

Telecom use at the bottom of the pyramid in emerging Asia

M is for Mobile: Exploring mobiles technology for social development

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BOP a large, valuable, under-tapped market

- Lowest socio-economic groups
 - Roughly living on USD2 per day
 - SEC D + E (LIRNEasia)
- Many consumers consuming little amounts
 - Estimated 3 billion, globally
- Many opportunities for companies (as well as consumers)

Understanding of emerging Asian BOP's use of ICTs (mostly phones) via **Teleuse@BOP** studies

- BOP defined as SEC groups D + E*
- What this means in *emerging* Asia... **579 million****
 - Bangladesh
 - Pakistan
 - India
 - Sri Lanka
 - Philippines
 - Thailand
- 10,000+ individuals surveyed; 200+ studied in depth via FGDs, mini-ethnographies and home visits

9,940 BOP teleusers surveyed

	Bangladesh	Pakistan ^[1]	India	Sri Lanka ^[2]	Philippines ^[3]	Thailand ^[4]	Total
BOP teleusers	2,050	1,814	3,152	924	800	800	9,540
Margin of error @ 95% CL (%)	± 3%	± 2%	± 2%	± 3%	± 4%	± 4%	

- Additional 200 (approx.) studied in depth via FGDs, mini-ethnographies and home visits

[1] Pakistan: Excludes tribal regions

[2] Sri Lanka: Excludes North and East

[3] Philippines: Survey was undertaken only among SEC E

[4] Thailand: Excludes Bangkok as the SEC DE population in Bangkok is very small

Lower two socio-economic categories (D & E)

	Bangladesh	Pakistan	India	Sri Lanka	Philippines	Thailand
Mean household income (USD/day)	117	126	99	151	127	171
Mean personal income (USD/day)	36	37	38	54	45	79

- Earning ~USD1-2 per day
- Primary-secondary education

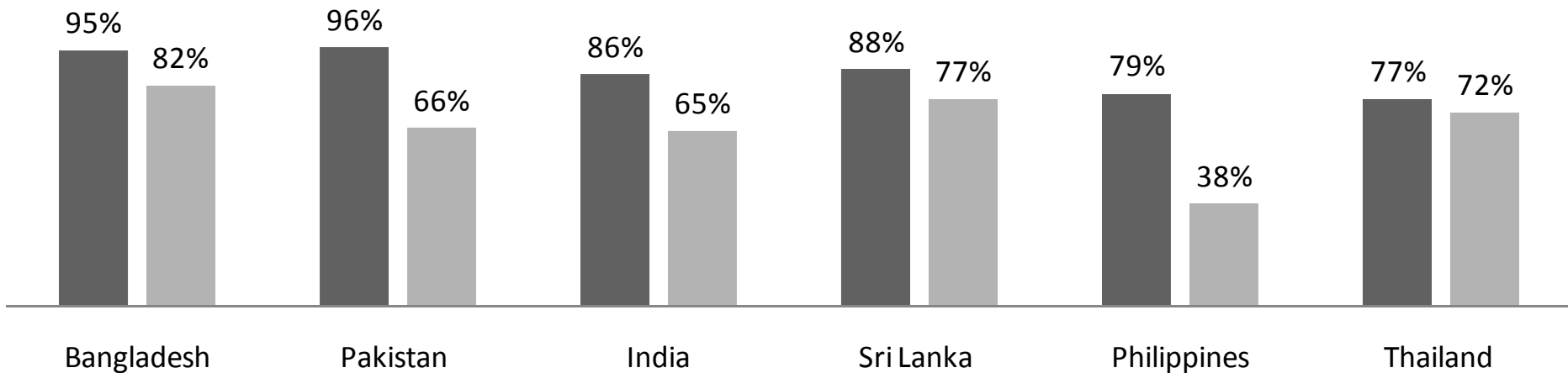
Teleuse@BOP

HIGH ACCESS, MOSTLY MOBILE

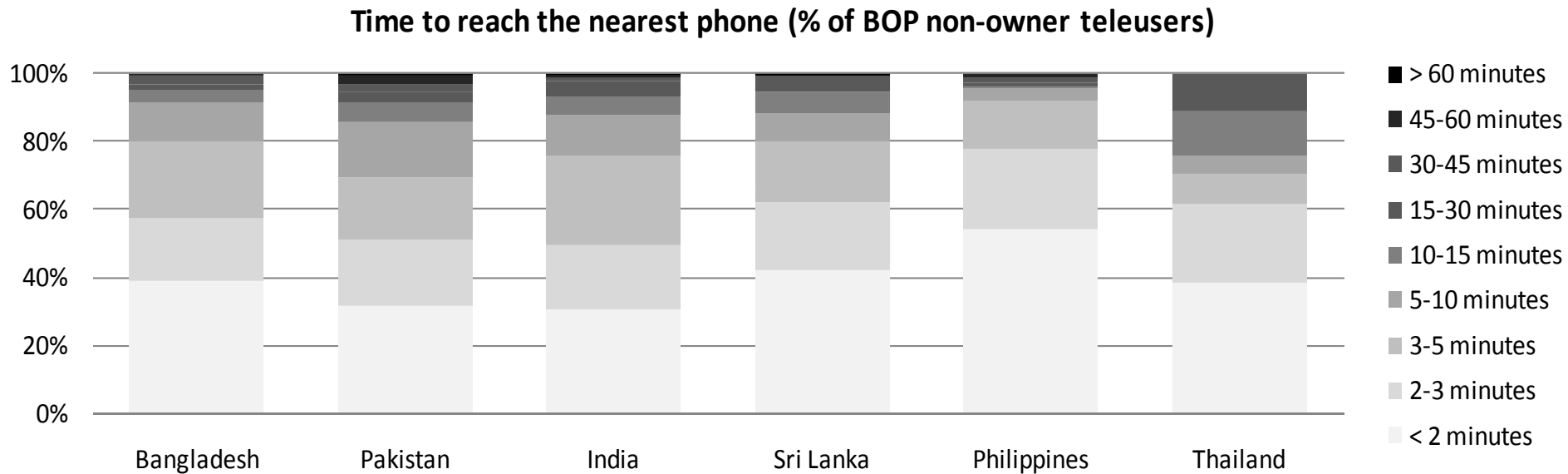
Most have *used* a phone in the last 3 months

Use of the phone (% of BOP [outer sample])

■ Have used phone in last three months ■ Have used a phone in last week



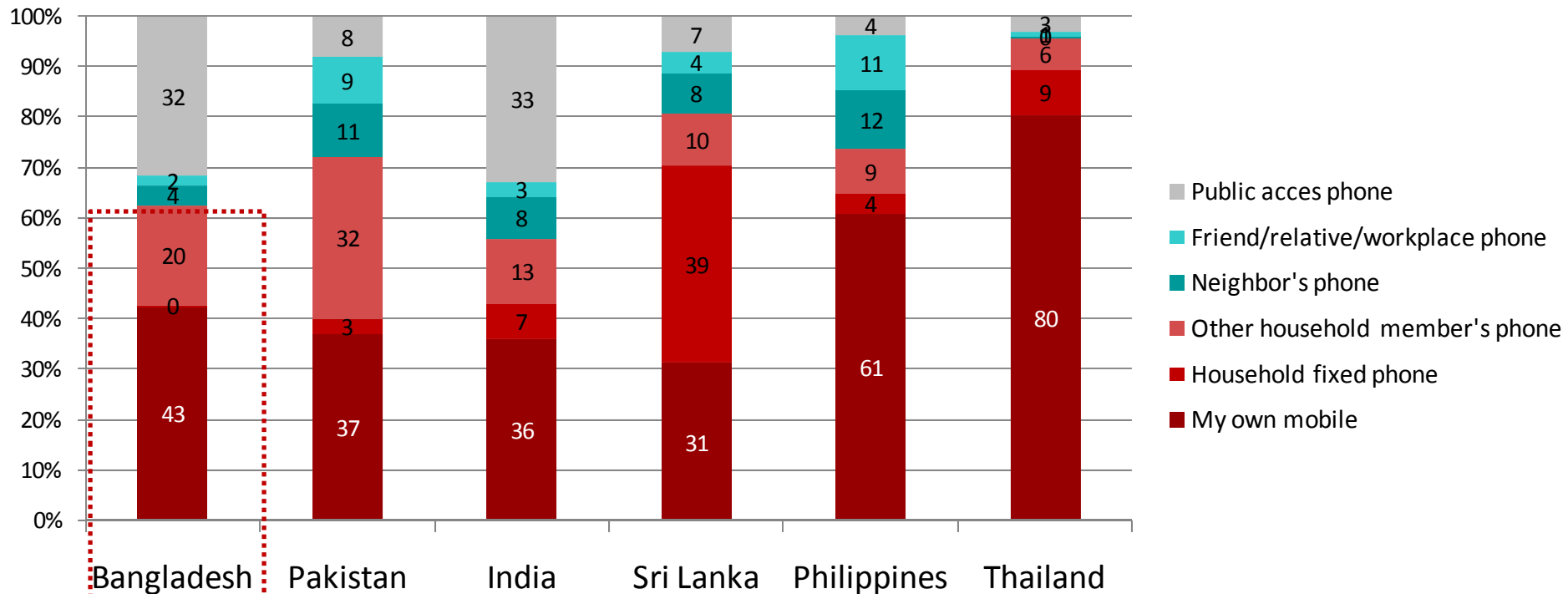
Non-owners can get to a phone in ~5 minutes (walking)



- Over half have access within house

Many non-owners, still have mobile access within the household

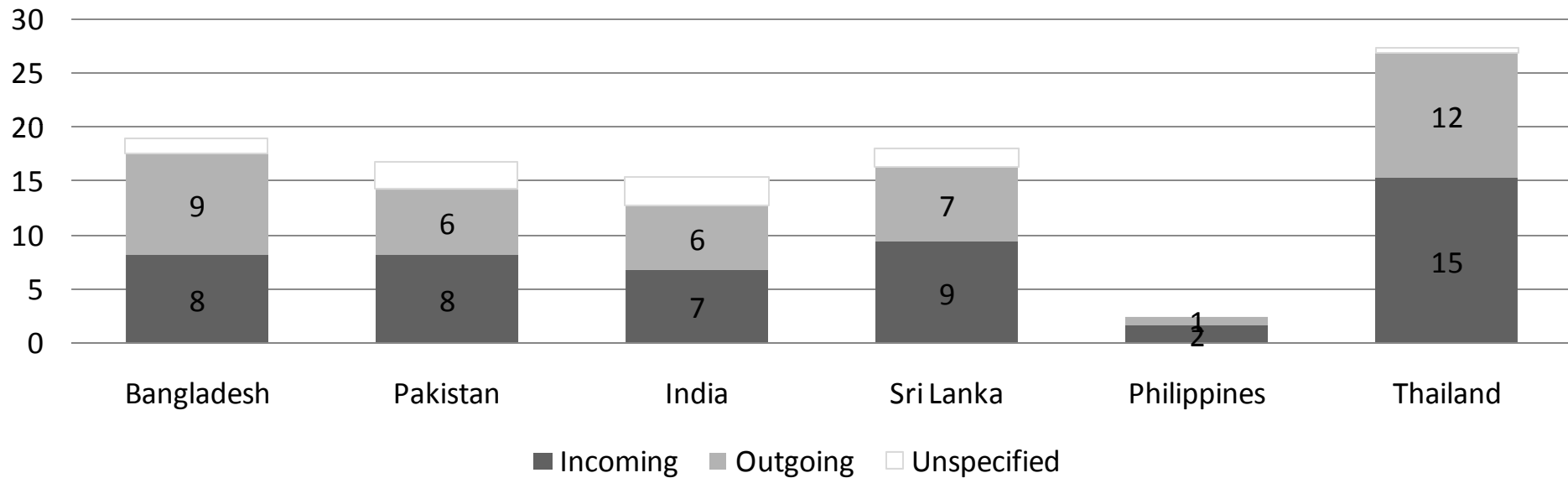
Most frequently used phone (% of BOP teleusers)



Access within the household

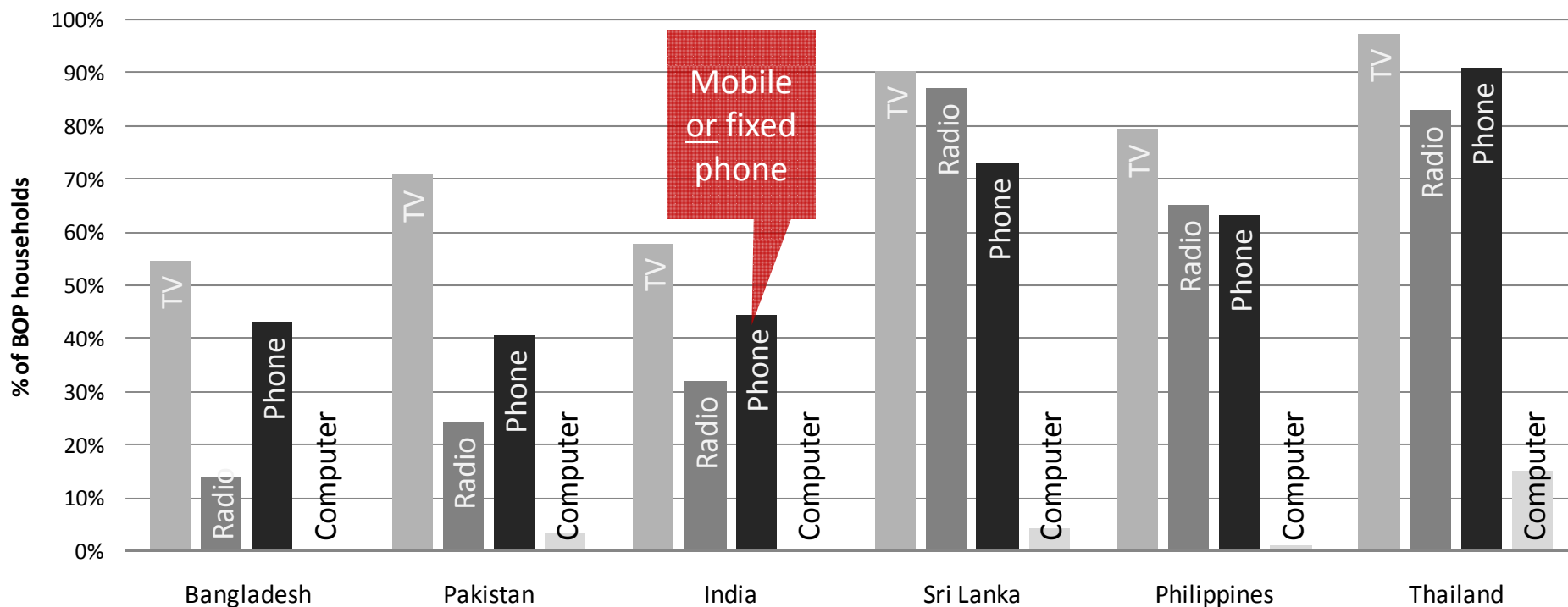
~1 call per day (outgoing)

Average number of calls per week



Phones overtaken radio in South Asia

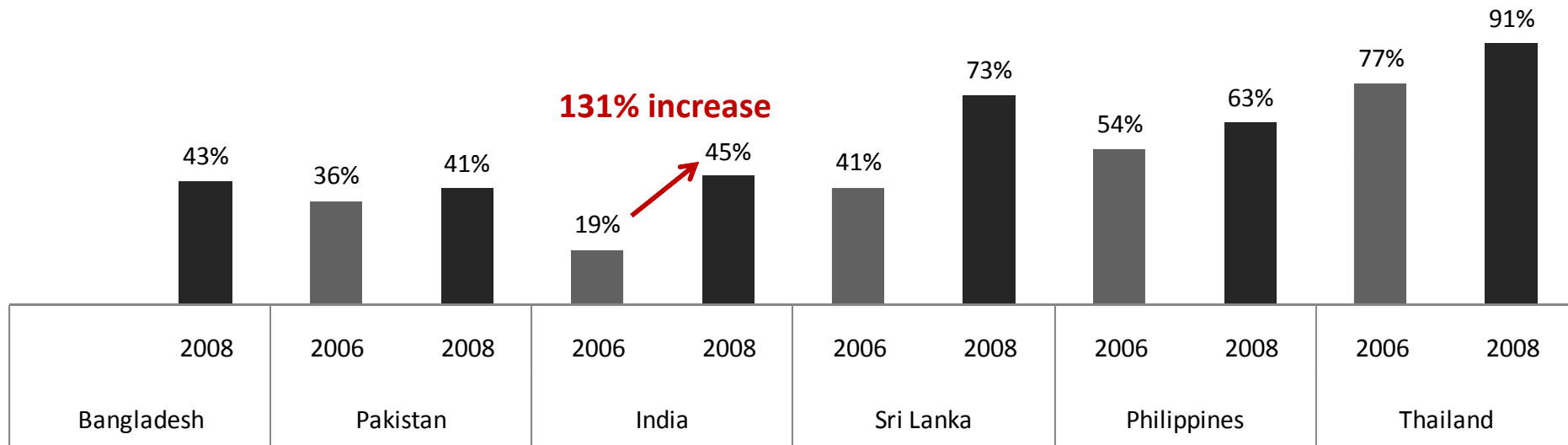
Access to communication technologies within the household (% of BOP teleusers)



- In addition, many have access to other householders' mobiles (esp in South Asia)

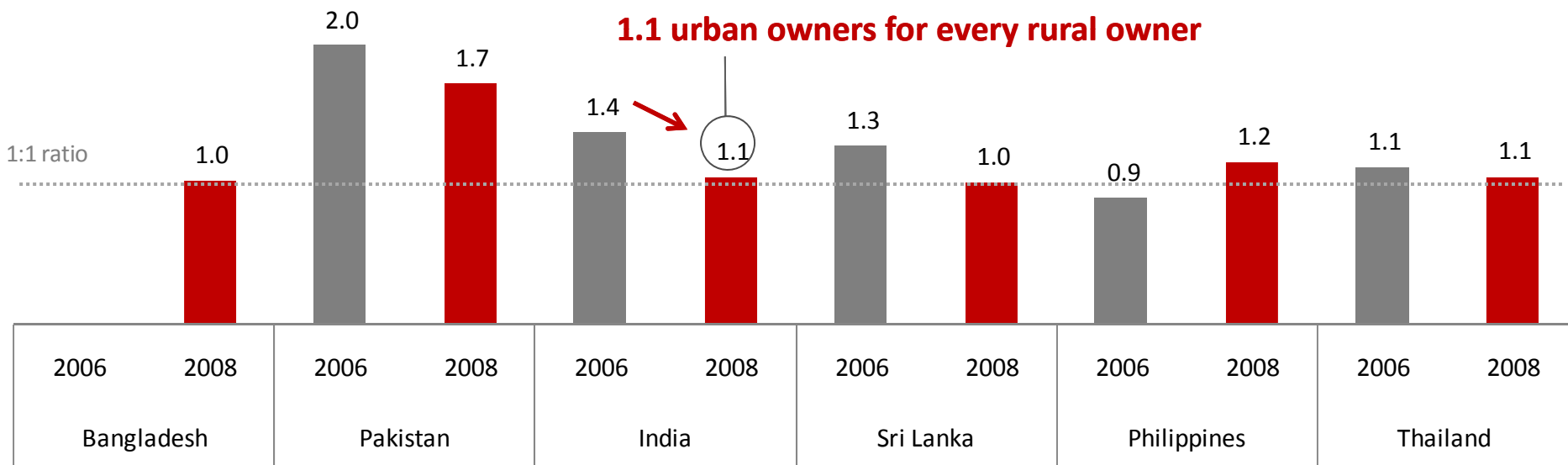
Largest % growth in Indian total BOP phone ownership

Total BOP phone ownership: 2006 vs 2008 (% of BOP teleusers)



Urban-rural divide in total BOP phone ownership **declining**

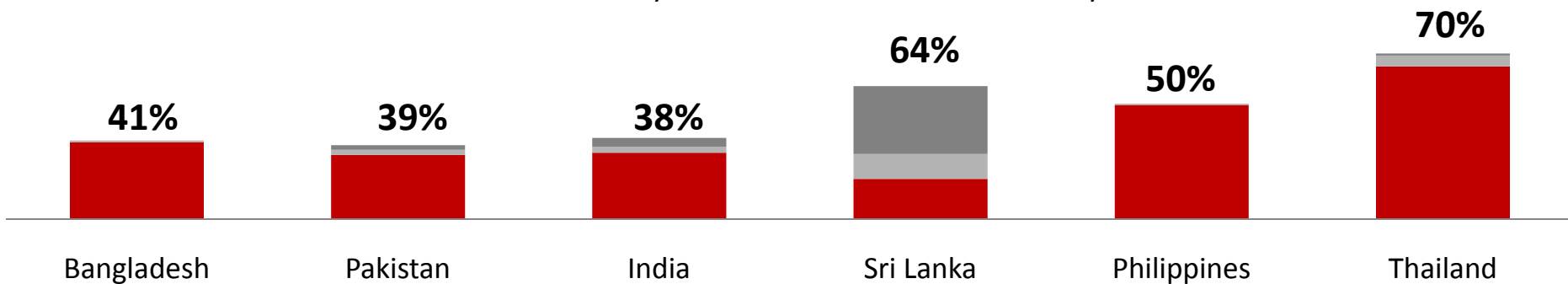
Urban-rural divide in phone ownership (urban:rural)



Most own a mobile

Phone ownership (% of BOP)

■ Mobile only ■ Mobile + fixed ■ Fixed only

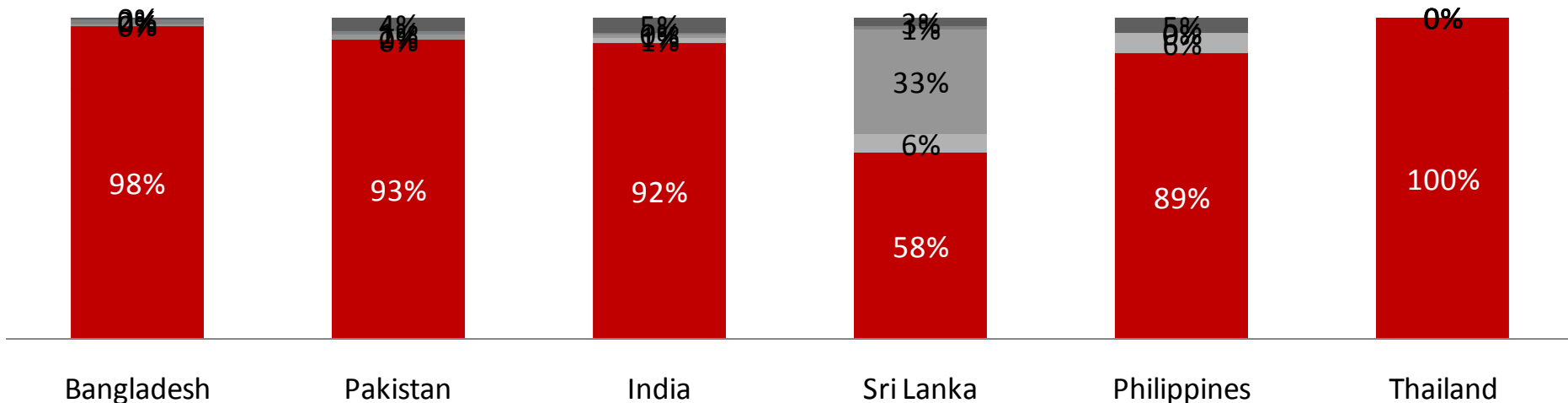


- LK “fixed” = mostly CDMA

Many non-owners planned to get connected within 1 year from survey; mostly to mobile

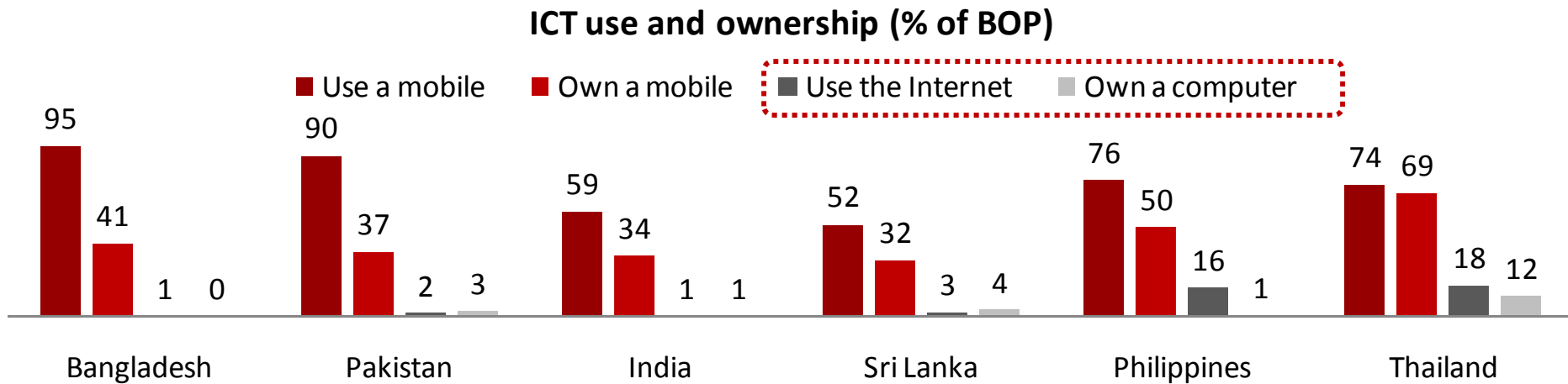
Type of phone planning to buy (% of potential BOP owners)

■ Mobile ■ Fixed (wireline) ■ Fixed (wireless) ■ Fixed (undecided) ■ Not decided



- Many would like to get mobiles with coloured screens, cameras, radios and torches
 - Some demand for SMS and MMS capabilities, Internet and Bluetooth in PH and TH

BOP most likely to join the information economy via mobile phones

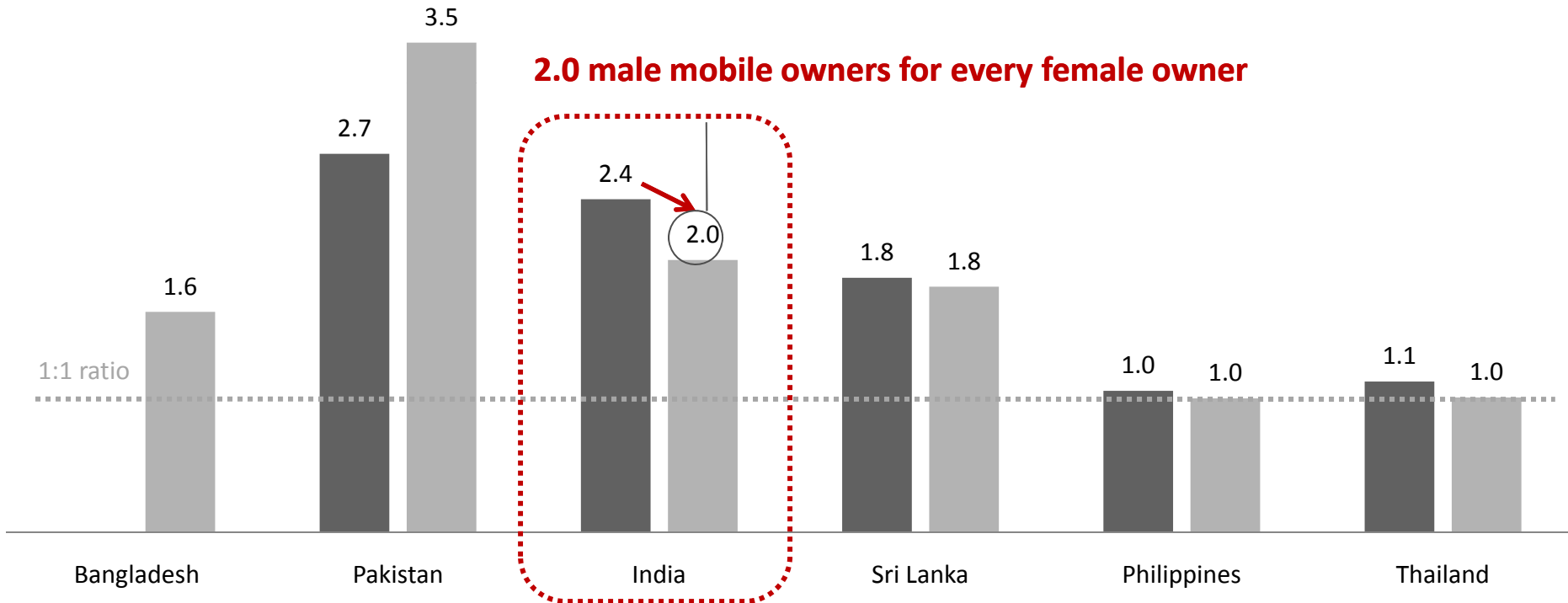


- Many not even heard of the Internet!

Gender divide improving in India

Ratio of male/female use: Mobile as the most frequently used phone

■ 2006 ■ 2008



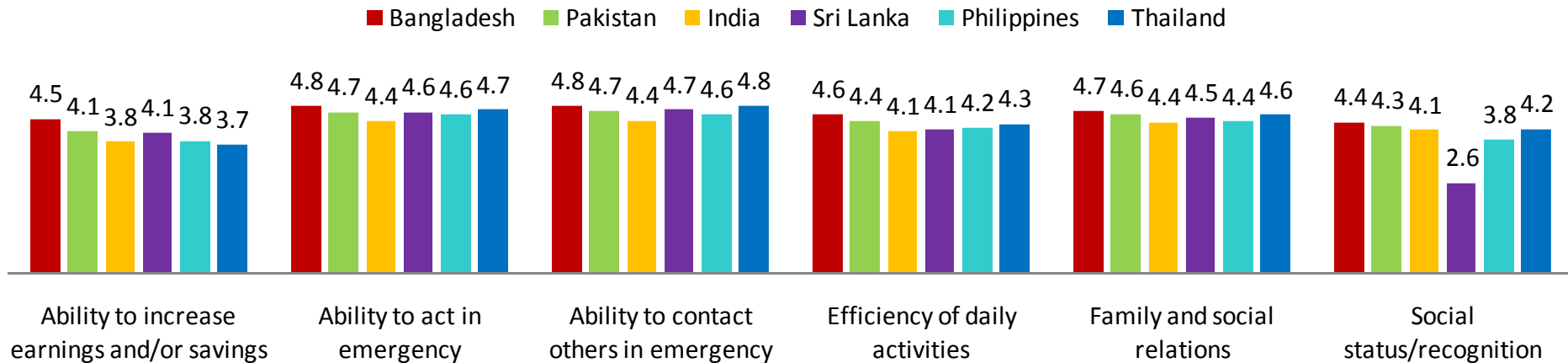
Teleuse@BOP

PERCIEVED BENEFITS

Largest benefits perceived in emergency communication and relationship maintenance

1=worsened 2 = slightly worsened 3=no change 4=slightly improved 5=improved

Perceived benefits of telecom access: General

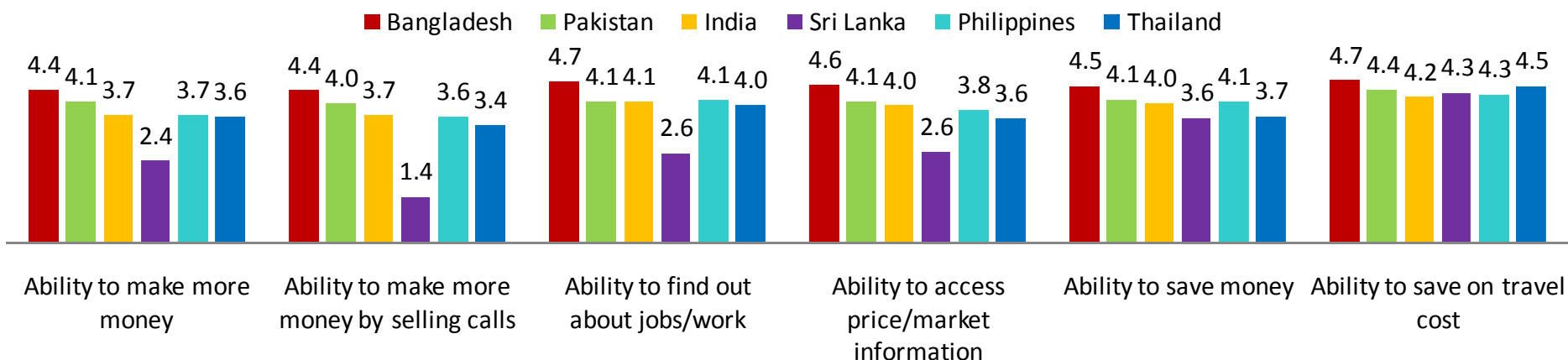


- Emergency communication and maintaining family and social relations most important

Lower perceived benefit on economic factors (though still positive)

1=worsened 2 = slightly worsened 3=no change 4=slightly improved 5=improved

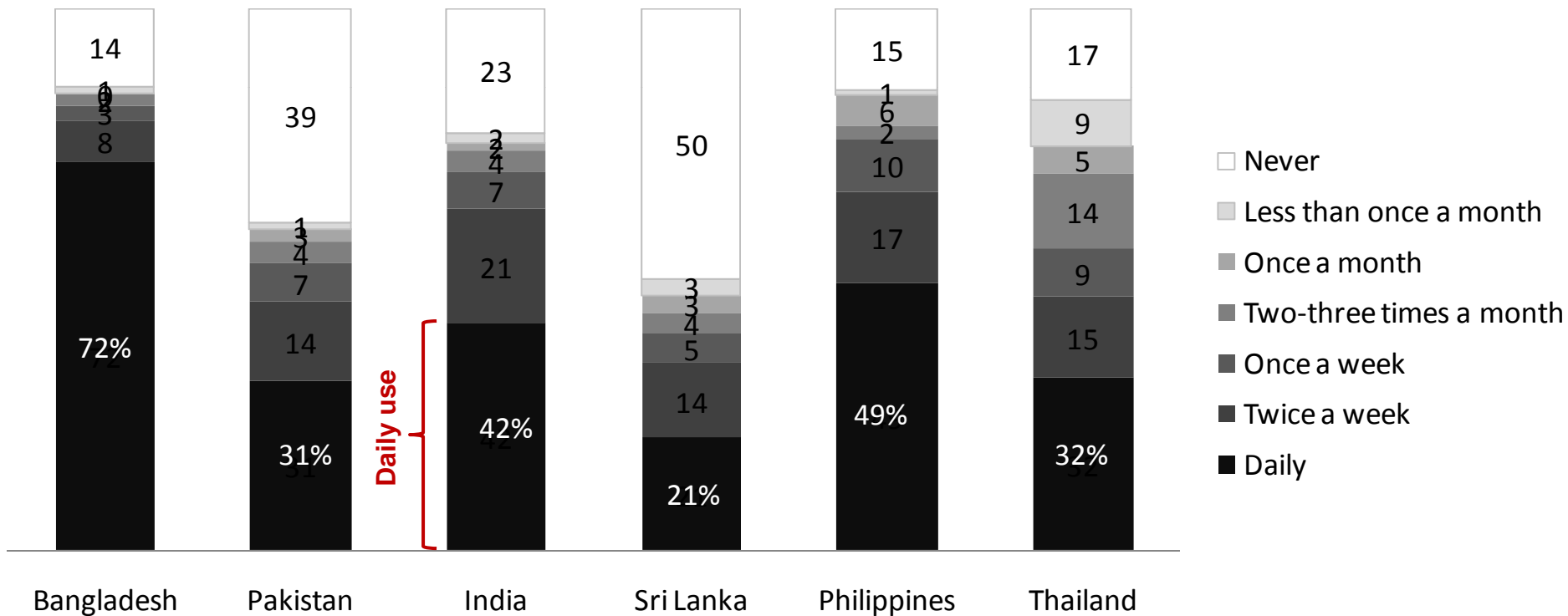
Perceived benefits of telecom access: Livelihood-related



Indians who use the phone for business activities see more benefits in terms of: making more money (also via sale of calls), ability to find out about employment, save money, improve efficiency of daily work

High use of mobiles for productive purposes (77%)

Use of the phone for financial, business or work-related purposes (% of BOP mobile owners)



Zayed | Shopkeeper

21 years | Sonargaon, Bangladesh

- Obtained mobile to expand business.
- Mobile has helped him reduce travel time and cost, remotely coordinate matters at the shop, increase business and expand business network.
- His accumulated monetary and time savings allowed him to start a poultry business; buying live chickens and selling them from his shop.
- More vendors contact him when new products are available now, allowing him to expand his line of products with little effort.
- Reduced dependence on an auto rickshaw driver for travel for stocks; in turn the latter's dependence on Zayed for information has increased
- Can earn revenue by facilitating remittances via mobile phone



Teleuse@BOP

SOCIOECONOMIC DEVELOPMENT VIA MORE-THAN-VOICE SERVICES?

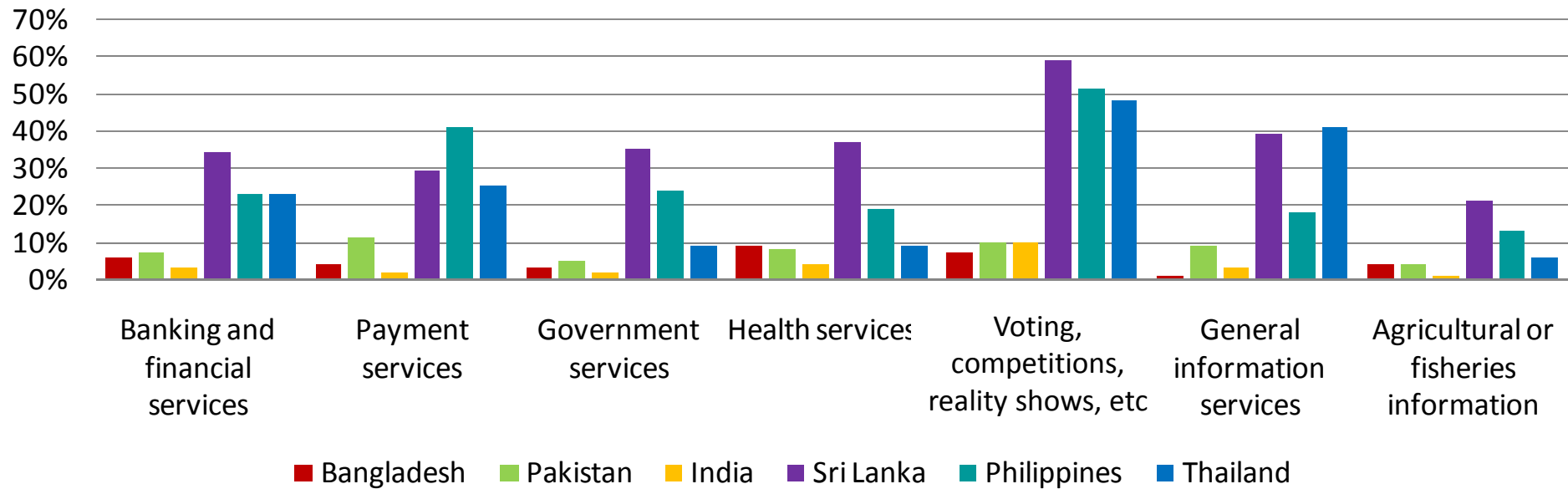
What the BOP does with mobile phones: Currently not much beyond voice and text

Among BOP mobile owners

	B'desh	Pakistan	India	S' Lanka	Ph'pines	T'land
	% of BOP mobile owners					
Taking phone calls	100%	100%	99%	100%	89%	100%
Receiving phone calls	100%	100%	98%	100%	99%	100%
Sending/receiving 'missed calls'	94%	84%	84%	73%	86%	39%
Sending/receiving SMS (text messages)	32%	47%	33%	52%	100%	53%
Sending/receiving MMS (picture messages)	1%	4%	4%	6%	13%	4%
Sending/receiving emails	0%	0%	1%	0%	0%	1%
Browsing the Internet	0%	1%	1%	2%	0%	2%
Taking photos /video clips	4%	2%	1%	8%	4%	18%
To play games (individual)	13%	18%	7%	21%	14%	17%
To play games (interactive)	1%	1%	1%	1%	3%	1%
To listen to the radio	0%	7%	3%	12%	5%	22%
To listen to music (files which you have downloaded or been sent by others, not radio)	4%	5%	3%	7%	3%	22%
To share content that you have created (E.g. ringtones, wallpapers, pictures, games and video clips)	1%	2%	2%	6%	5%	3%
To send or receive or download or upload other content (E.g., ringtones, wallpapers, pictures, games and video clips)	0%	2%	3%	8%	10%	9%
As an organizer (keep appointments, reminders, alarm and clock)	1%	7%	8%	4%	9%	14%
To check my bill / credit balance	11%	40%	25%	50%	3%	39%

Mobile2.0 services: Awareness among BOP is poor in BD, PK and IN

Awareness of services available on phones and computers (% of BOP teleusers)



Mobile2.0 services: Small amount of usage in higher penetration countries

- Awareness among BOP is poor in BD, PK and IN
- Those who use services, use in small amounts.....

	BD		PK		IN		LK		PH		TH	
	Regularly	Not regularly	Regularly	Not regularly	Regularly	Not regularly	Regularly	Not regularly	Regularly	Not regularly	Regularly	Not regularly
Banking and financial services					1%		2%		1%		3%	
Payment services							3%	2%	3%	1%	4%	
Government services							2%		2%			
Health services		1%			1%		8%		1%		2%	
Voting, competitions, reality shows, etc					1%	1%	1%	5%	7%	1%	8%	
General information services		1%	1%				3%		2%	5%	11%	
Agricultural or fisheries information							1%					

Among BOP teleusers who are aware of services

Why don't they use these services?

- Don't know how
- Not applicable to me
- Too expensive
 - When they're available free via other modes
 - Insufficient prepaid credit for transactions
- ...though services that the poor can and want to use are emerging; encouragement via app store models needed

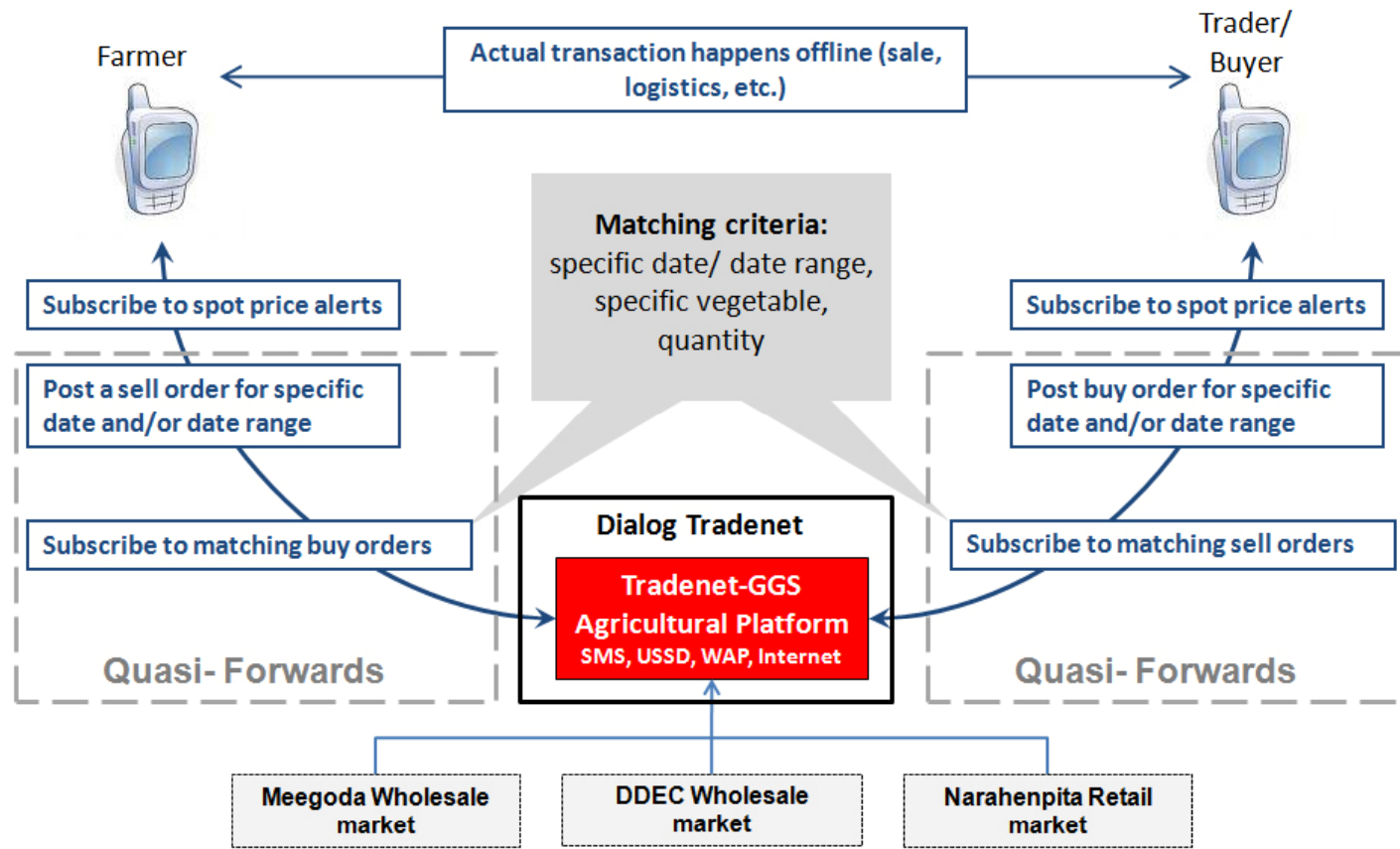
Improving price transparency through Tradenet (tradenet.dialog.lk)

Tradenet:

Partnership between a not-for-profit company called Govi Gnana Seva (GGS) and Sri Lanka's largest mobile operator (Dialog Axiata PLC)

Launched Dec 2009

GGS: main source of wholesale agricultural price information in the country





An SLF assessment of the overall impacts of the service on farmers (over a one year period)

SL Component		Intervention Group	Control Group
Livelihood assets	Financial	An average PREMIUM OF 6.4% on average daily market prices	An average LOSS OF 2.3% on average daily market prices
	Social	Increase in interactions with traders, other farmer groups, relatives and neighbors; increased trust in market negotiations with traders.	No increase in interactions
	Human	Increased knowledge of price trends (their crops + new crops)	No changes noted
Vulnerabilities		Reduced vulnerability to price volatility	Not assessed
Livelihood strategies		<ul style="list-style-type: none"> • Chose harvesting and selling times based on price alerts; • Hoping to leverage their strategic advantage over farmers with lesser price information to grow higher value crops in the short term. 	Not assessed

Prerequisites for "more-than-voice" **mobile** are in place:

- Familiarity with the technology
 - Access and use
 - Easy access via mobiles or CDMA 'fixed' phones is most appropriate
- Ownership
 - Only 40+% in the Indo-Gangetic Plain (world's largest concentration of poor people) own a phone
 - Affordable but sophisticated handsets can aid uptake
- Potential for use of "more-than-voice"
 - SMS is the most popular more-than-voice application
 - Willingness to try new services
 - Payment systems in place: e-reloads as "gateway" to advanced applications

CONCLUSIONS

- Mobiles can contribute to socioeconomic development objectives
 - Access to services (health, govt, information, etc)
 - Livelihood opportunities
- BOP as individuals have low spending power, but, demand for services exists (current and future)
 - Poor Internet access strengthens the mobile proposition
- Services need to be developed to cater to BOP
 - Prerequisites in place
 - Some barriers exist

www.lirneasia.net (search term: BOP)

Full dataset available at <http://lirneasia.net/projects/2008-2010/bop-teleuse-3/>
Photos by CKS Consulting Pvt Ltd