

# How the poor use ICTs: Findings from multi-country studies of Teleuse at the Bottom of the Pyramid

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# Understanding how the poor (those at the bottom of the pyramid) use ICTs through **Teleuse@BOP** studies

- Multi-country studies conducted in 2005, 2006, 2008, 2011
  - Bangladesh, Pakistan , India, Sri Lanka, Indonesia (Java), Philippines, Thailand
  - Quantitative (representative survey) and qualitative research conducted
- Target group: BOP teleusers aged 15-60
  - BOP defined as Socio-Economic Classification (SEC) groups D and E
  - Teleusers defined as having used any phone in previous three months
- Different methodology and target group (USD1.25/day group) in Java

## SEC D+E vs. USD2/day comparison

### Actual population proportions

	Bangladesh	Pakistan	India	Sri Lanka	Thailand
SEC D+E (% of population)	73	59	69	44	33
Less than USD2 per day (% of population)	84	80	74	43	25
Year	2000	2004	2002	2003	2002
Source: World Resources Institute					

Java study used a different method. Represents those making less than USD 1.25/day

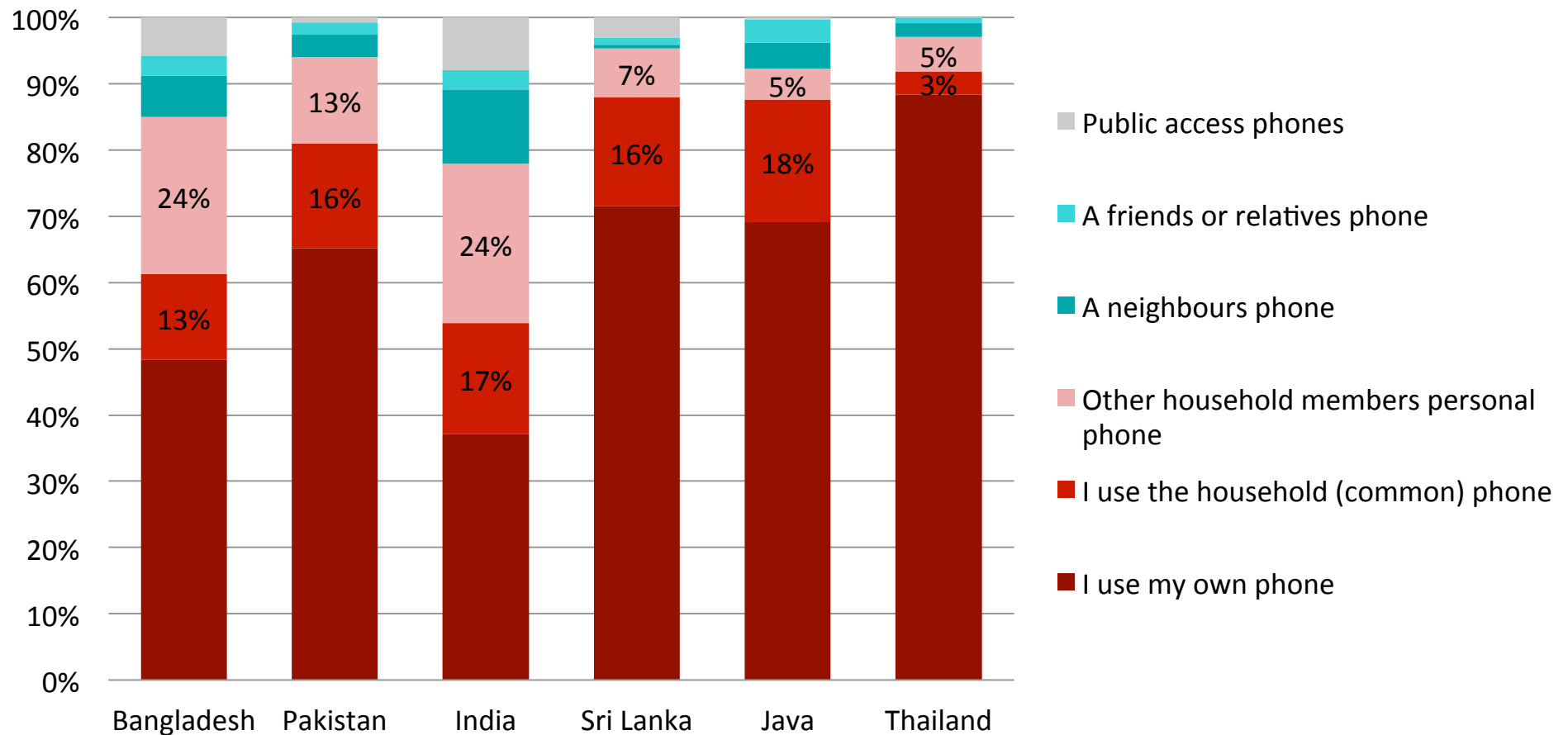
# In 2011, 89-99% of BOP had used a phone in previous 3 months

## Used a phone in the last 3 months (% of BOP)

	Bangladesh	Pakistan	India	Sri Lanka	Java	Thailand
2008	95%	96%	86%	88%	-	77%
2011	99%	96%	89%	90%	90%	91%

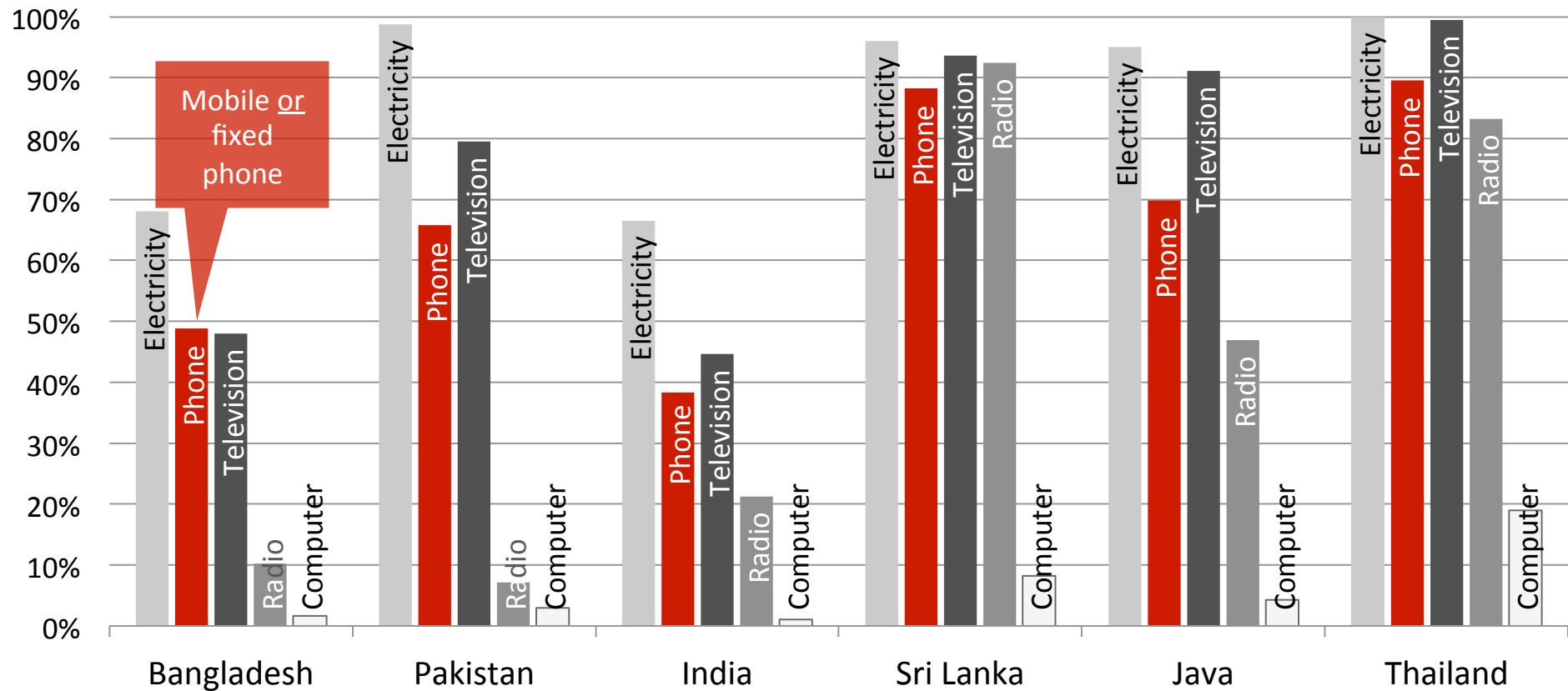
# > 75 % of BOP had access within the household

Most frequently used phone (% of BOP teleusers)



# Phones have overtaken radio at BOP everywhere except LK (but some mobiles are used as radios)

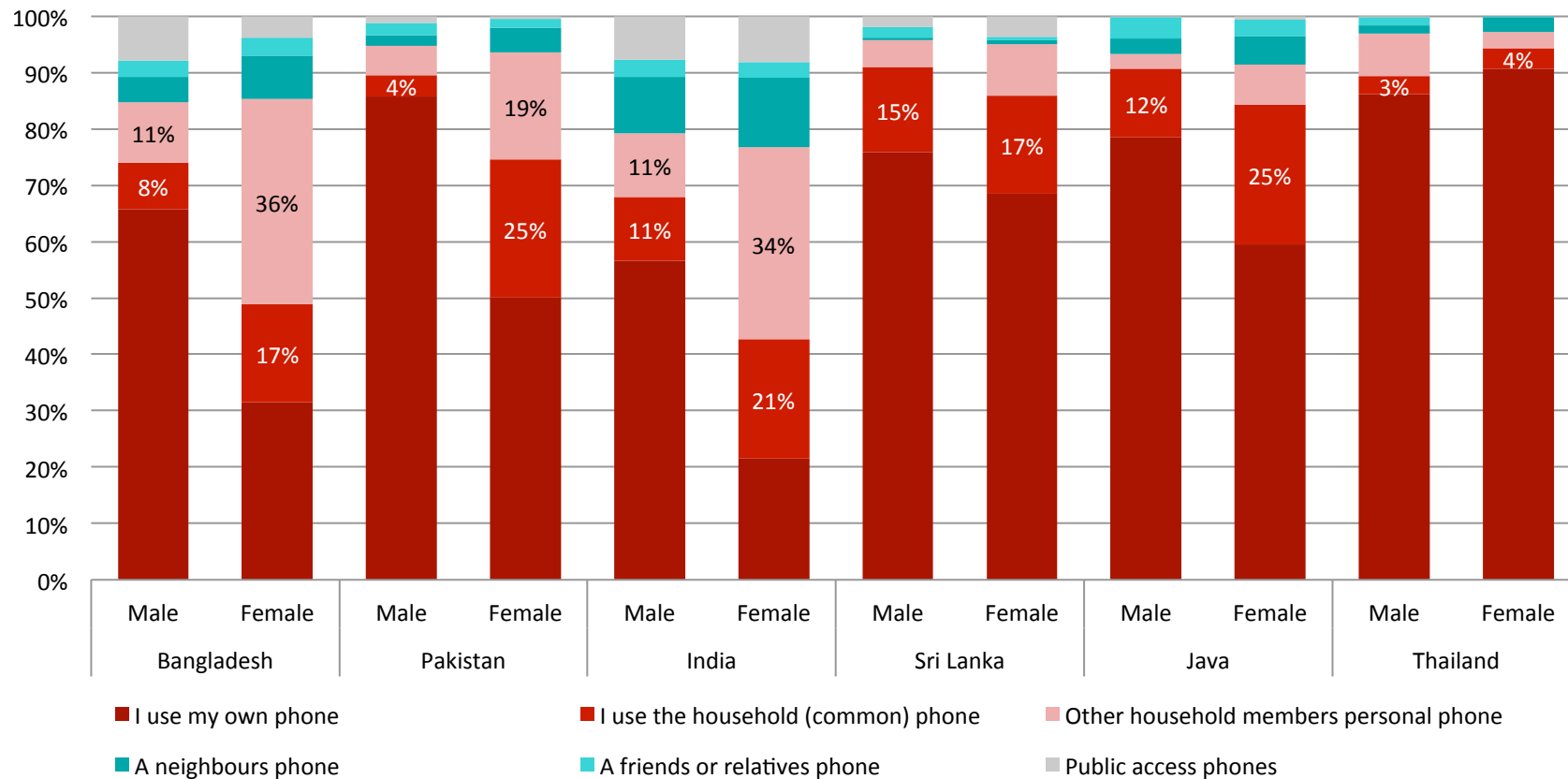
Household access (% of BOP teleusers)



Among BOP teleusers

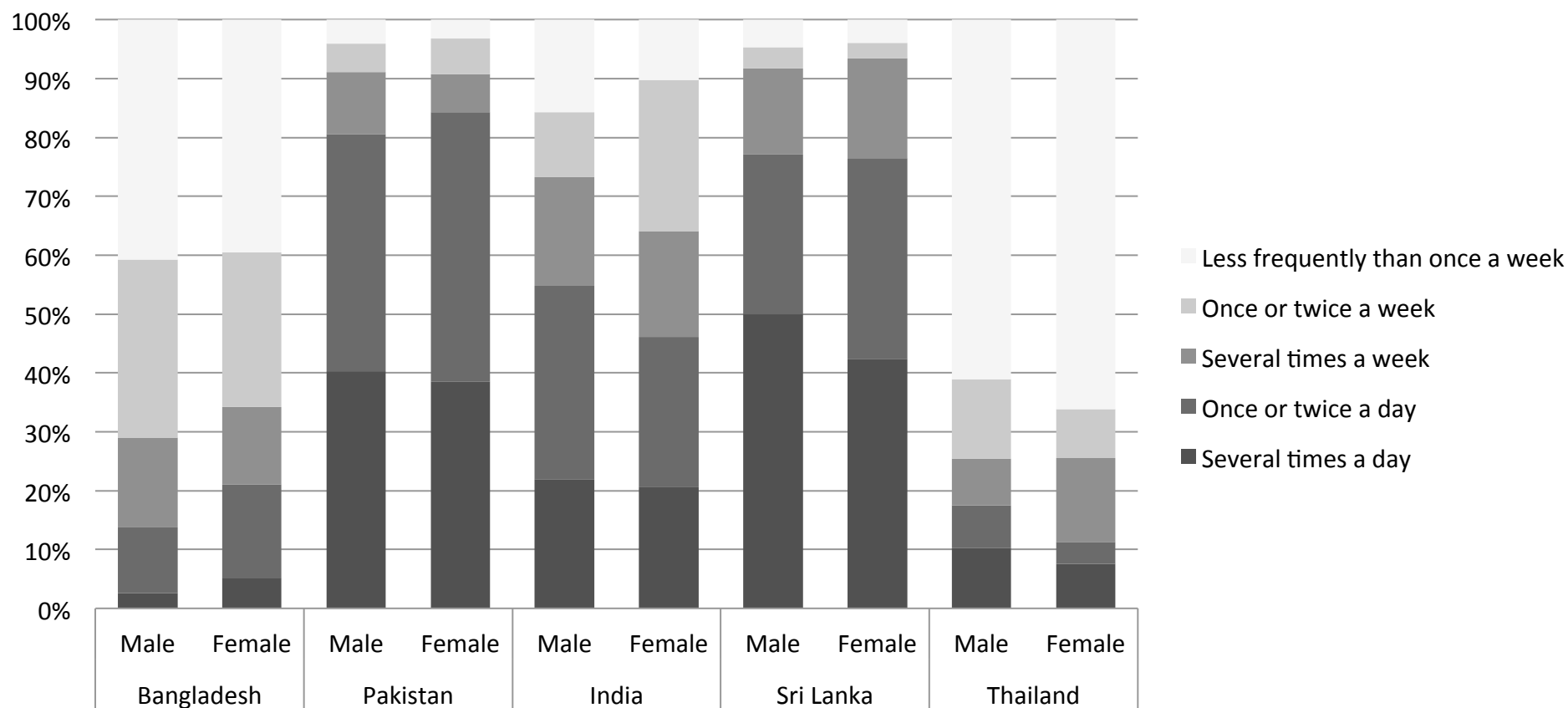
# Male v. female: BOP females depended more on household phones & household members' phones, except in Thailand

Most frequently used phone (% of BOP teleusers)



# Male v. female: No significant difference among those who text at BOP

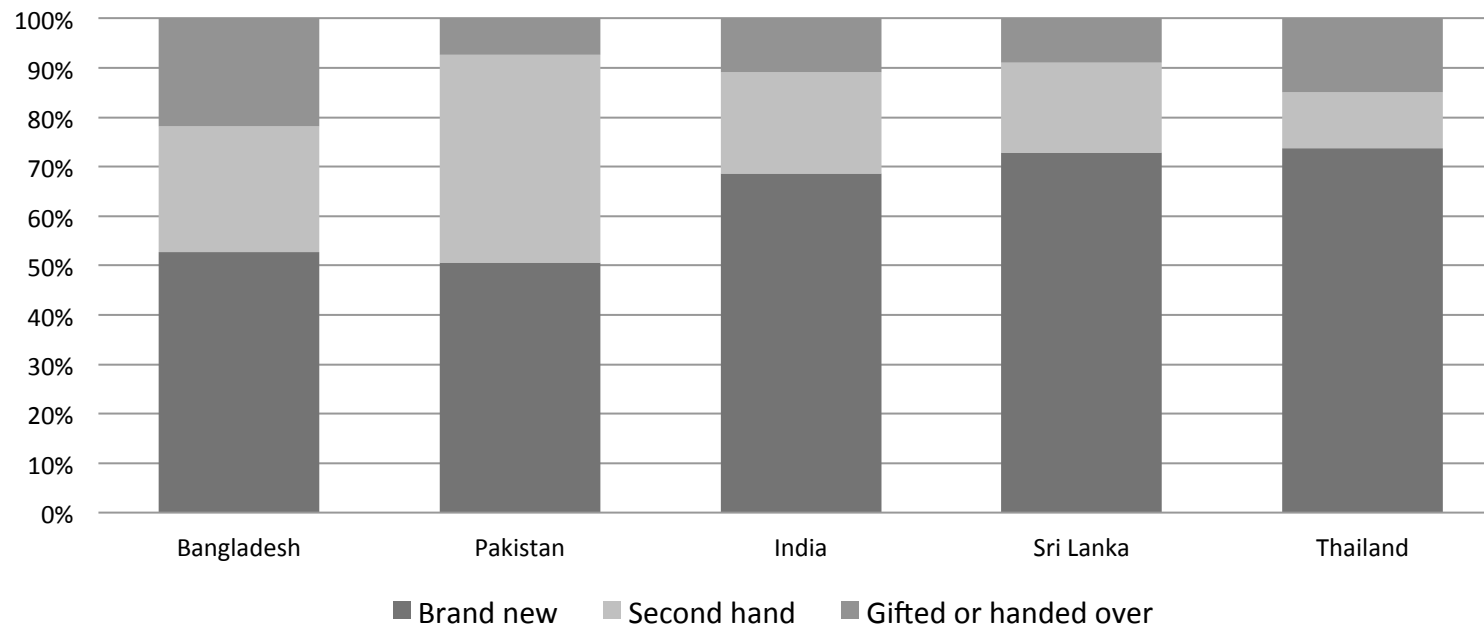
SMS frequency (% mobile owners who use SMS)





# Over 50% of BOP handsets brand new when obtained (PK BOP had highest secondhand use)

How handsets were obtained (%BOP mobile owners)

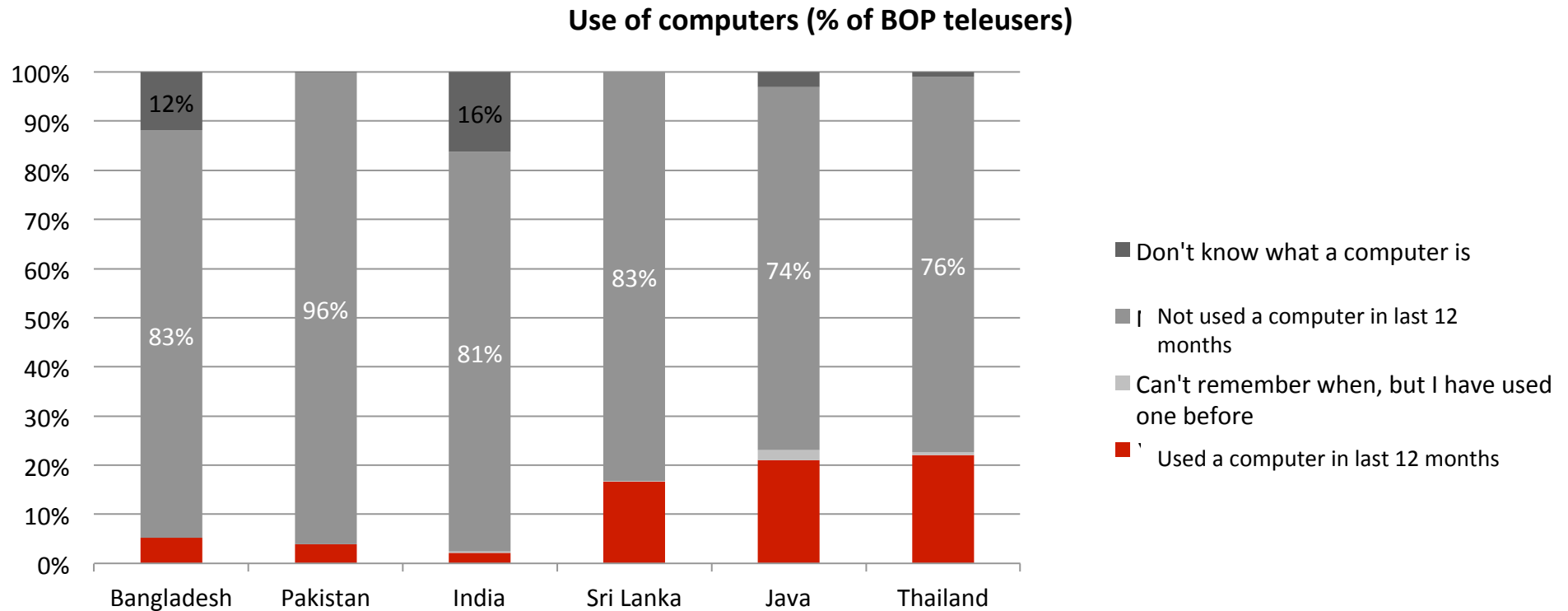


# Thais spend the most on handsets

	Brand new		Second hand	
	Mean	SD	Mean	SD
Bangladesh	44	25	23	12
Pakistan	50	72	23	31
India	51	68	24	15
Sri Lanka	56	31	28	28
Thailand	100	85	47	44

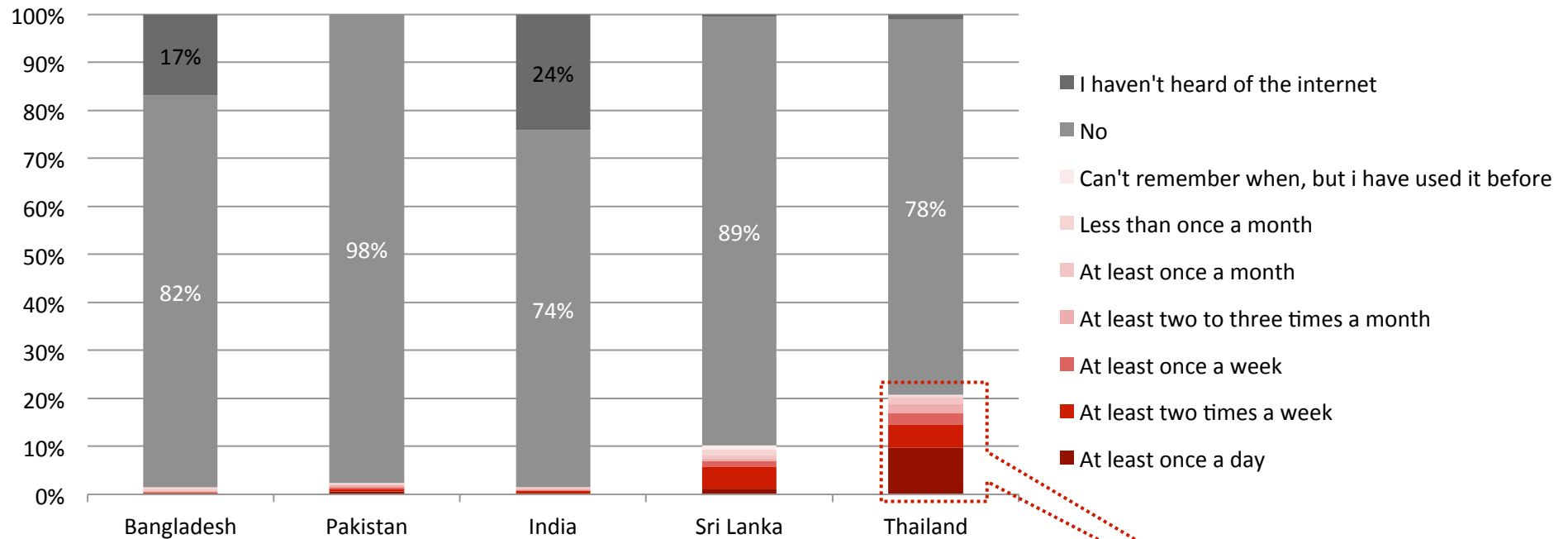
High prices indicate presence of smartphones

# Computer use at BOP low overall



# Internet use at BOP similarly low; significant lack of awareness at Bangladeshi & Indian BOP

Internet use (% of BOP teleusers)



	Bangladesh	Pakistan	India	Sri Lanka	Thailand
Use the Internet (% of BOP teleusers)	2%	2%	1%	9%	21%

# What they do with mobile phones at BOP

Among BOP mobile owners

	% of BOP mobile owners					
	B' desh	Pakistan	India	S' Lanka	Java	Thailand
Make phone calls	100	99	100	99	96	100
Receive phone calls	100	95	99	100	94	99
Send/receive missed calls	86	71	78	65	54	24
Send/receive SMS	19	38	23	55	89	37
Send/receive MMS	1	2	3	5	14	8
Send/receive e-mail				1	3	2
Browse the Internet	3		1	1	10	5
Take photos/video	19	7	8	14	26	19
Play games	27	21	18	11	31	16
Listen to radio	13	15	12	17	26	18
Listen to music	25	5	15	8	26	30
Share that you have content created	1	1	3	2	8	3
Send/receive or download/upload other content	1	1	2	2	6	3
Use as an organizer	7	5	8	2	15	8
Check my bill/credit	13	20	11	18	16	3
Send/receive talk time/load	10	5	2	2	35	0
Access facebook	1			1	7	2
Access other social networking or blog applications					2	1

# What they did in 2008

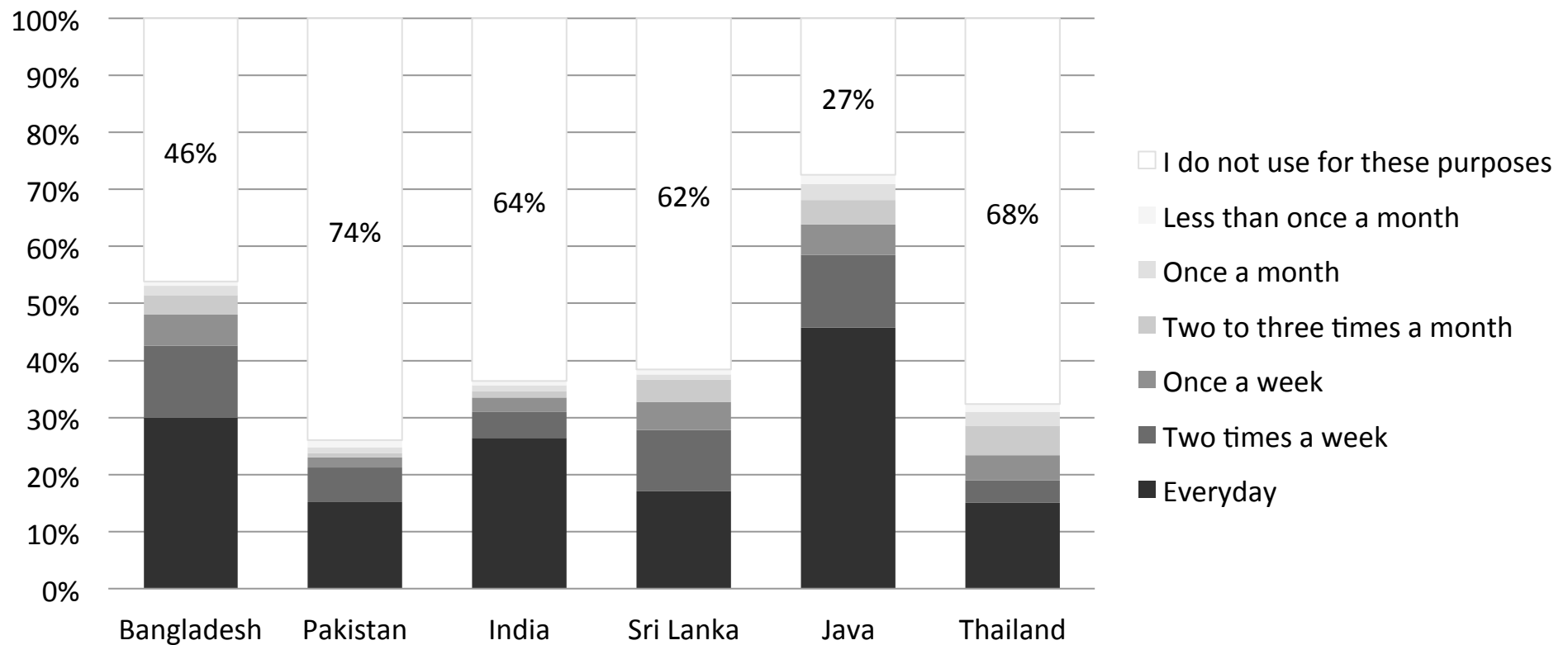
	% of BOP mobile owners				
	Bangladesh	Pakistan	India	Sri Lanka	Thailand
Taking phone calls	100	100	99	100	100
Receiving phone calls	100	100	98	100	100
Sending/receiving missed calls / beeps/ flashes / ring-cuts	94	84	84	73	39
Sending/receiving SMS	32	47	33	52	53
Sending/receiving MMS	1	4	4	6	4
Sending/receiving emails	0	0	1	0	1
Browsing the Internet	0	1	1	2	2
Taking photos /video clips	4	2	1	8	18
To play games by myself	13	18	7	21	17
To listen to the radio	0	7	3	12	22
To listen to music	4	5	3	7	22
To share content that you have created	1	2	2	6	3
To send or receive or download or upload other content	0	2	3	8	9
As an organizer	1	7	8	4	14
To check my bill / credit balance	11	40	25	50	39
Sending/receiving talk-time/load	8	35	7	3	6

## SMS and entertainment more popular among those below 35

	B' desh		P' tan		India		S Lanka		Thailand	
	35 or less	Above 35	35 or less	Above 35	35 or less	Above 35	35 or less	Above 35	35 or less	Above 35
Taking phone calls	100%	100%	99%	99%	100%	99%	100%	98%	100%	100%
Receiving phone calls	100%	100%	95%	95%	99%	99%	100%	100%	99%	99%
Sending/receiving missed calls	87%	84%	74%	65%	82%	71%	77%	49%	32%	17%
Sending/receiving SMS	25%	5%	46%	20%	29%	10%	73%	32%	50%	23%
Sending/receiving MMS	2%	0%	3%	0%	4%	1%	8%	1%	14%	2%
Sending/receiving e-mail	0%	0%	0%	0%	0%	0%	1%	0%	3%	1%
Browsing the Internet	4%	0%	0%	0%	1%	0%	2%	0%	9%	1%
Taking photos/video	24%	7%	8%	5%	10%	4%	20%	7%	29%	9%
To play games	35%	9%	24%	13%	23%	8%	15%	5%	26%	6%
To listen to radio	16%	4%	17%	12%	15%	6%	20%	12%	25%	12%
To listen to music	31%	11%	7%	2%	18%	8%	11%	3%	46%	14%
To share that you have content created	1%	0%	2%	0%	4%	1%	3%	1%	5%	1%
To send/receive or download/upload other content	2%	0%	2%	0%	3%	1%	2%	1%	5%	1%
As an organizer	8%	4%	6%	5%	9%	7%	3%	1%	10%	6%
To check my bill/credit	13%	12%	23%	12%	11%	10%	20%	16%	4%	3%
Sending/receiving talktime/load	11%	9%	6%	3%	2%	1%	2%	2%	0%	1%
To access facebook	1%	0%	0%	0%	0%	0%	2%	0%	4%	0%
To access other social networking or blog applications	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%

# Use of mobiles for financial, business or work communication highest in Java

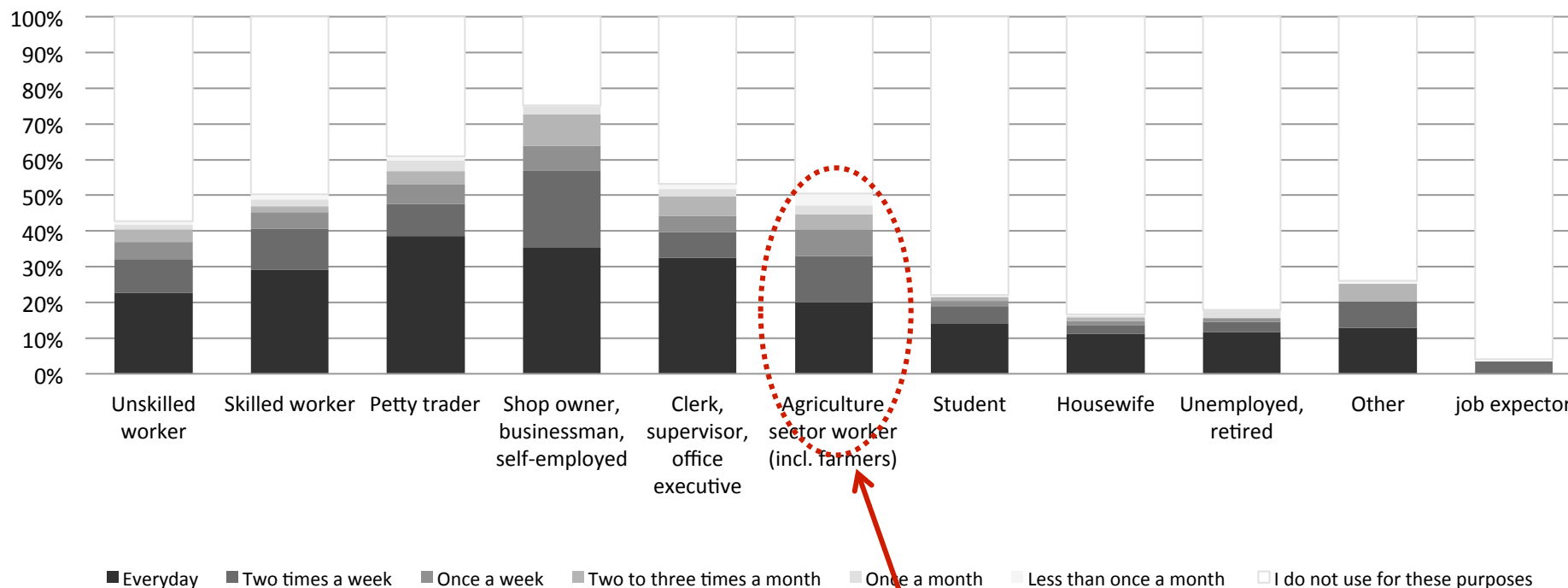
Use of phone for financial, business or work related communications (% of phone owners)





# Business people and petty traders use ICTs for livelihood-related purposes the most

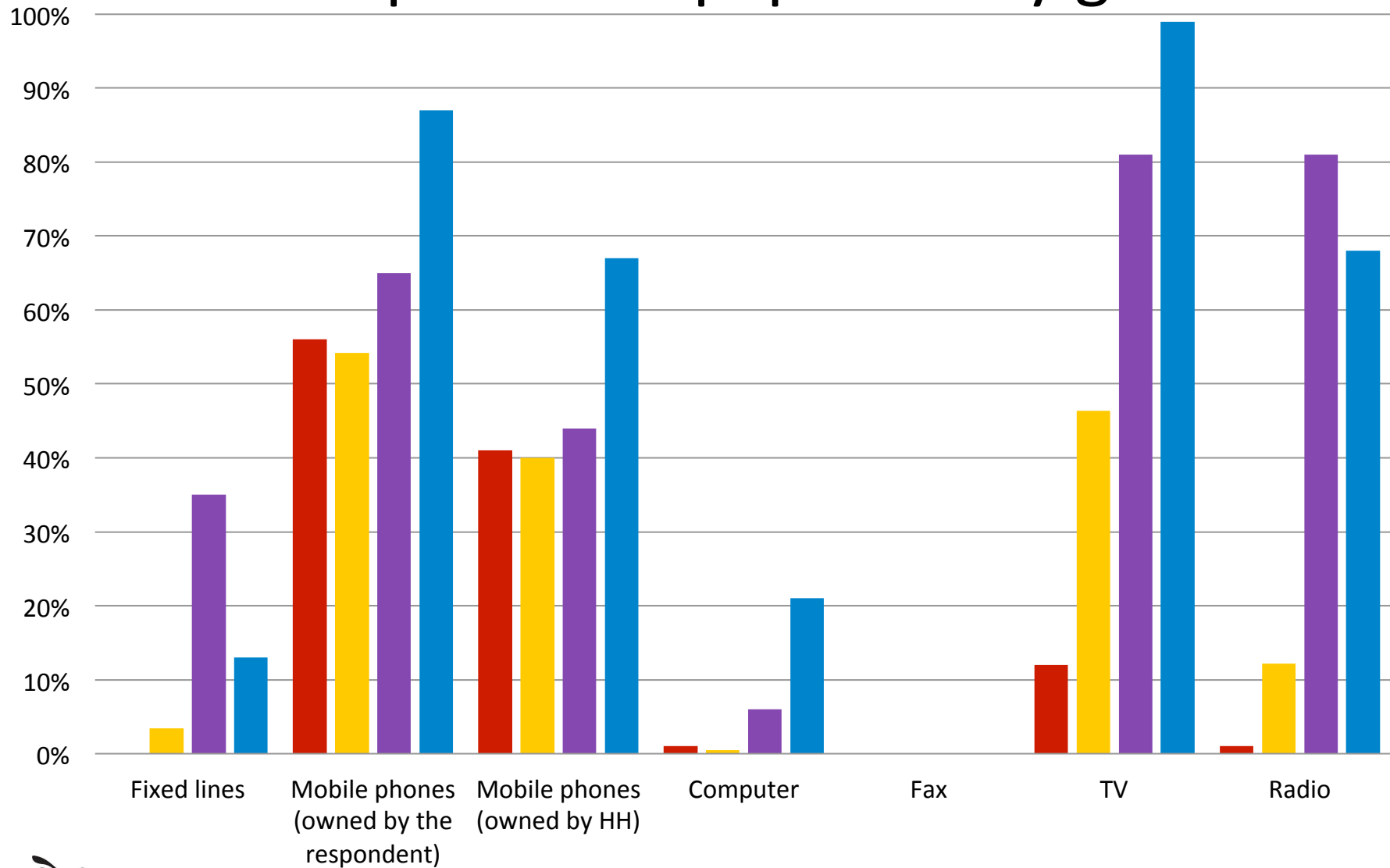
Use of the phone for financial, business or work-related purposes (% of BOP teleusers)



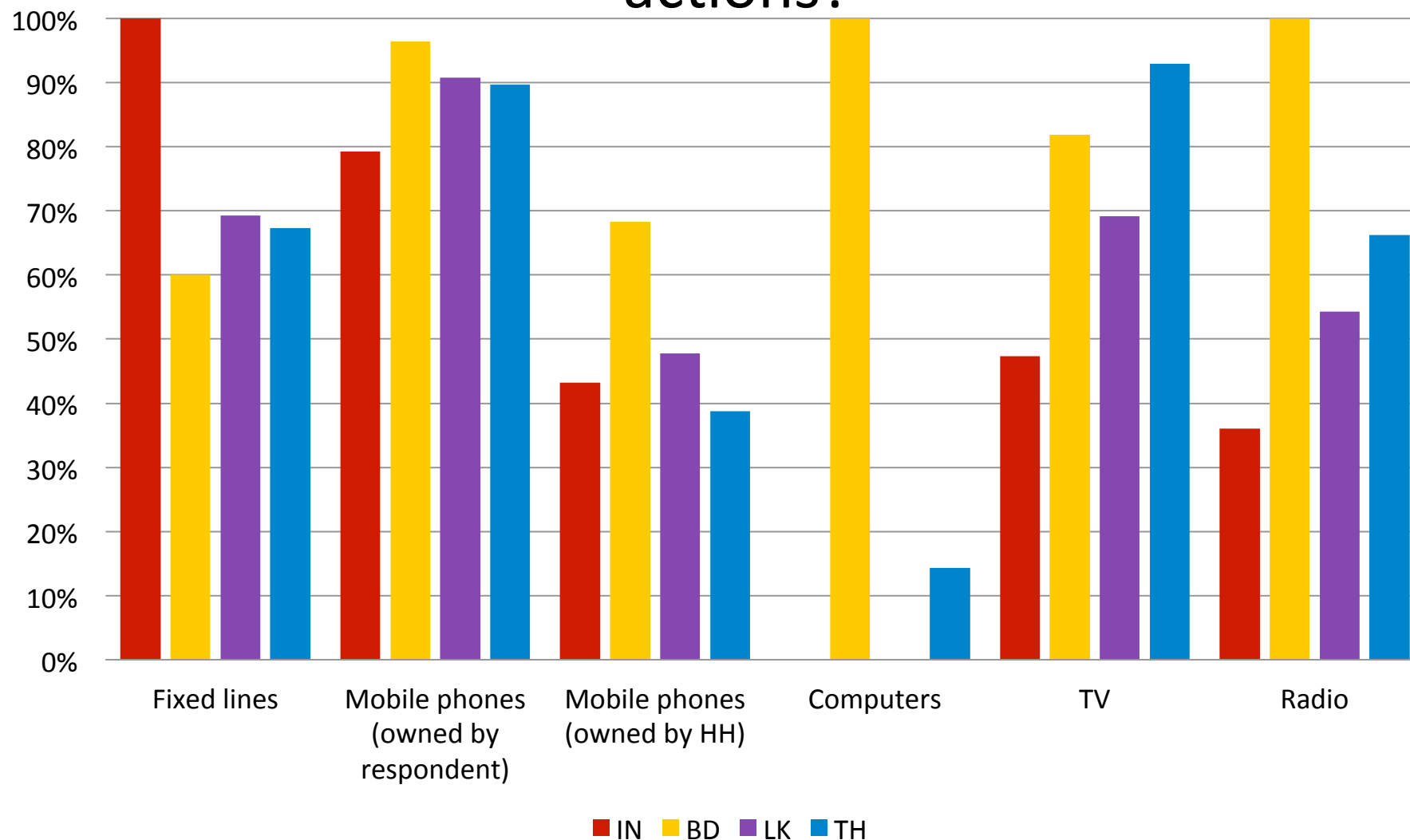
Agriculture sector workers are moderate users: Is it because appropriately designed applications are not available? Or . . .

**DRILLING DOWN . . .**

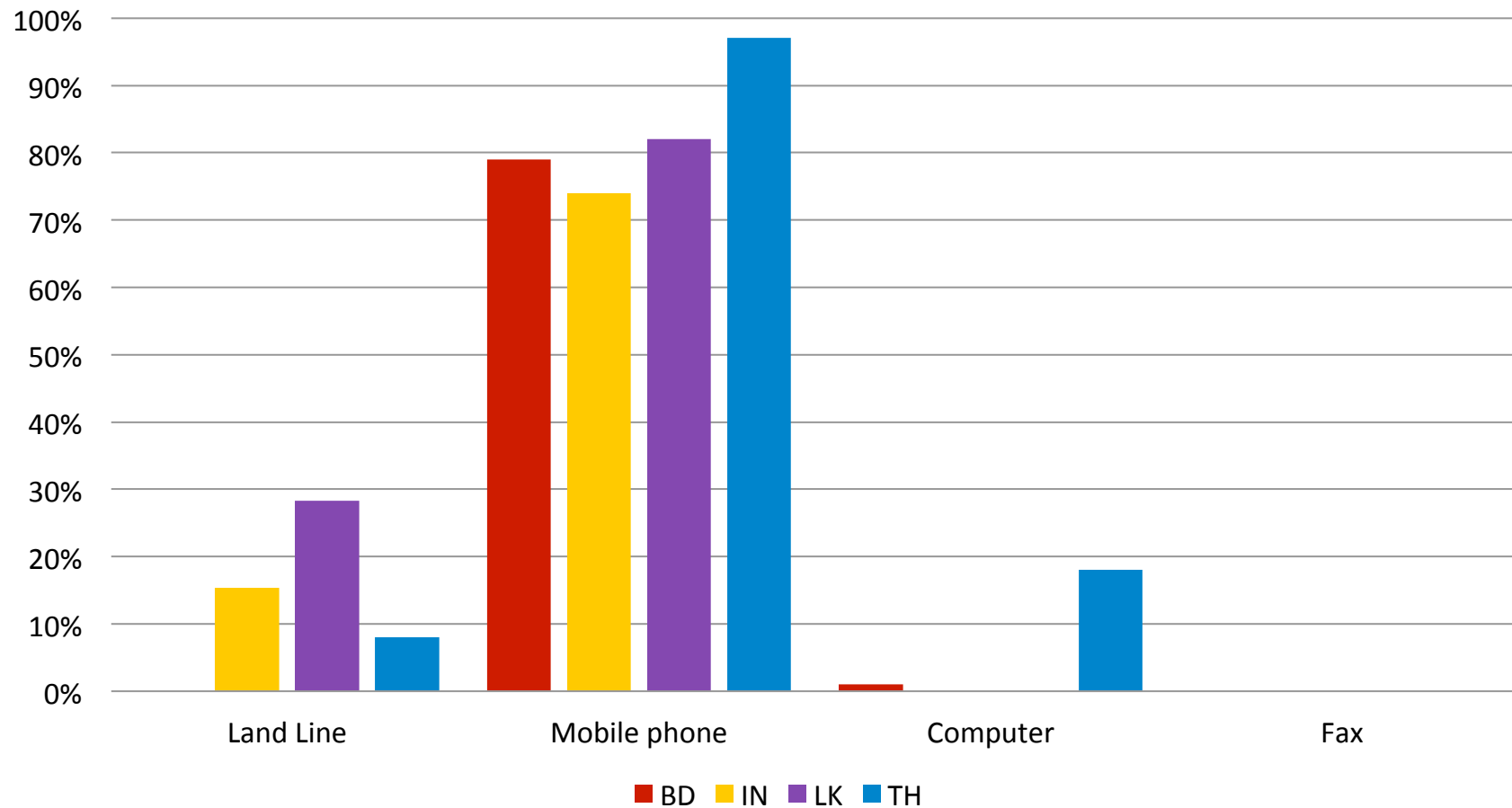
# Ownership of ICT equipment by growers



# What means do they use for livelihood related actions?



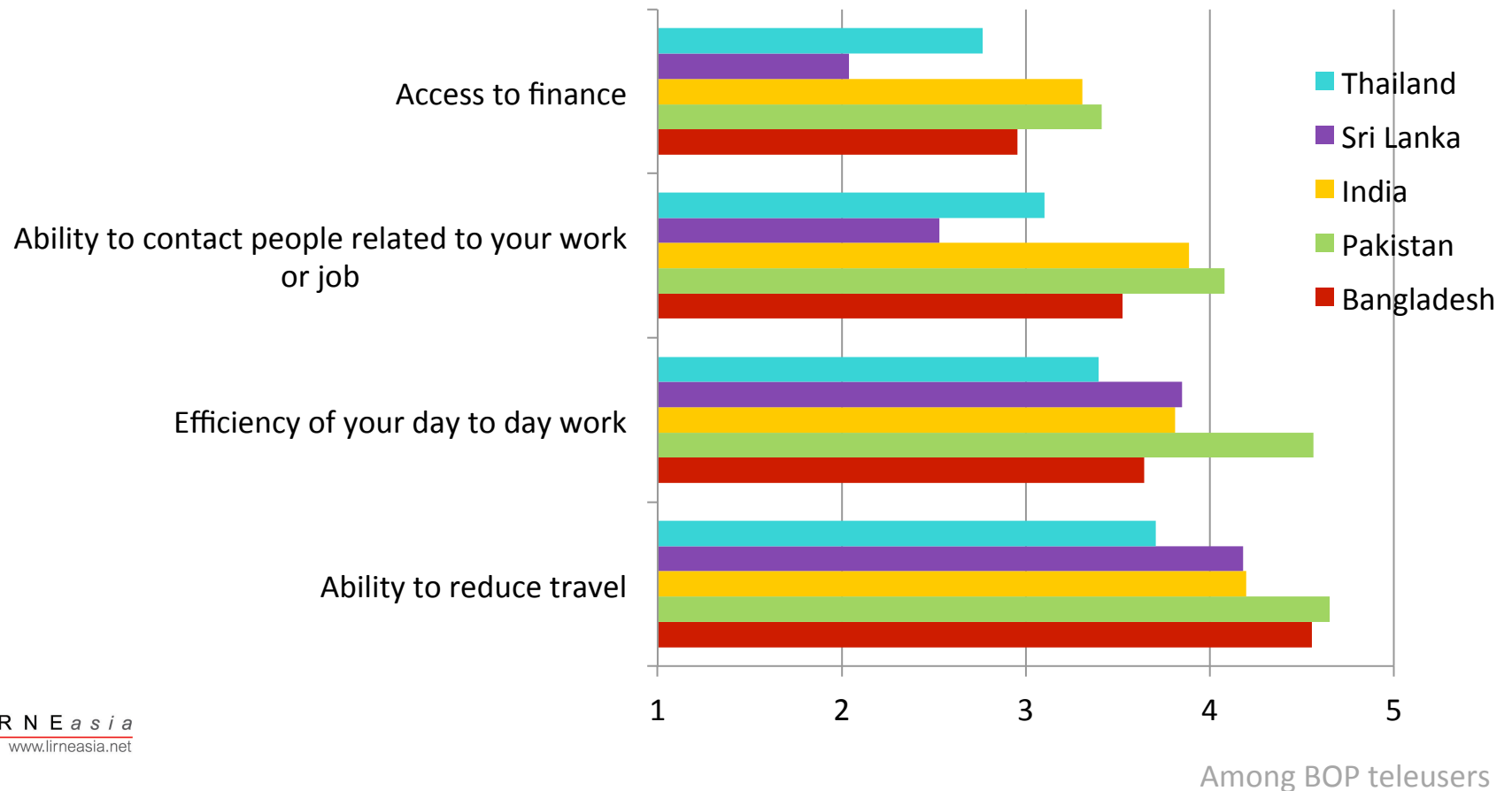
# For non-growers its all about the mobile...



**BENEFITS, AS SEEN BY THE BOP  
(REPRESENTATIVE SAMPLE)**

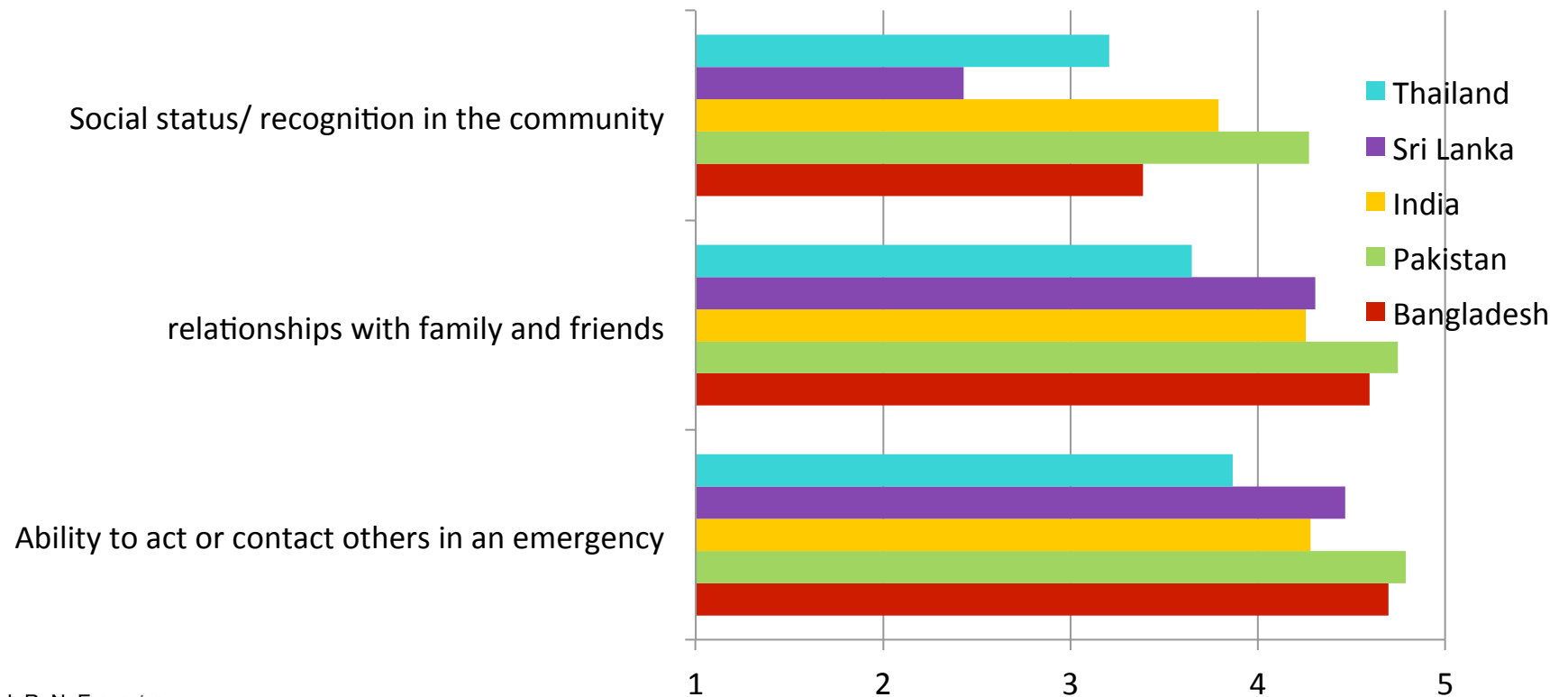
# Main perceived economic benefit is reducing travel

**Benefits of phones (%BOP teleuser)**  
1=No change 5=Improved greatly



# Voice telephony mainly benefits personal life

**Benefits of phones (%BOP teleuser)**  
1=No change 5=Improved greatly

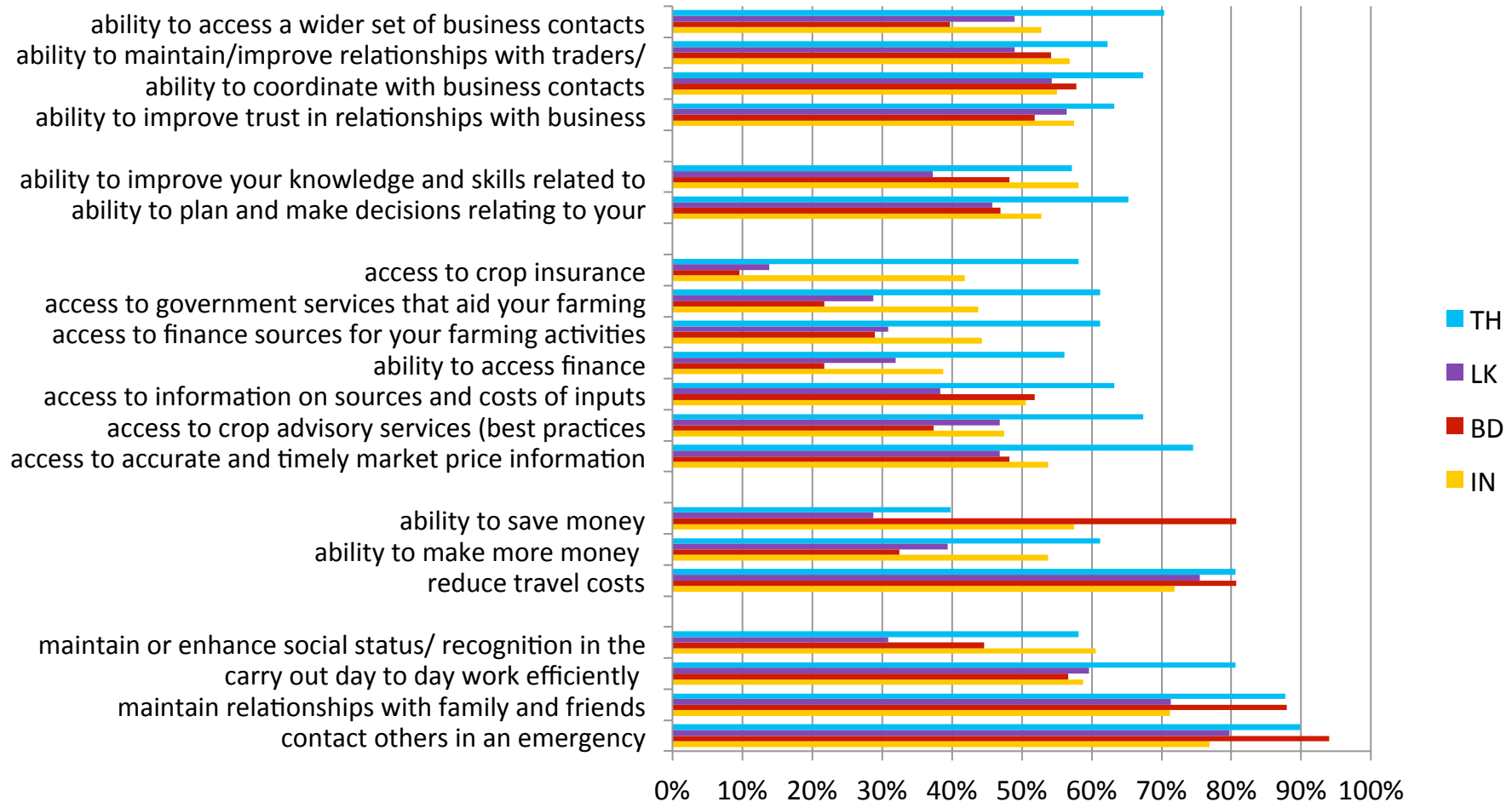


Among BOP teleusers

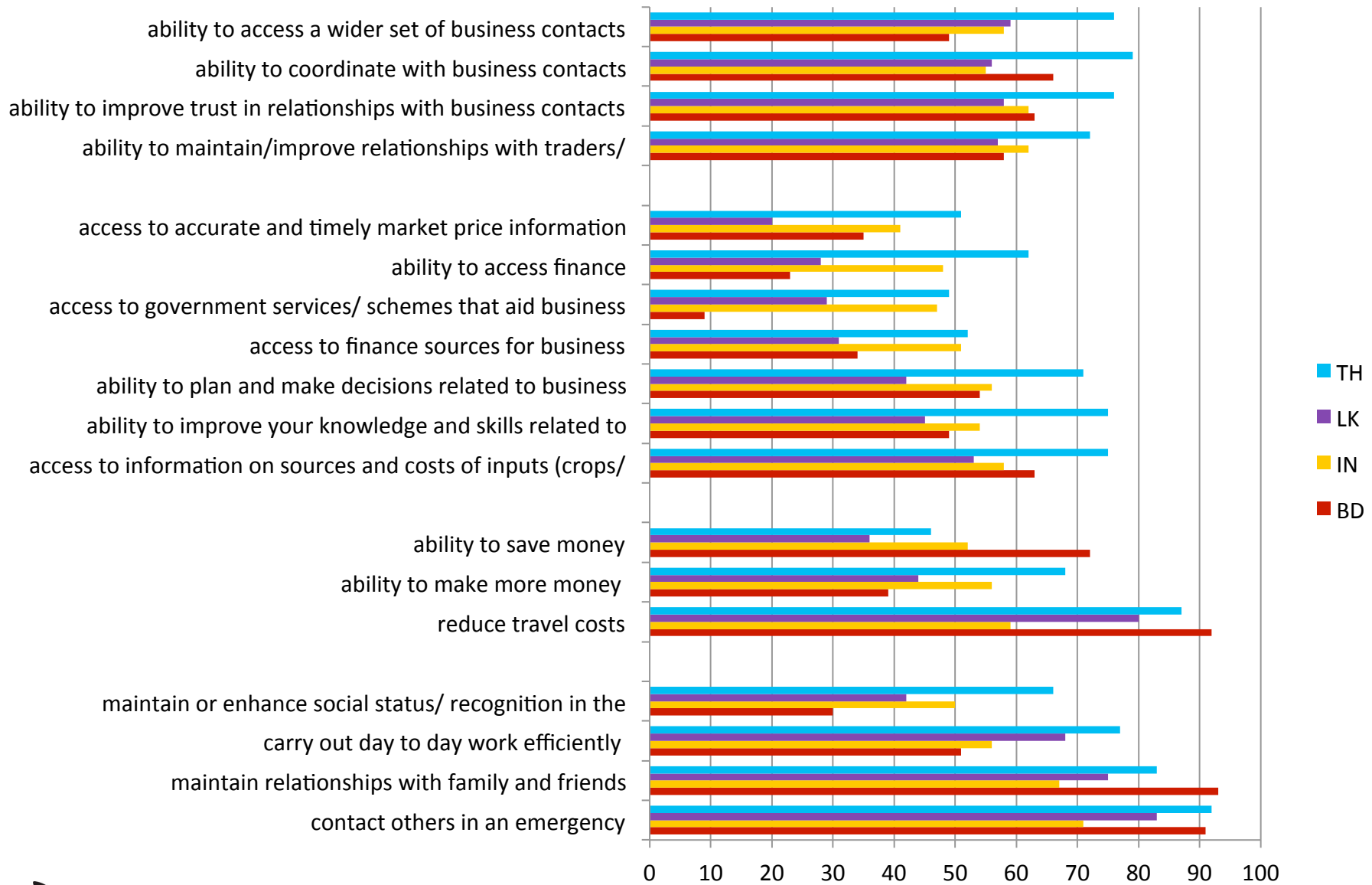


# **BENEFITS NOT VERY DIFFERENT FOR AGRICULTURAL MICRO ENTERPRISES**

# For growers: emergency use, reduced travel costs, relationship maintenance



# Benefits for non-growers?...no different from growers



# In sum

- Mobiles are the pre-eminent communication technology among the poor, and among smallholders & those who interact with them
- Yet, the moderate use of mobiles for livelihood-related purposes in agriculture sector
- More mobile-based applications needed
- Teleuse@BOP studies (qualitative, representative/non-representative, quantitative) since 2004 provide a rich base of data for those designing applications that will help smallholders use the potential of mobile connectivity to improve their lives