



Ensuring effective performance of universal service schemes

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USFs a tool used to bridge the digital divide, but their effectiveness has been questioned



- World Bank's Independent Evaluation Group (2011), after reviewing 10 years of Bank activities in the ICT sector stated, "targeted efforts to increase access beyond what was commercially viable have been largely unsuccessful. Support to universal access programs was largely superseded by the rollout of phone services by the private sector... "
- UNESCAP (2017) finds "UASFs targeting broadband/Internet expansion have not experienced better results in fixed-broadband and Internet growth than the countries without such fund. Based on the review of existing literature and publicly available documents, the effectiveness of UASFs seems to have been limited, due possibly to weaknesses in the design, structure and implementation, which imposed enormous pressure on timely disbursement of the funds."

We tackle 2 questions, drawing on experiences of 3 South Asian countries



How do we assess the performance of USFs?

India



How do we design good USFs?

Pakistan



Sri Lanka



How to assess the performance of USFs



1. Are the funds collected being disbursed (utilized)?
2. Are the objectives defined for each universal service scheme met?

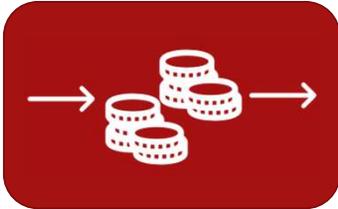
How to assess the performance of USFs



1. Are the funds collected being disbursed (utilized)?

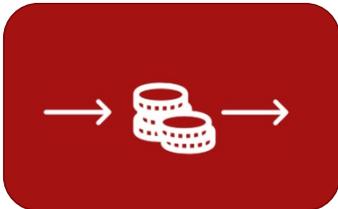
We propose using disbursement rates to measure USF utilization

To measure performance of fund over its lifetime



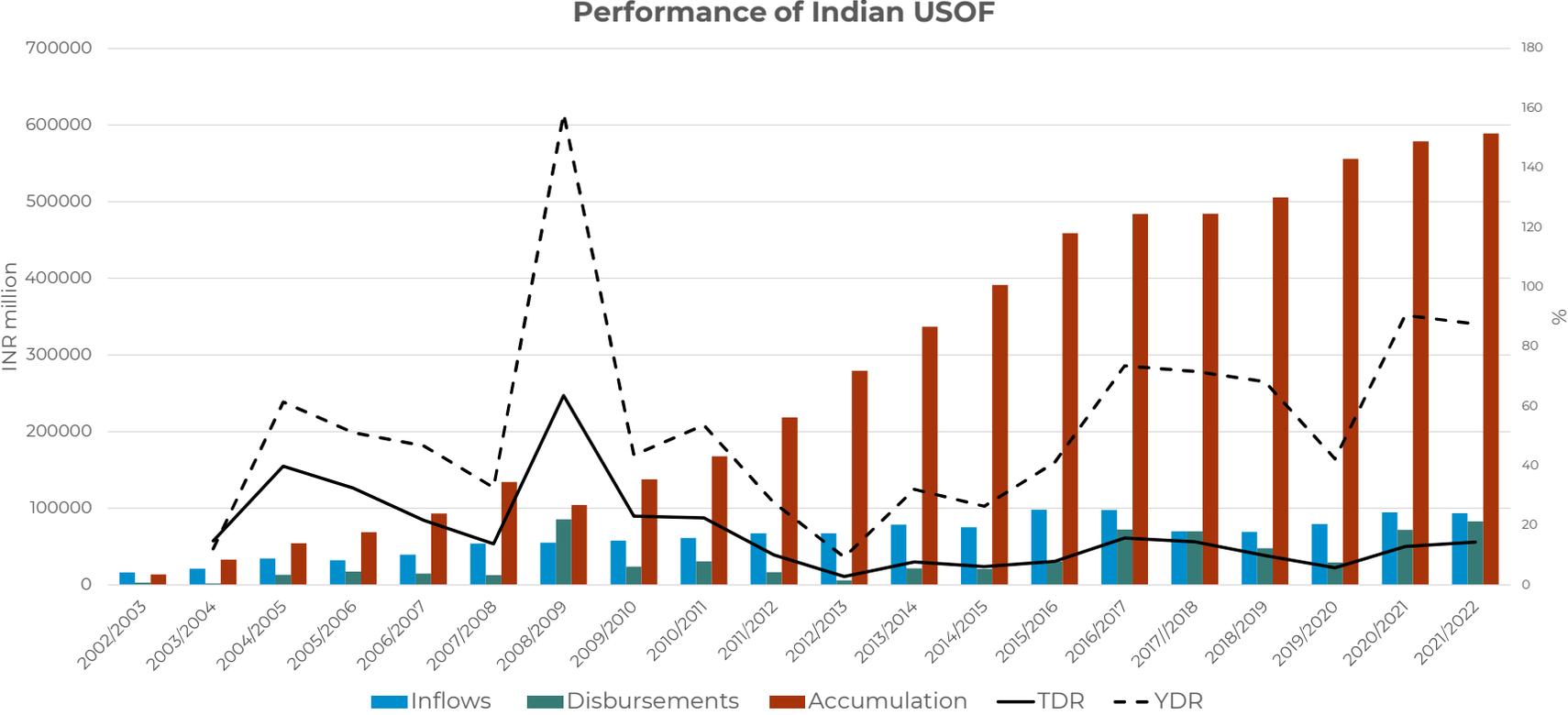
$$\text{Total disbursement rate} = \frac{\text{Disbursements}_t}{\text{Accumulations}_{t-1}} \times 100$$

To measure performance of fund in a given year



$$\text{YoY disbursement rate} = \frac{\text{Disbursements}_t}{\text{Inflows}_{t-1}} \times 100$$

TDR shows low disbursement over USF lifetime in India; YDR shows gradual improvement



Source: USOF India website

How to assess the performance of USFs



2. Are the objectives defined for each universal service scheme met?

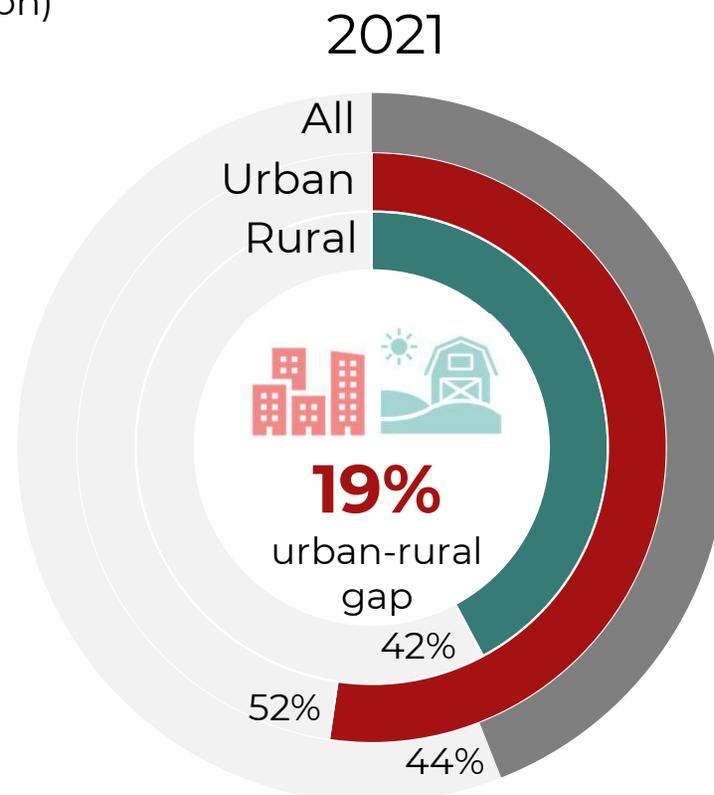
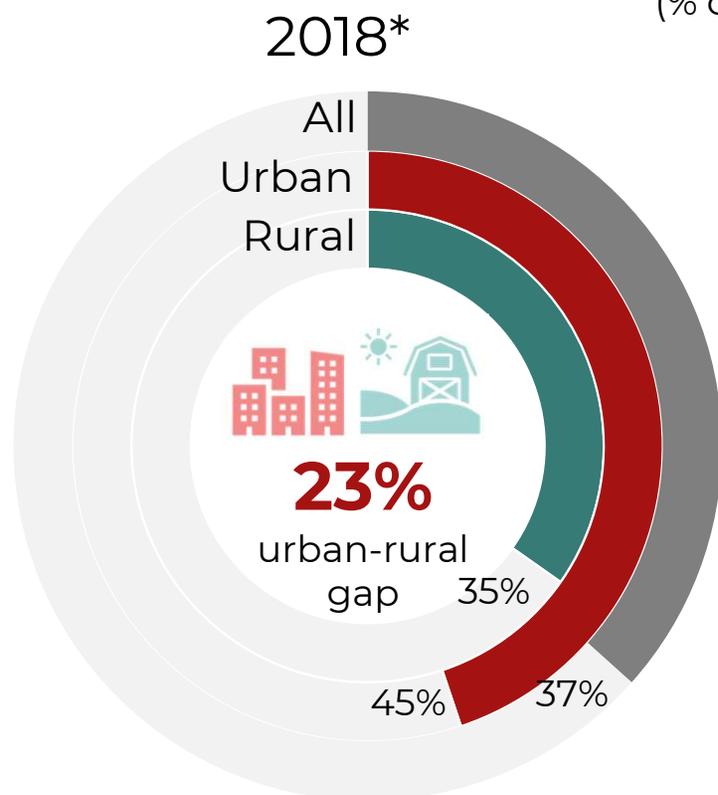
Objectives of each USF vary; some objectives are easier to measure than others

Pakistan	India
Bring the focus of telecom operators towards rural population and increase the level of telecom penetration significantly in the rural areas through effective and fair utilization of the fund.	Network extension & stimulation of uptake of ICT services
Improve broadband penetration	Mainstream the underserved & unserved areas or groups by bridging the Access Gap
	Enable equitable distribution of the fruits of the telecom/digital revolution and fair allocation of national resource (pooled USO levy) via targeted subsidies
	Enable citizens [to] exercise their political rights in an informed way

- Network extension can be measured using data available to USF and operators
- Measuring use gaps would require additional data collection

Representative survey used to measure urban-rural use gaps: gap in Sri Lanka remained over 4 years

Internet use - Sri Lanka
(% of age 15+ population)



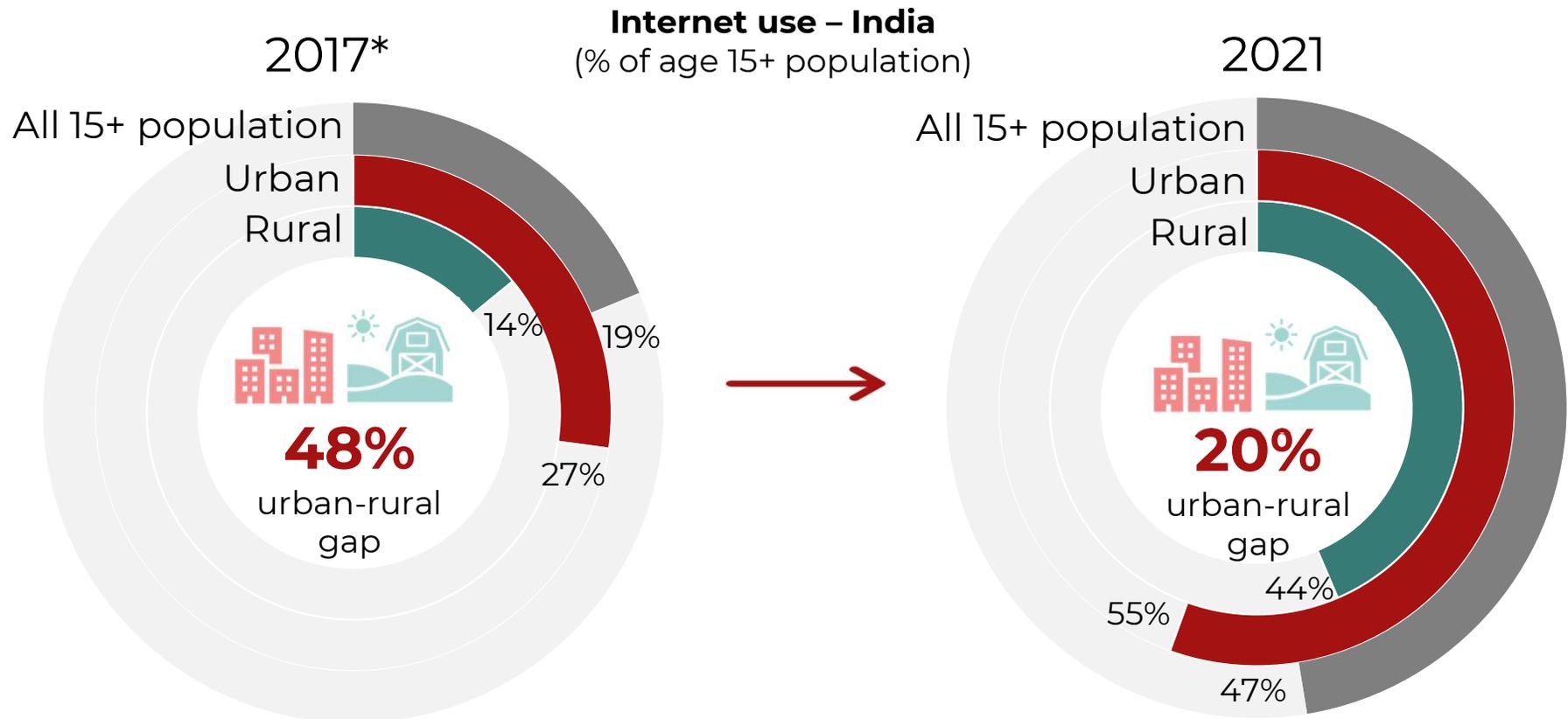
* for the ages of 15-65 population

Q: Have you ever used the Internet? (Websites and applications like Google, Facebook, WhatsApp, email, etc.) Base: All respondents (n=2,017; 2,501)

Source: LIRNEasia (2021)

$$\text{Urban-rural gap in Internet use (\%)} = \frac{\text{Urban internet users (\% of urban population)} - \text{Rural internet users (\% of rural population)}}{\text{Urban internet users (\% of urban population)}}$$

Data shows that urban-rural gap more than halved in India, but we must understand broader policy environment before directly attributing success to USF



* for the ages of 15-65 population including Kerala.

Q: Have you ever used the Internet? (Websites and applications like Google, Facebook, WhatsApp, email, etc.) Base: All respondents (n=6,995)

Source: LIRNEasia (2021)

$$\text{Urban-rural gap in Internet use (\%)} = \frac{\text{Urban internet users (\% of urban population)} - \text{Rural internet users (\% of rural population)}}{\text{Urban internet users (\% of urban population)}}$$



How to design good USFs

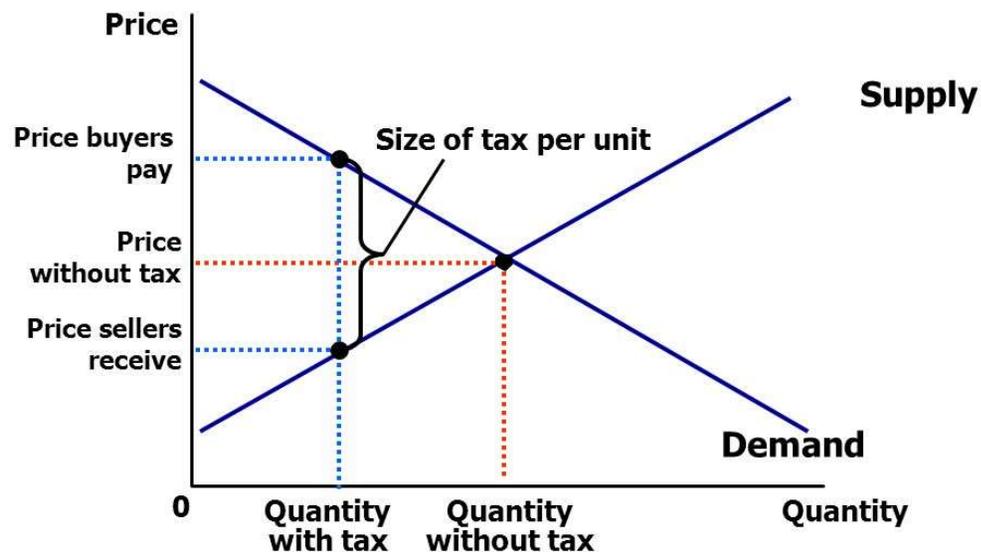
1. If at all possible, do not tax current telecom consumers; take from another source



- The Chilean universal service schemes for telecom (and other utility services) were funded by general taxation, not sector-specific levies
- The Sri Lankan scheme was funded by charges on incoming and outgoing international calls (problematic in terms of WTO principles and International Telecom Regulations)

2. Try not to depress demand: Disburse promptly

The Effects of a Tax...



- Money that has been withdrawn from a reasonably competitive sector must be disbursed
 - Otherwise, it's only doing harm by depressing demand

3. Ensure transparency; necessary condition for external pressure



News report in April 2015

- "The government has spent only 2.6 per cent of the money accumulated in Rural Telecommunications Development Fund (RTDF) in the last 17 years. This shows that a huge amount of resources has remained idle in the fund, which was supposed to be utilised for extending telecom services to rural areas. As of March-end, Nepal Telecommunications Authority (NTA) collected a total of Rs 10.22 billion for RTDF from income of its licensees till last fiscal. Each licensee of NTA contributes two per cent of their annual income from services in RTDF that was established as per a provision in Telecommunications Act 1997. The Act says the fund has to be used for making telecom services available in 'rural areas'. So far, Rs 265.69 million has been paid to Nepal Telecom (NT) and Rs 2.95 million to Subisu Cable Net from the fund for their involvement in service expansion to rural and remote areas."

External pressure works; results by 2017

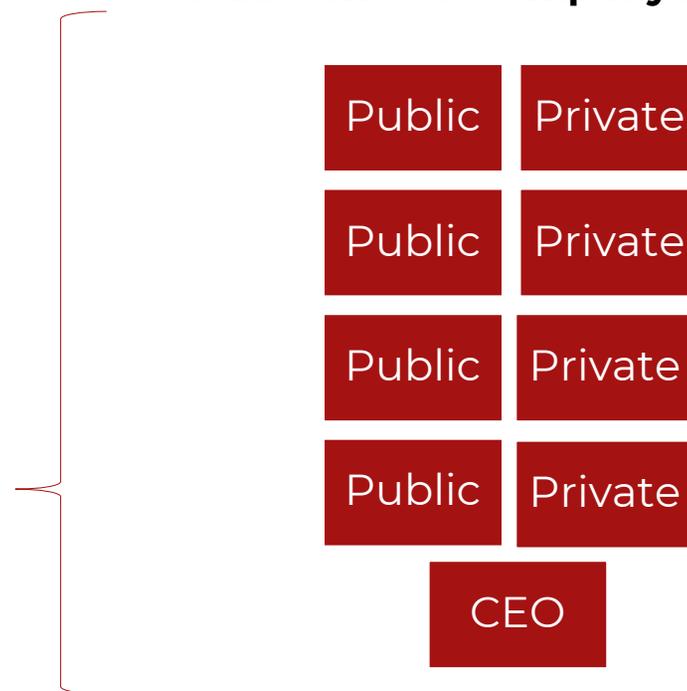
- Two years later, the Senior Director of the Nepal Telecom Authority who spoke about the regulatory aspects of broadband rollout did not speak in vague generalities or in the future tense. He spoke of least-cost subsidy auctions conducted and contracts signed. Appears that Nepal is moving on the challenging tasks of connecting its people.
- What was even more heartening was the intense and substantive questioning he faced after making a comprehensive presentation. And his concluding comments that welcomed suggestions on how to execute the initiatives better. This creates a lot of hope as we start this major project.

4. Create SPV to manage the fund, with strong stakeholder participation

Most funds are (mis)managed by the public sector

	Public Sector	Quasi independent entity
India	✓	
Malaysia	✓	
Pakistan		✓
Sri Lanka	✓	

Pakistan USF Company Board



5. Sunset the organization/levy percentage; at least require periodic reauthorization



- A universal service fund is an intervention that seeks to fill a gap
 - If it succeeds, the gap will be filled, and it should go out of business
 - If it fails, it should be reformed/shut down
- But once an organization with growing resources exists, normal political/bureaucratic incentive is to find new gaps to fill ==> results in loss of focus and accountability
 - Reauthorization allows a reset of objectives
- Another mechanism is to decrease the levy percentage so fund does not keep expanding
 - Telecom is a growing sector, keeping the % constant will result in expanding the fund



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