100
Regional/Urban Utility - stand-alone					100	80	100	na	100	67	100	74
Regional/Urban Utility - connected	100	100					100	na			100	100

*Note: Croatia and BiH to be verified*

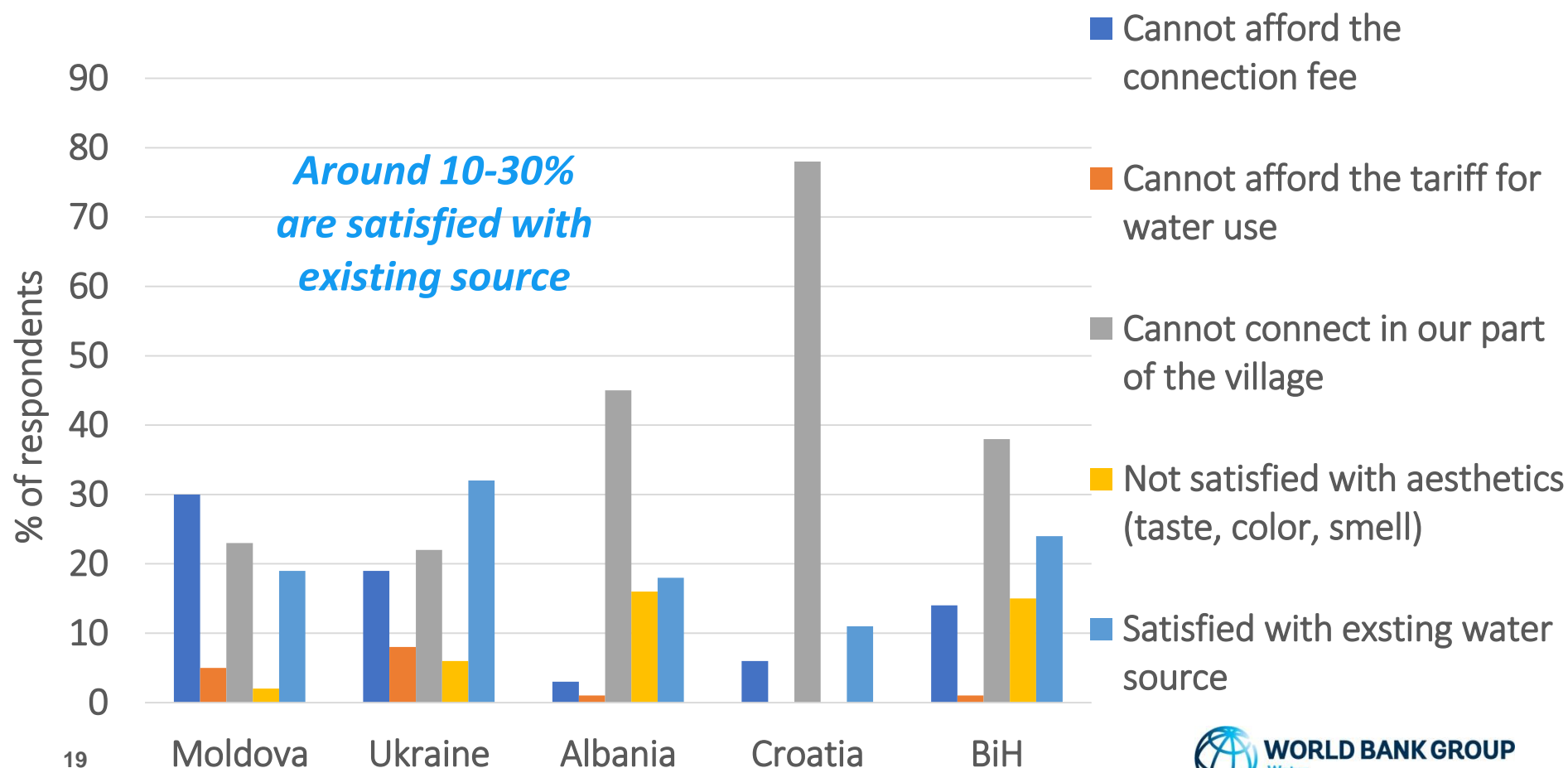
# Local Government Perspectives

- Mobilization of finance
- Support received for WSS mandate
- Assistance to service providers
- Service agreements and regulation

# What do we know about self-supply by households?

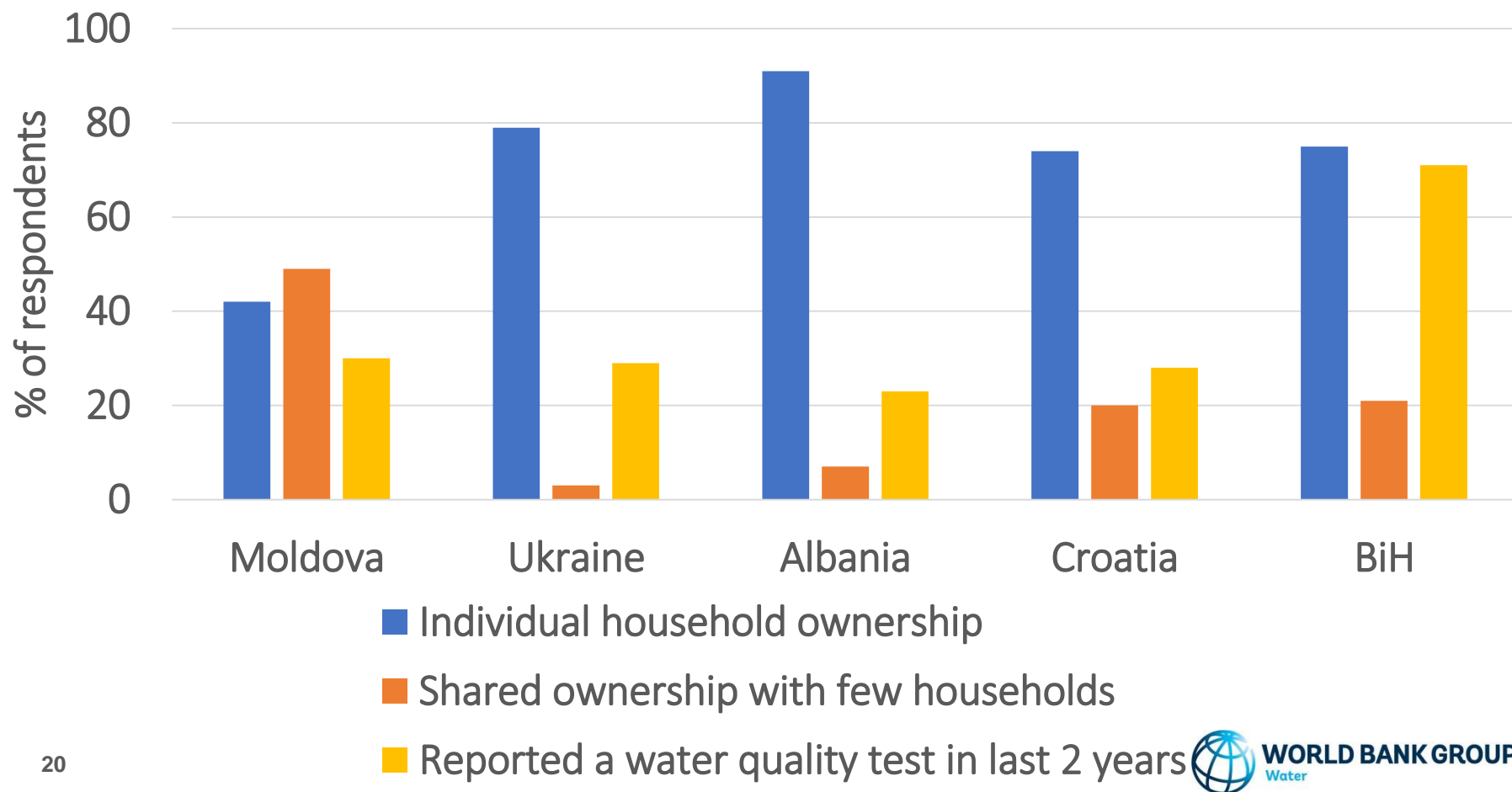
# Do self-suppliers want to connect? ...Yes mostly, but affordability of connection fee and network presence are key barriers

Non-connected households:  
Primary reason not to connect to the piped water supply



# High private well ownership - limited water quality testing and low levels of household-level treatment..

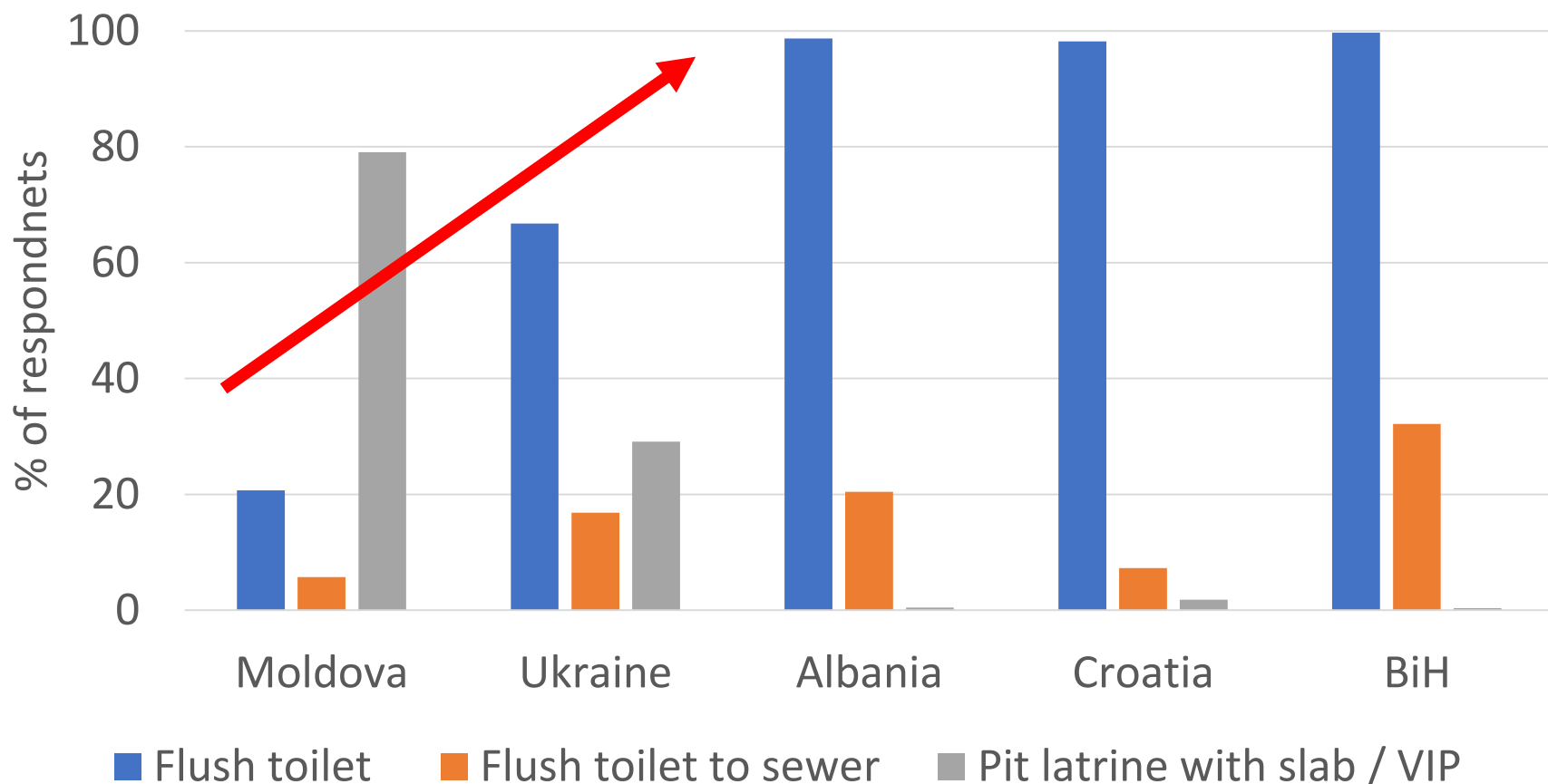
Self-supply: ownership of wells and reported water quality testing



# Sanitation.. A new frontier for rural areas?

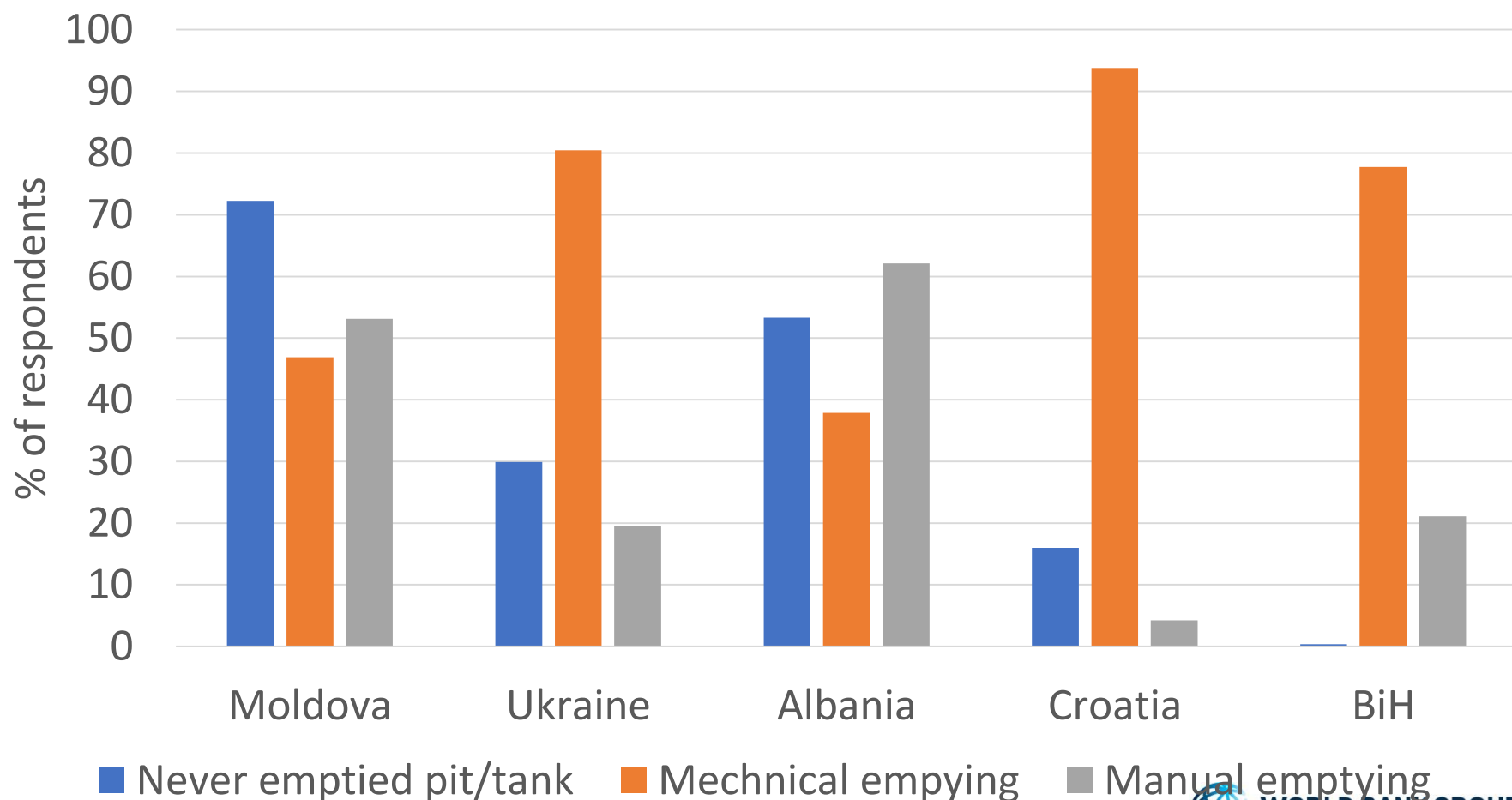
# Even in rural areas with water systems access to flush toilets is variable and access to sewer limited

Access to sanitation within rural localities  
in the survey sample



# How is emptying done, if at all?...Large share does not get emptied...mechanical practices are common-place

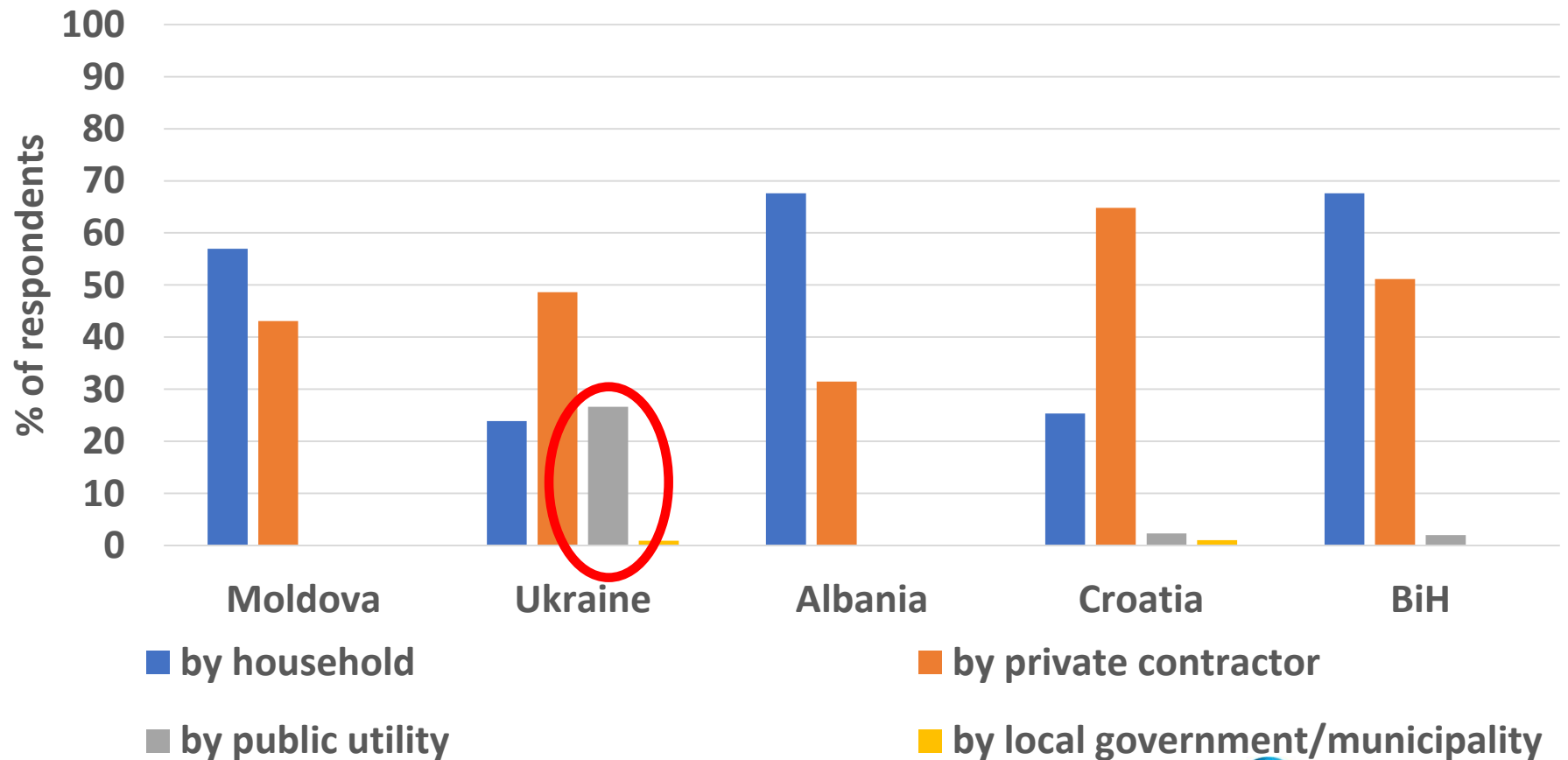
How are pits/tanks being emptied?



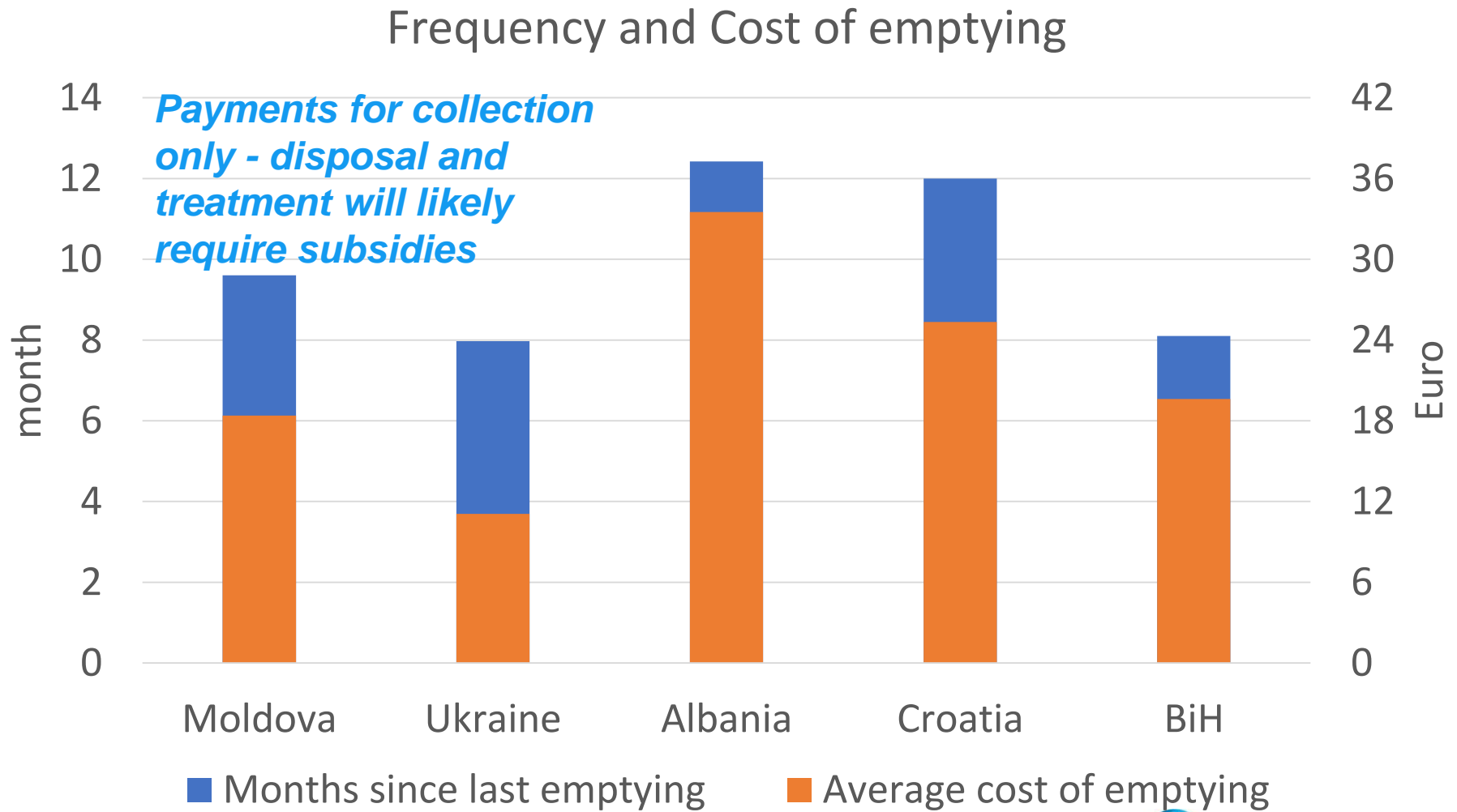


# Emptying carried out by households and unregulated private sector – absence of utility / public service

Who is emptying the pit or tanks?



# Already regular emptying and household payments indicate opportunities for fecal sludge management



# Key issues we will explore in depth

- What are the benefits and challenges of integration of rural systems within larger utility companies? Good practices?
- What complementary approach can accelerate rural service provision, when integration/regionalization is difficult/slow?
- What can be done to strengthen local service providers and local governments in rural areas?
- What policies can help to mitigate the risks of self-supply?
- What sanitation services may fit the reality of rural areas?  
How to advance rural sanitation?

# Thank You



**WORLD BANK GROUP**  
Water

[www.wsp.org](http://www.wsp.org) | [www.worldbank.org/water](http://www.worldbank.org/water) | [www.worldbank.org/sief](http://www.worldbank.org/sief) |  @WorldBankWater