Teleuse@BOP

More than voice

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BuzzCity-NUS Digital Media Forum
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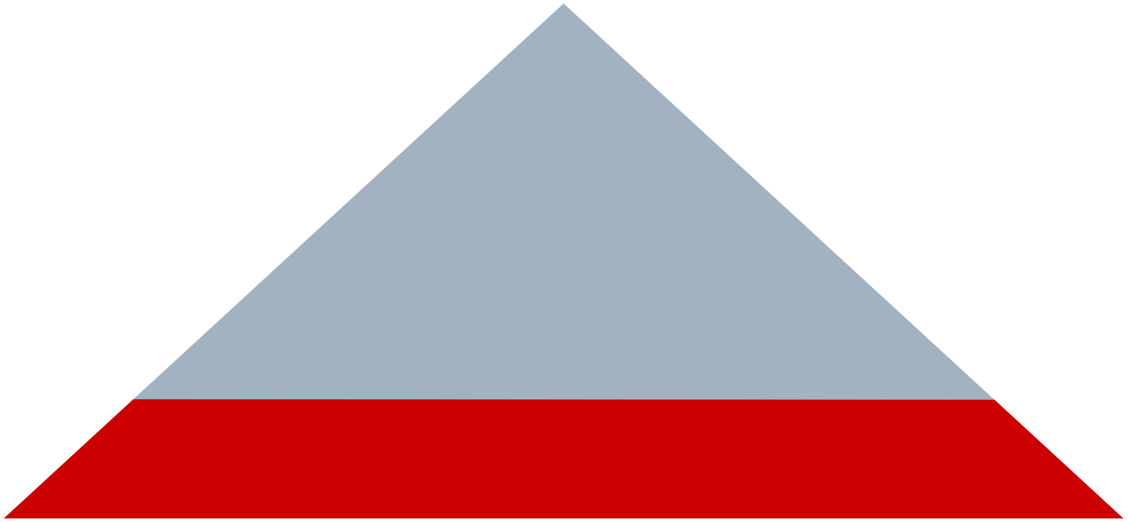
LIRNEasia
Learning Initiatives on Reforms for Network Economies

Bottom of the Pyramid

- Emerging markets are ‘where the action is’
  - The next billion…
- Untapped potential at the ‘bottom of the pyramid’
  - *Fortune at the Bottom of the Pyramid* by C.K. Prahalad
  - NextBillion.net (*Development through enterprise* site hosted by the World Resources Institute)

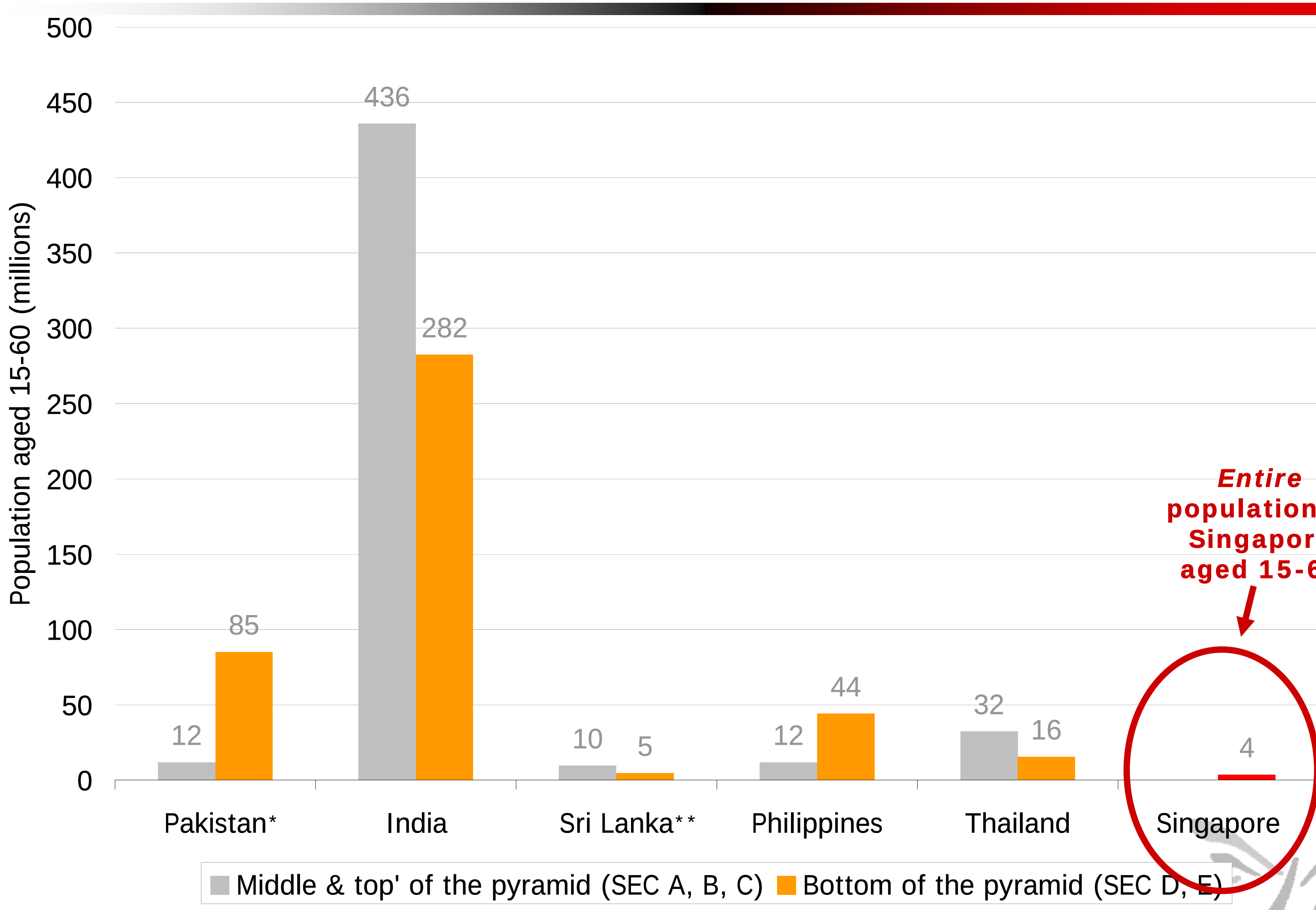


Plan of presentation

- What relevance is the BOP to “high-end” services?
- Methodology and background
- Can the BOP use more-than-voice services?
- What does the BOP use telecom for?
- Non-owners becoming owners: barriers
- In sum . . .

Relevance of the BOP?

How big are the markets in emerging Asia: BOP and TOP?



*excluding FANA/FATA Tribal Areas; **excluding North & East Provinces

Methodology

Methodology

Quantitative

Random sample 8,660 F-to-F interviews; in 5 countries 50% diary

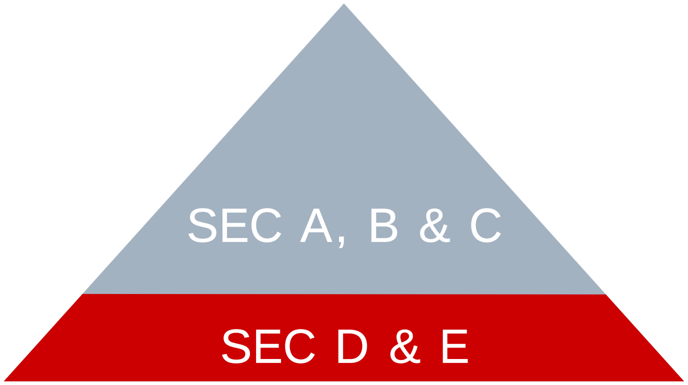
Qualitative

6 Focus Group Discussions per country (30)

Final output

Bottom of the Pyramid (BOP) defined

- Many definitions of poverty, but this study uses SEC D and E; between ages 18-60
  - SEC does not take into account income, but it is closely related to income levels



	Pakistan	India	Sri Lanka	Philippines	Thailand
Population (million)	165	1,095	20	89	64
Target population of study (million)	77*	260	4**	41	15

*excluding FANA/FATA – Tribal Areas; **excluding N&E Provinces

Teleuse@BOP

- ~9,000 sample survey in five countries
  - >6000 BOP telephone users surveyed
  - India, Pakistan, Sri Lanka, Philippines & Thailand
- Understand telecom use at the BOP (= SEC Groups D &E) in Developing Asia
- Representative of <u>target population</u>
  - SEC D&E, ages 18-60

Quantitative sample

SAMPLE	South Asia			South East Asia		TOTAL
	Pakistan	India	Sri Lanka	Philippines	Thailand	
TOP (SEC A, B & C)	731	652	596	92	348	2,420
BOP (SEC D & E)	**1,081**	**3,348**	**481**	**1,008**	**352**	**6,269**
Total	1,812	4,000	1,077	1,100	700	8,689
Error margin at 95 percent CI	2.7%	1.5%	3.0%	3.0%	7.0%	

- BOP segment is representative of the BOP population
  - Diary respondents also representative of BOP
- Small (non-representative sample) taken of SEC groups A, B & C

Prerequisites for more-than-voice?

What are the prerequisites for “more-than-voice”?

- Access and use implies familiarity with the technology
- Access/ownership
  - Is ownership of the terminal necessary?
    - Any conditions under which non-voice applications can be used without individual ownership?
  - How many currently own terminals?
    - What kind of terminals?
  - How many likely to join the ranks of owner-users by 2008?
- Characteristics of owner-users
- What are BOP users now using the phone for? What do prospective BOP owners want to use it for?

Access is surprisingly high ➔ familiarity

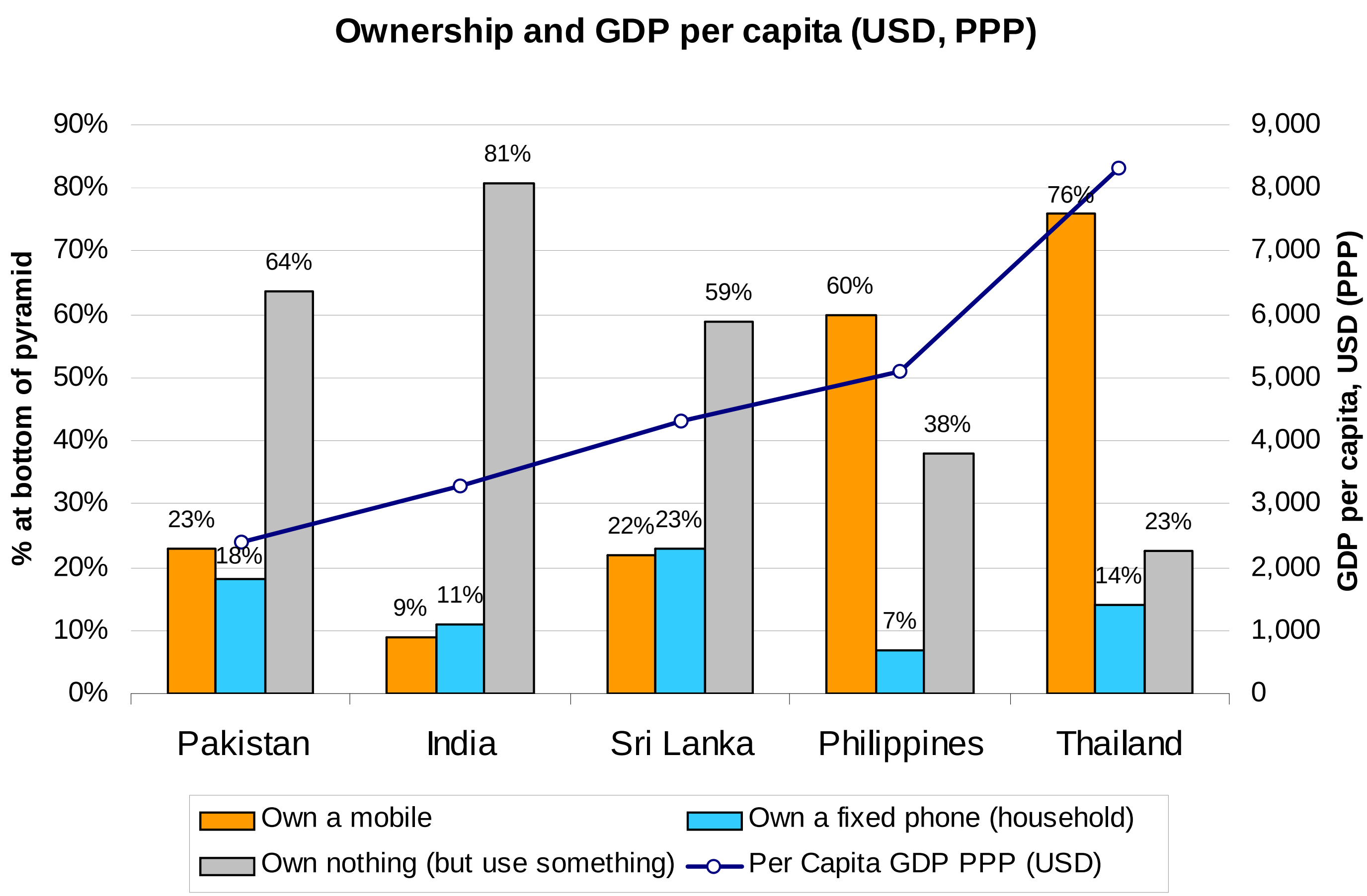
- Most people approached for survey (BOP and other) had used a phone in the last 3 months

	South Asia			South East Asia	
	Pakistan	India	Sri Lanka	Philippines	Thailand
Used phone in last 3 months	98%	94%	92%	93%	95%

"Half the world's population has not made a phone call" was wrong when Kofi Annan said it in 1999; absolutely wrong now

Ownership is not as high

- Especially in South Asia…



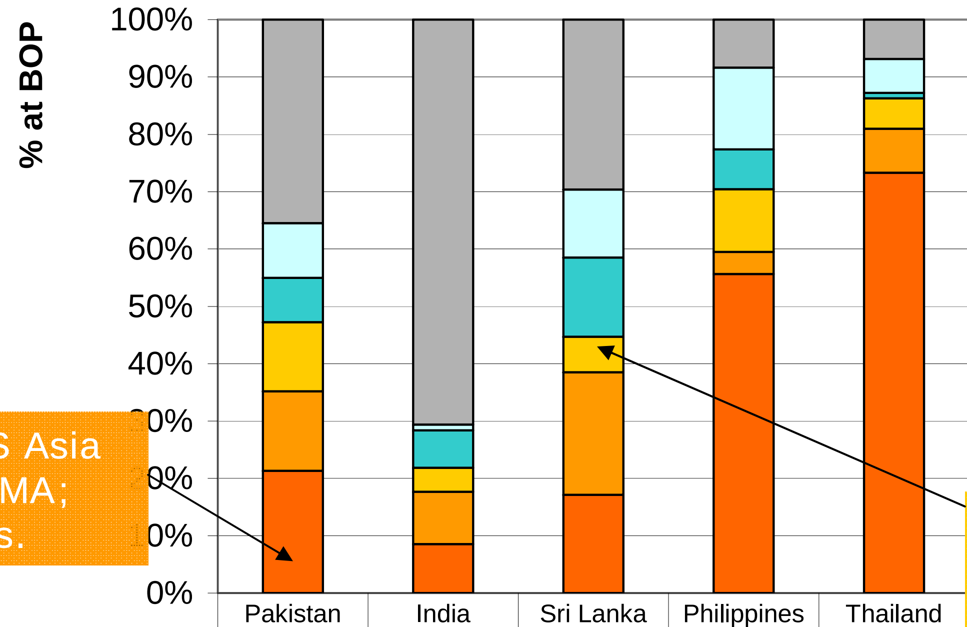
Easy access needed for more-than-voice . . .

- Easy access provided by ownership is important
  - Unlikely that public/shared phones will be used for anything other than basic voice
- Access for more-than-voice, in order of importance
  - Own mobile
  - Household member's mobile
  - CDMA "fixed" phone

Access modes among BOP phone users

- S Asia BOP mainly used public phones; SE Asia mobiles

Most frequently used mode



	Pakistan	India	Sri Lanka	Philippines	Thailand
Public phone	35%	71%	30%	8%	7%
Relative / friend's phone	10%	1%	12%	14%	6%
Neighbours phone	8%	7%	14%	7%	1%
Mobile of another household member	12%	4%	6%	11%	5%
Household fixed phone	14%	9%	21%	4%	8%
Own mobile	21%	9%	17%	56%	73%

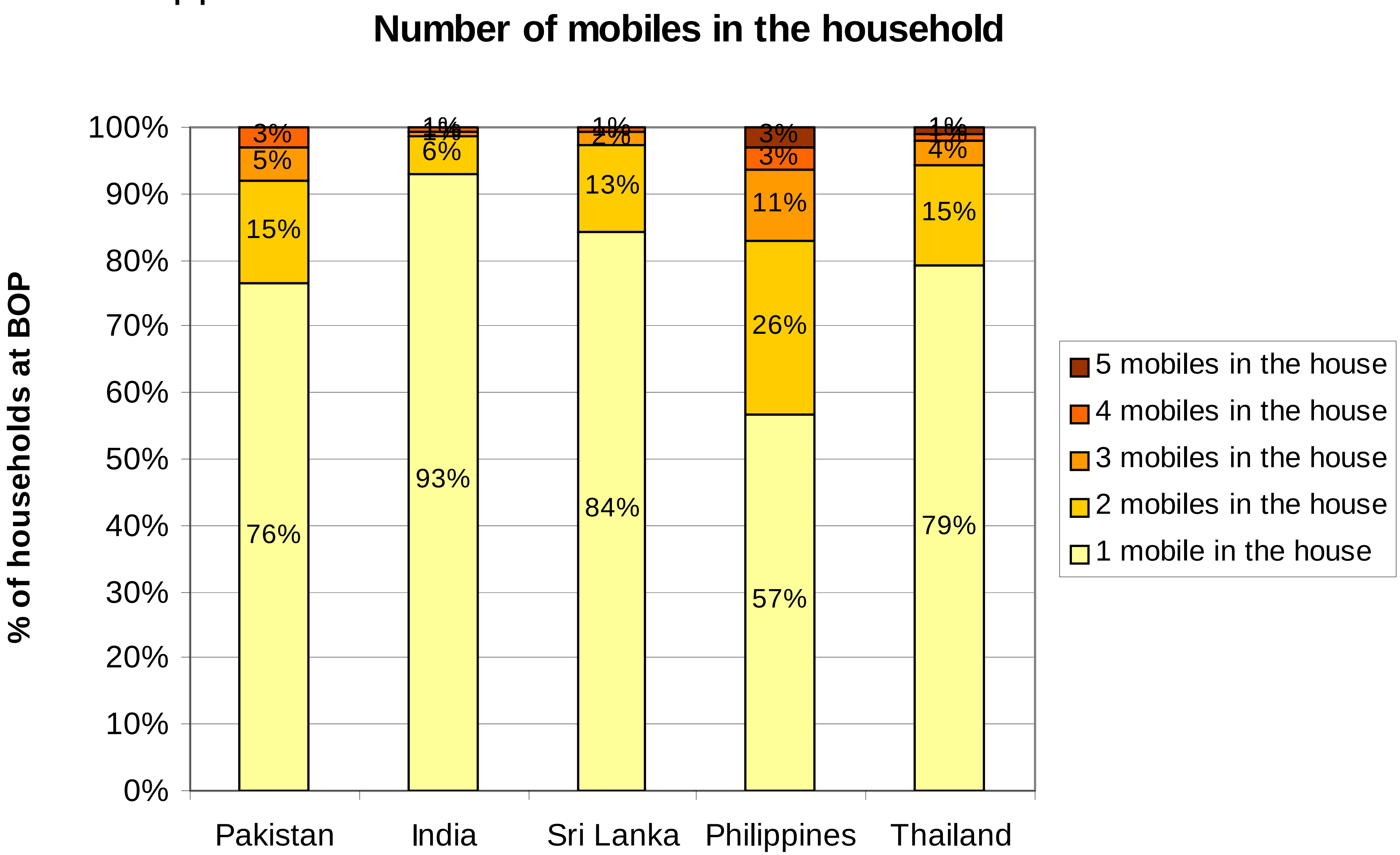
"Fixed" phones at S Asia BOP are mostly CDMA; Mimic GSM features.

Also note that 12% in PK, 4% in IN & 6% in LK use the mobile of another household member

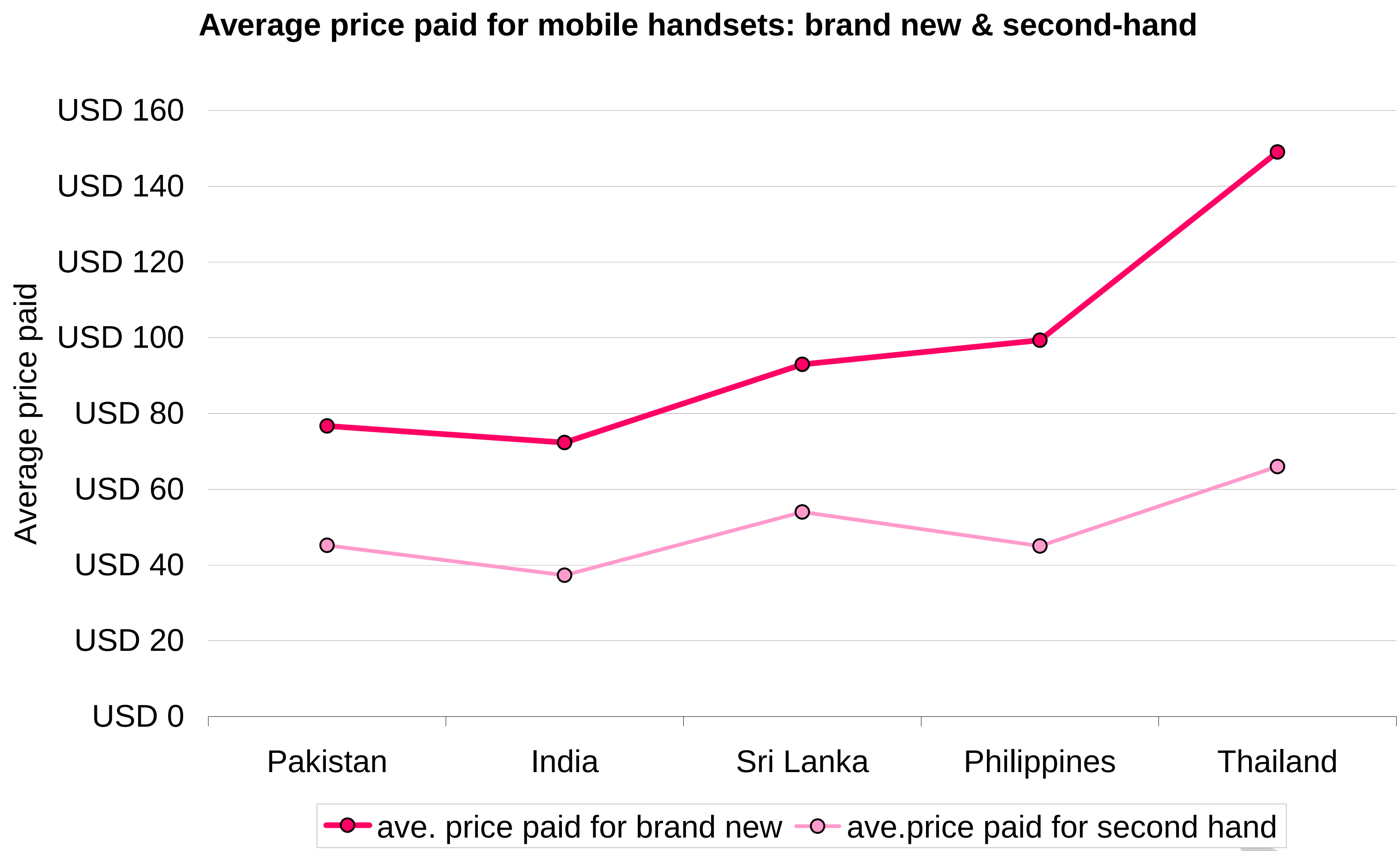
Except in India, combined BOP household use > BOP public phone use

Mobiles in the household

- BOP households have more than 1 mobile, especially in the Philippines

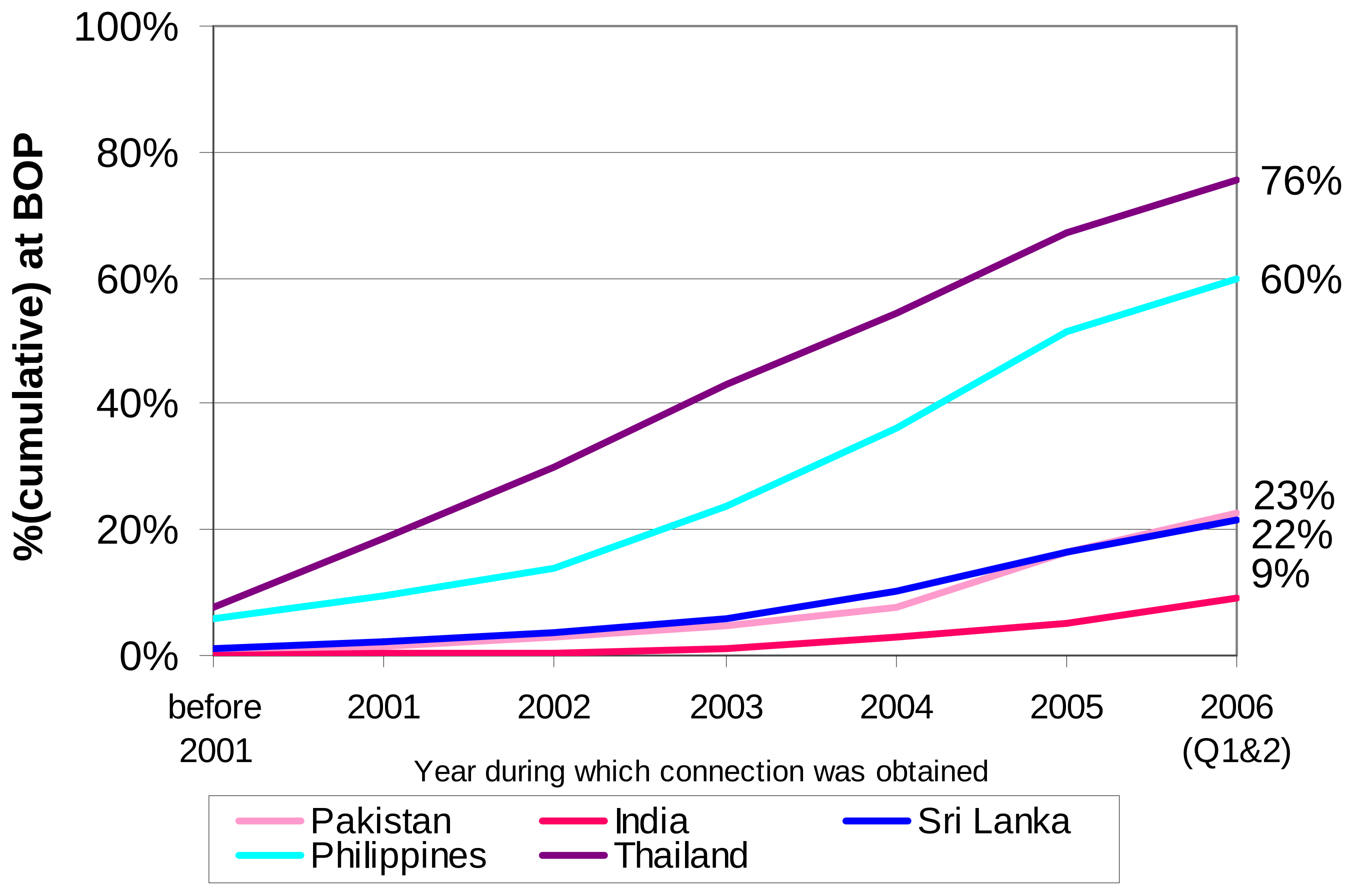


Sophistication of handsets at the BOP: Average cost USD70+



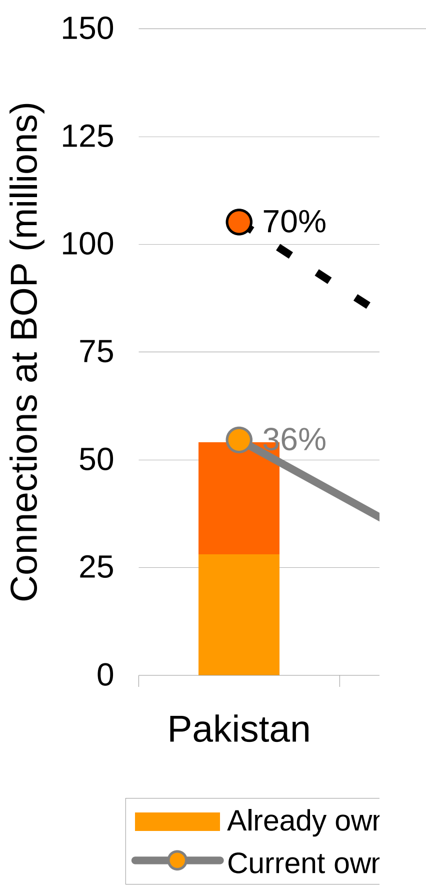
- ☐ 60-70% of mobile owners at BOP use brand-new handsets

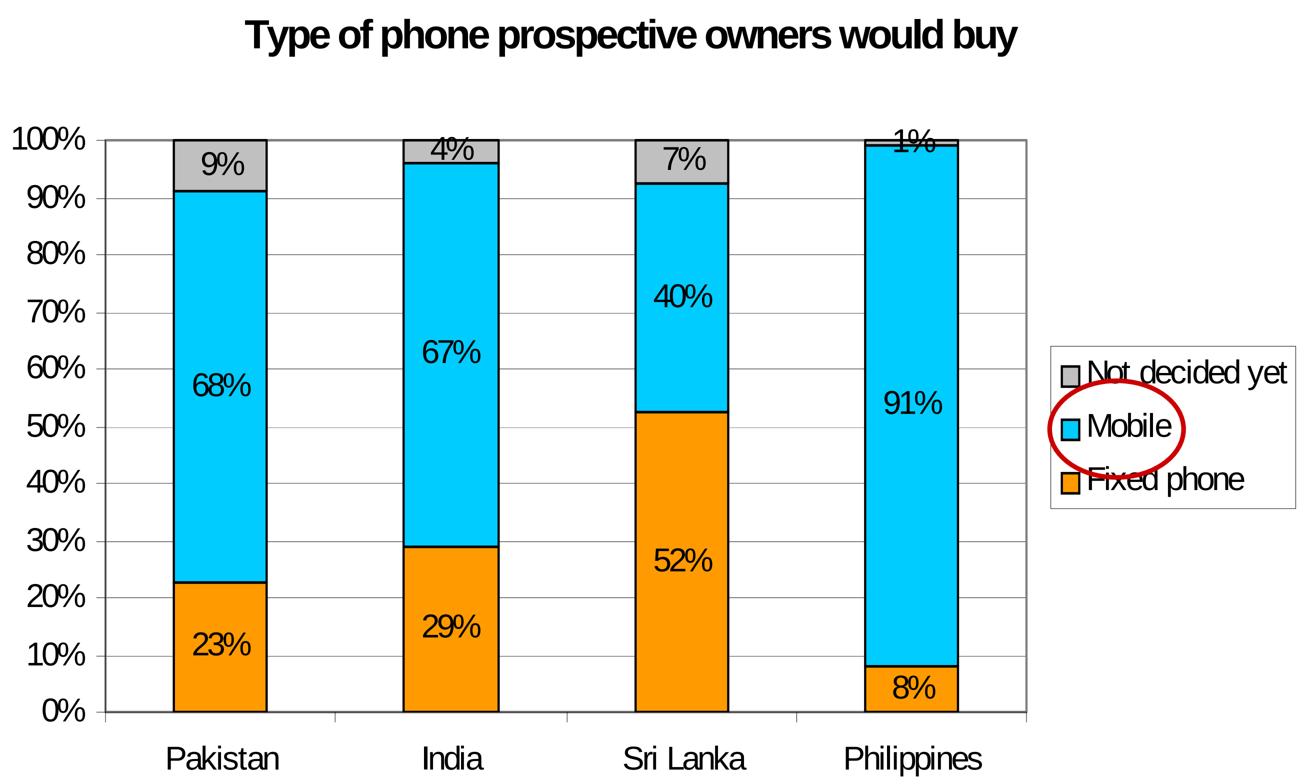
Growth in mobile phone ownership at BOP since 2001



Mobile access is high … and growing

	South Asia			South-east Asia	
	Pakistan	India	Sri Lanka	Philippines	Thailand
% of non-owners who plan to get connected between mid-2006 and mid-2008	53%	38%	53%	42%	38%





India's mobile Internet users growing

- As at 30 June 2007 (TRAI, 2007; p.14)
  - Fixed Internet subscribers: **9.22 million (declined in last quarter!)**
  - Internet subscribers accessing Internet via mobile handsets (GSM/CDMA): **38.02 million and growing**
    - One out of five mobile users in India use their handsets to access Internet

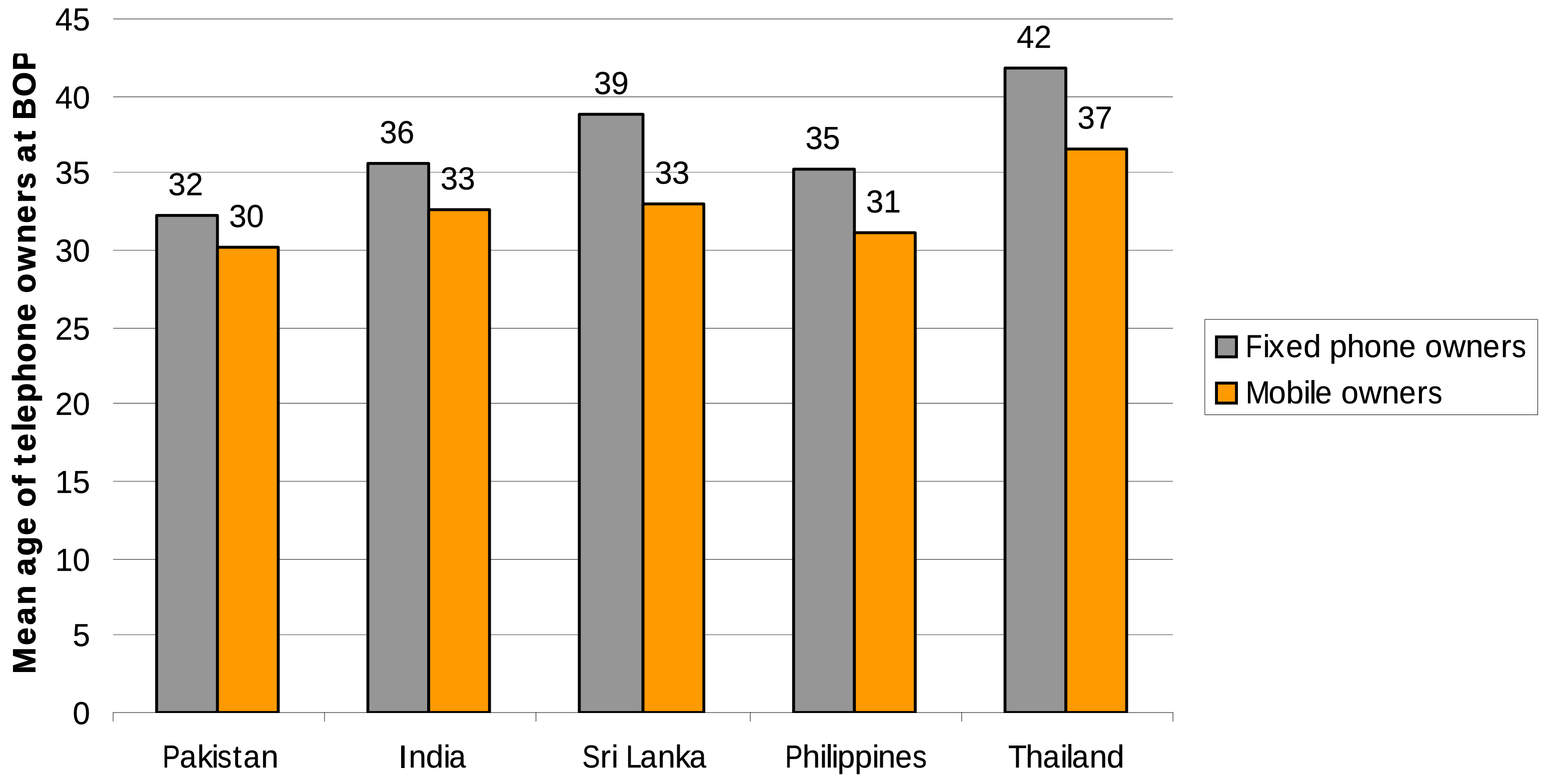
→ Mobile = 4 x Fixed

Foreshadowing the mobile-centric Internet?

What are current and prospective users at the BOP like?

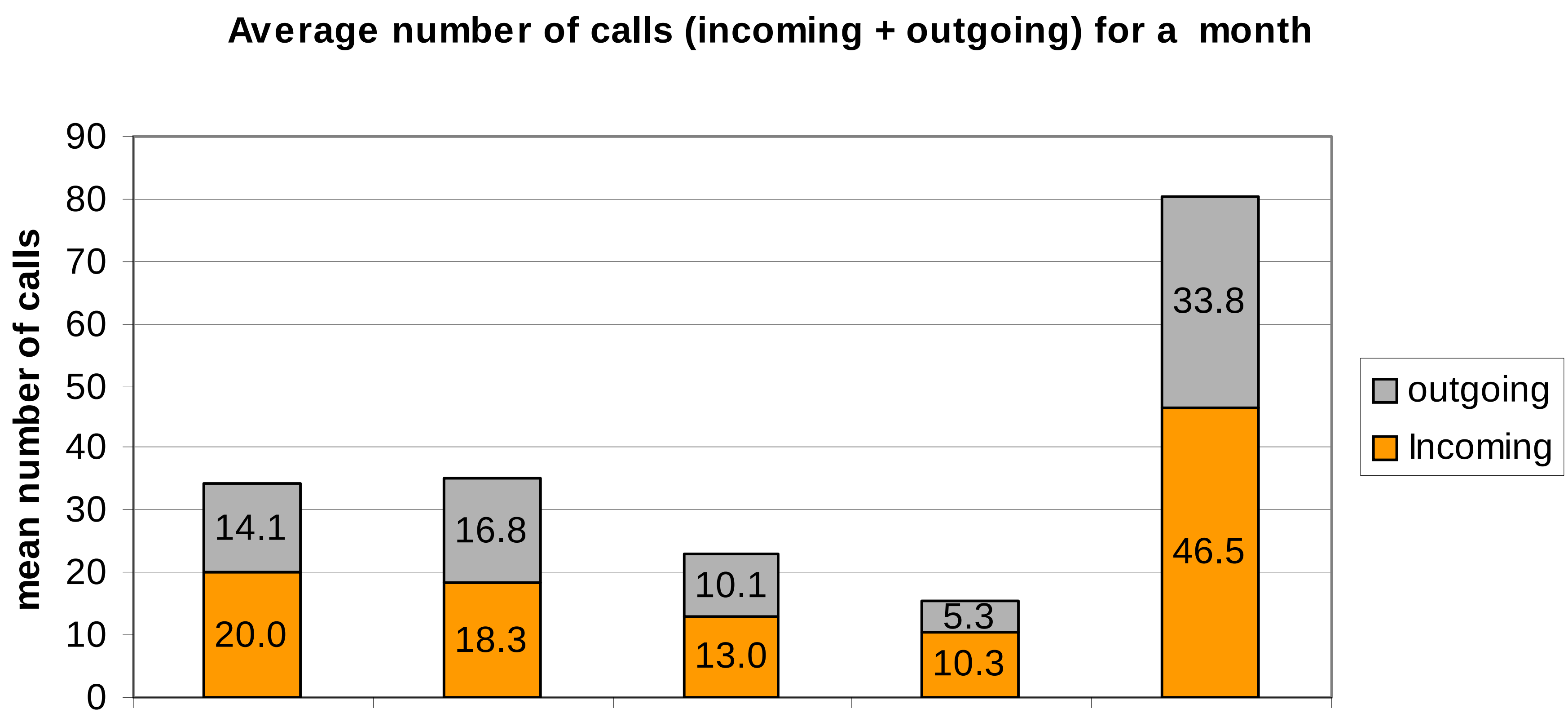
Age profile

- Mobile owners are younger on average than fixed phone owners



Light callers

- Approximately one call per day (except Thailand)

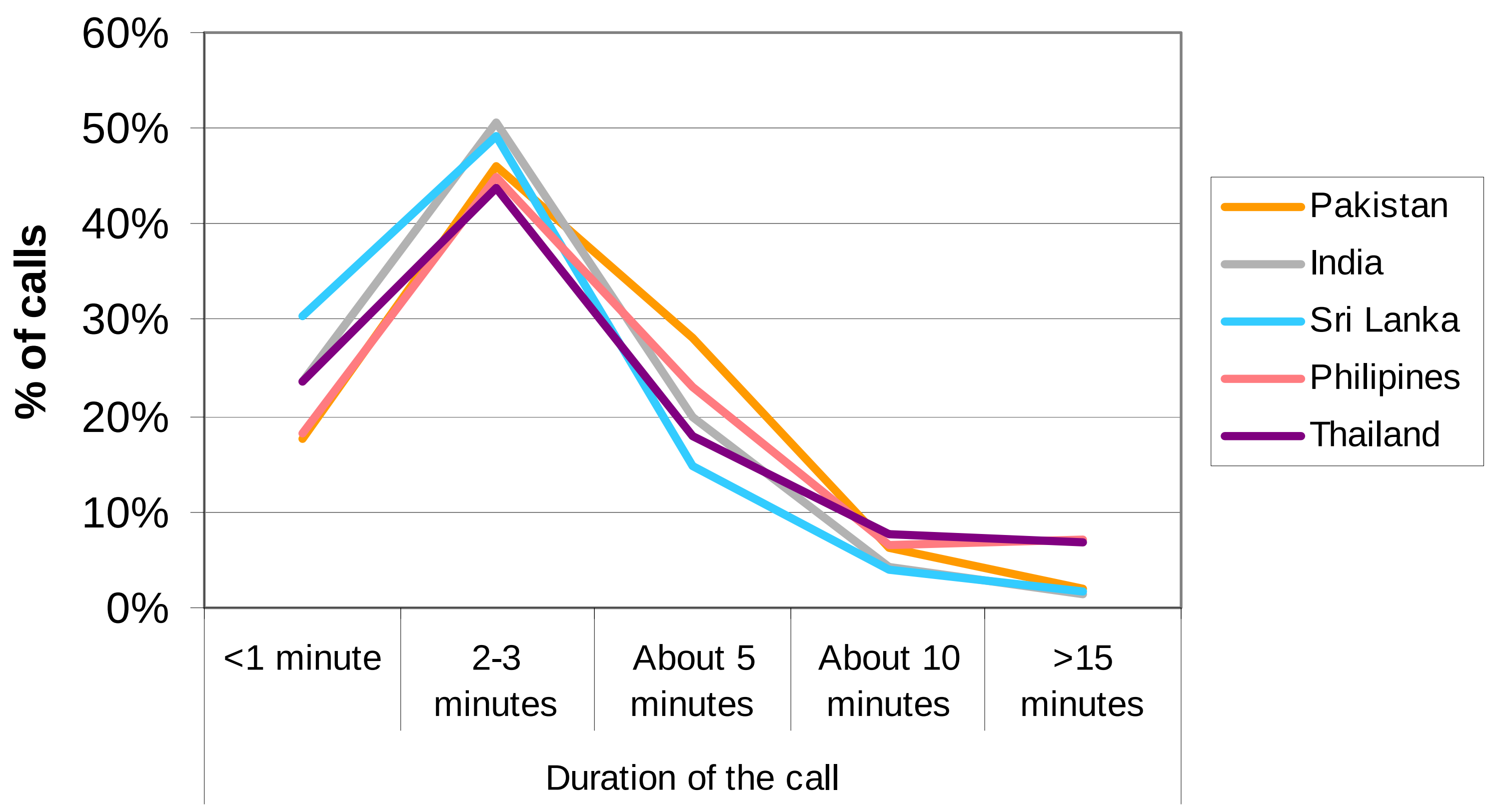


	Pakistan	India	Sri Lanka	Philippines	Thailand
Average # of calls for **a month** (in+out)	34.2	35.1	23.2	15.6	80.3

Source: Diary

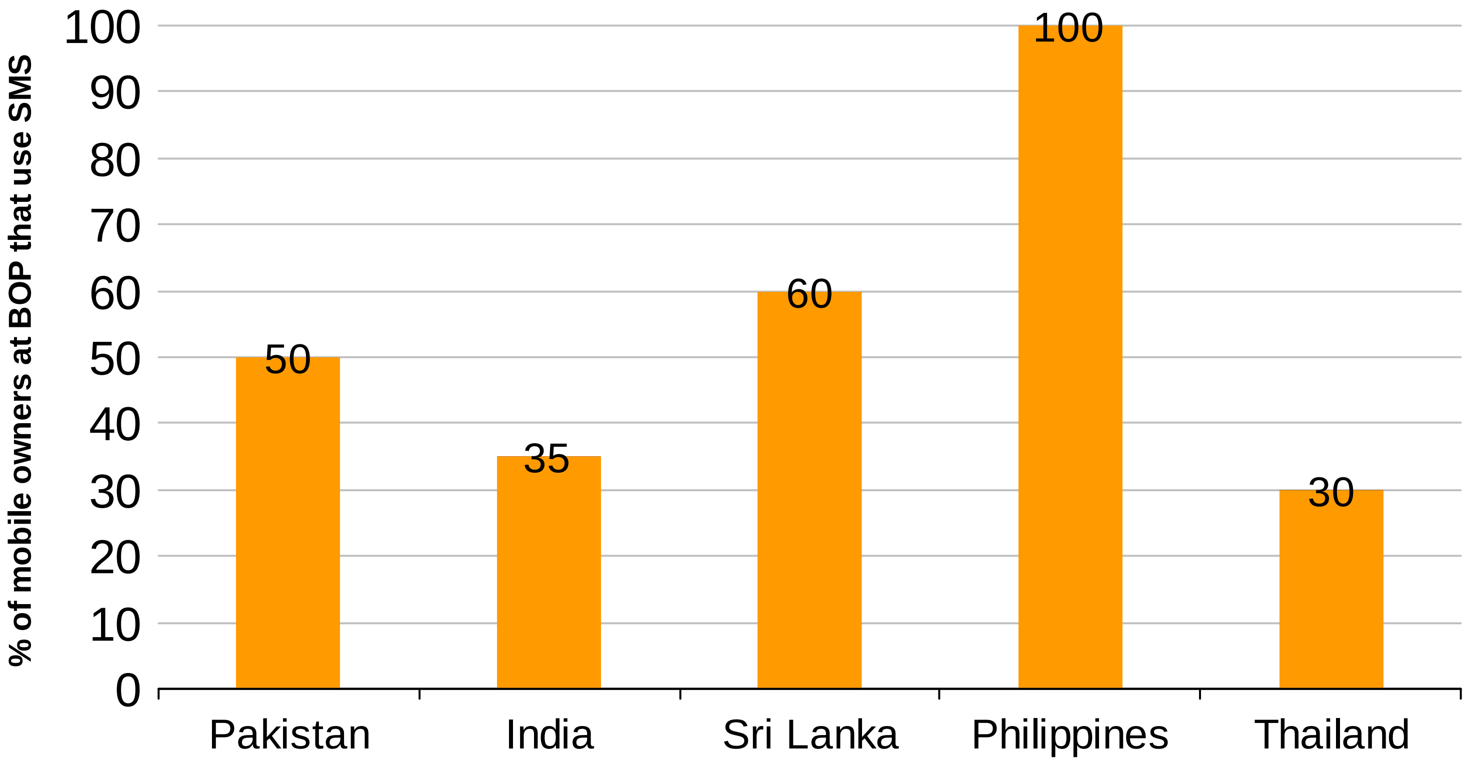
Short callers

Average call durations



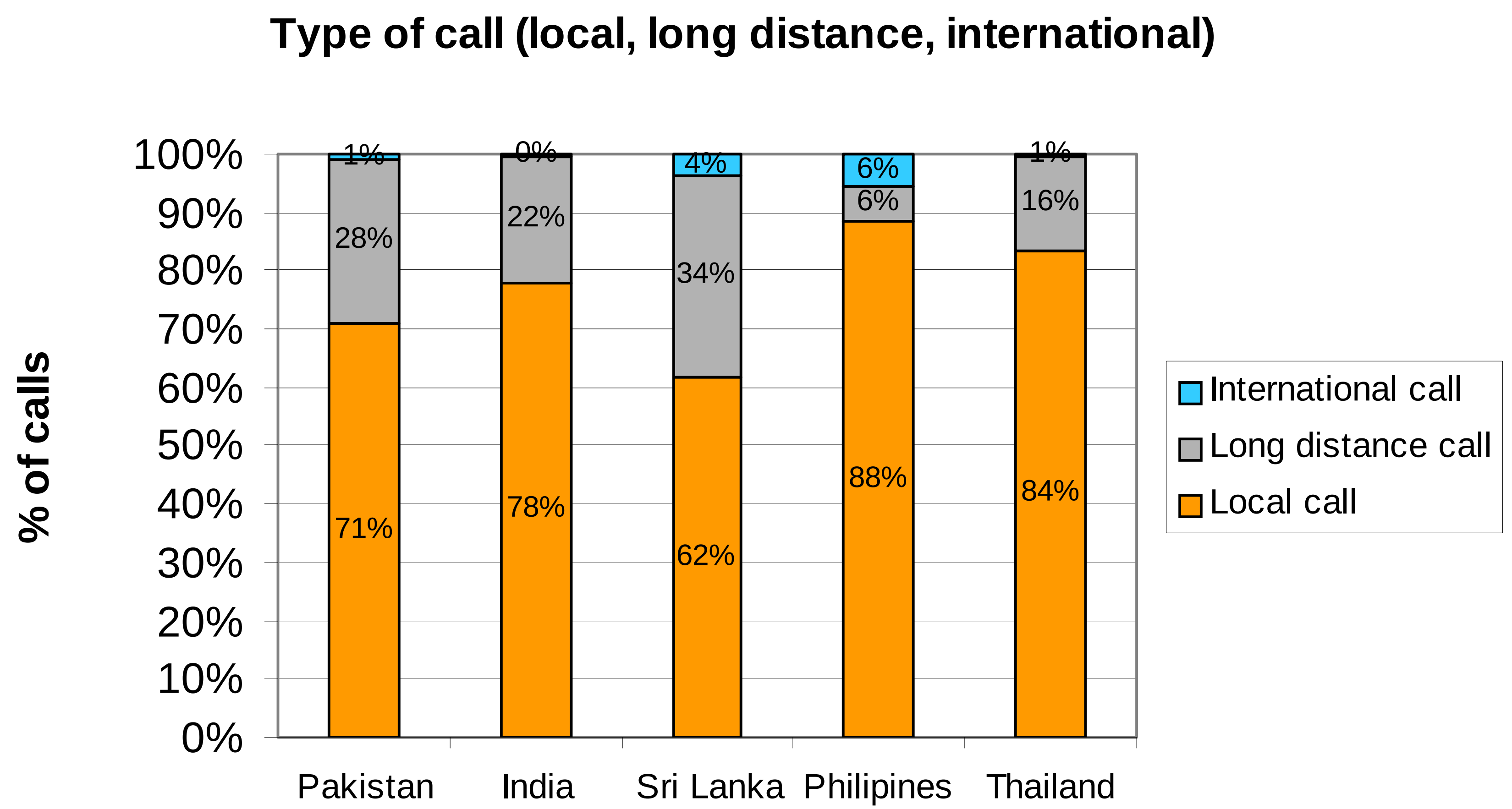
Source: Diary

SMS users



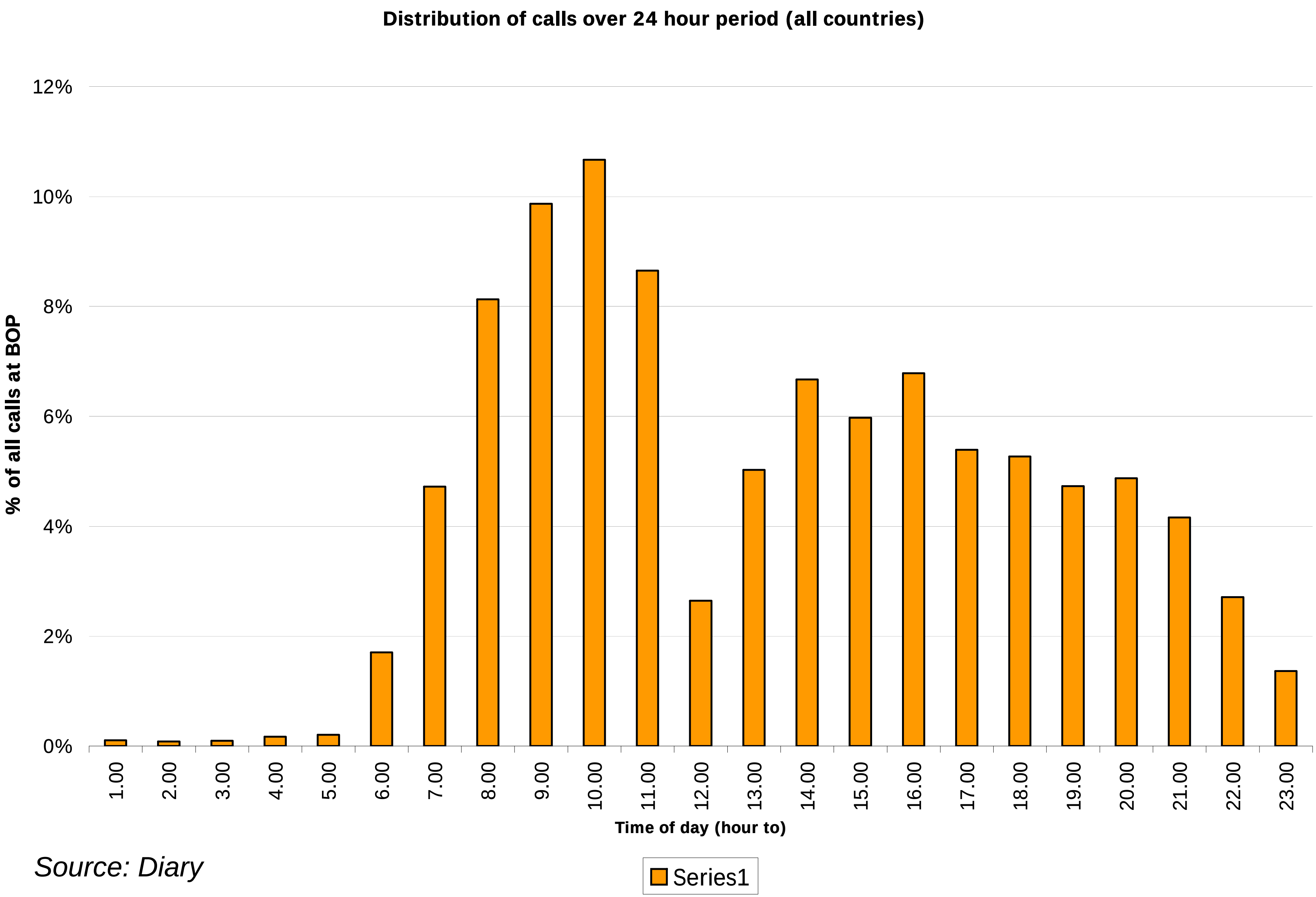
In India, its almost cheaper to call

Mainly local and long distance callers



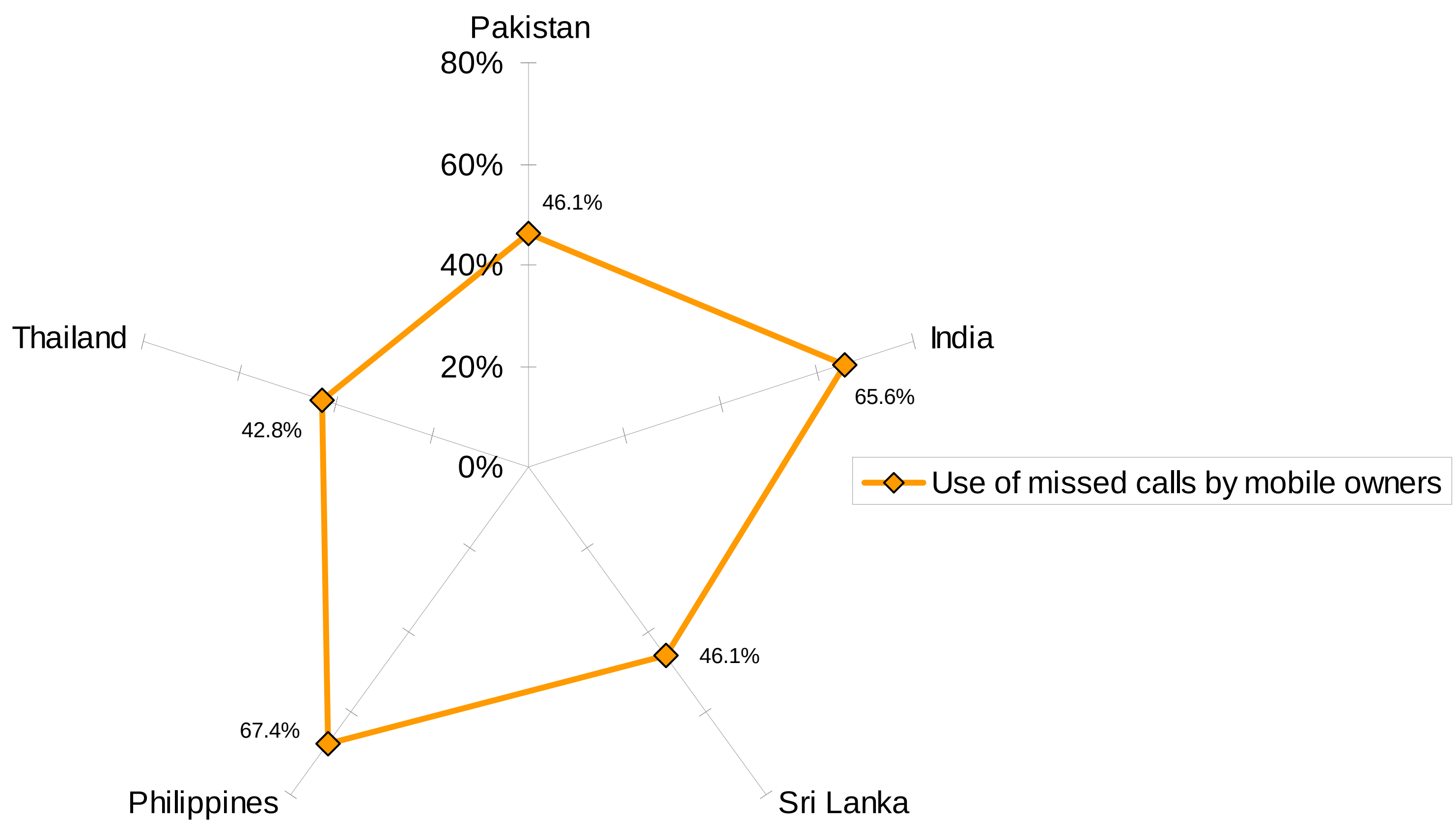
Source: Diary

Day-time callers



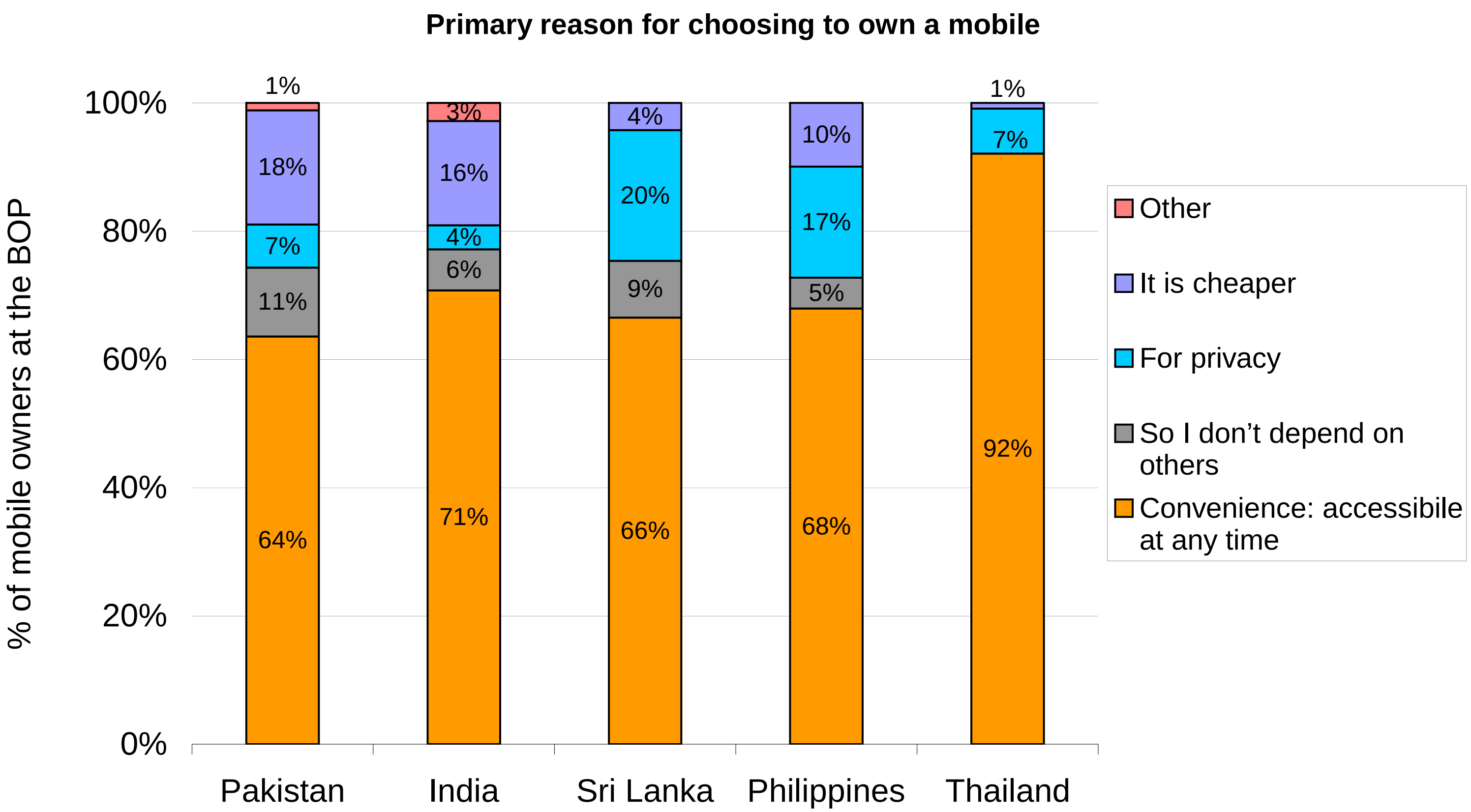
Source: Diary

Missed callers

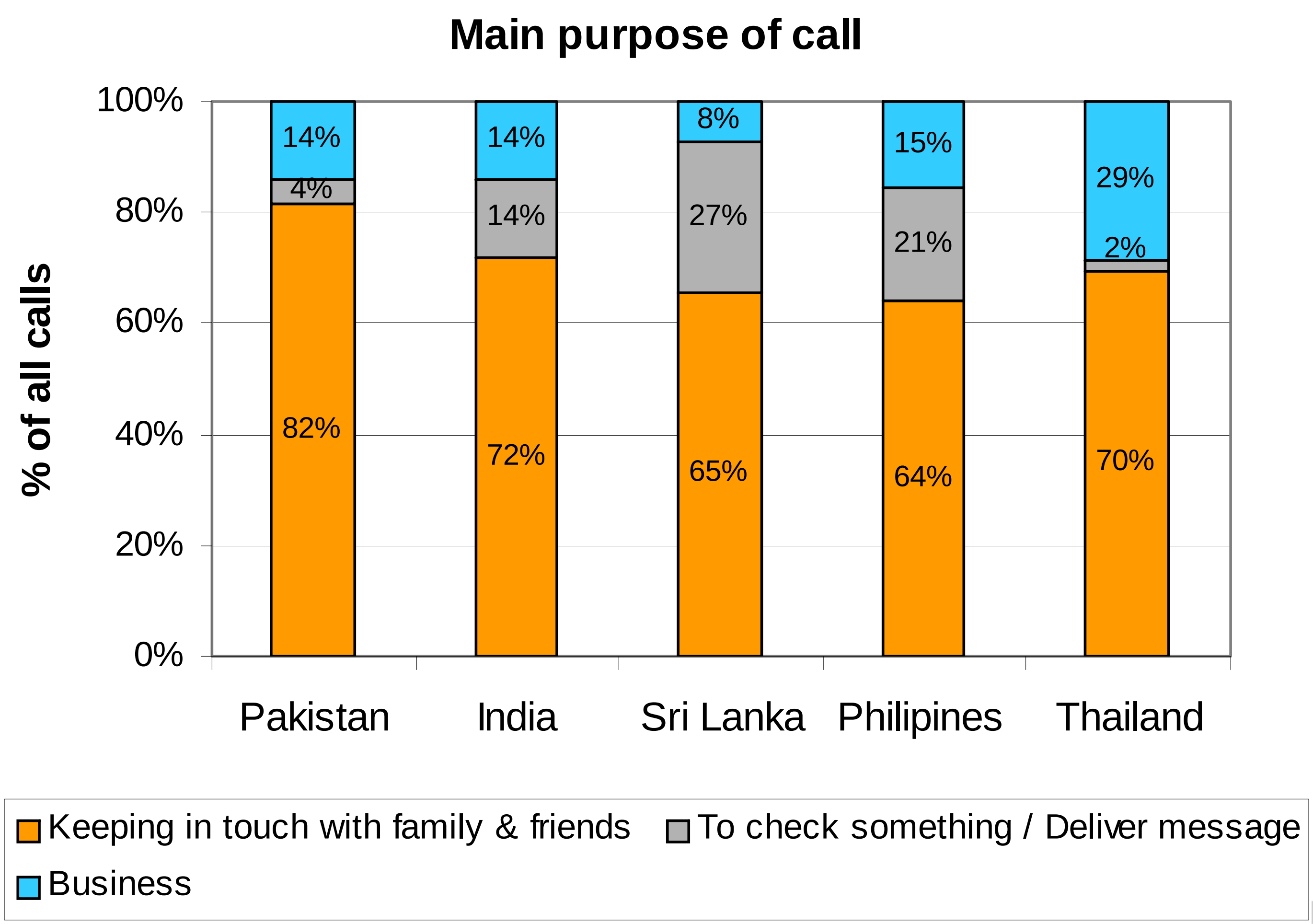


What are they using the phones for?

BOP are looking for convenience in owning a phone

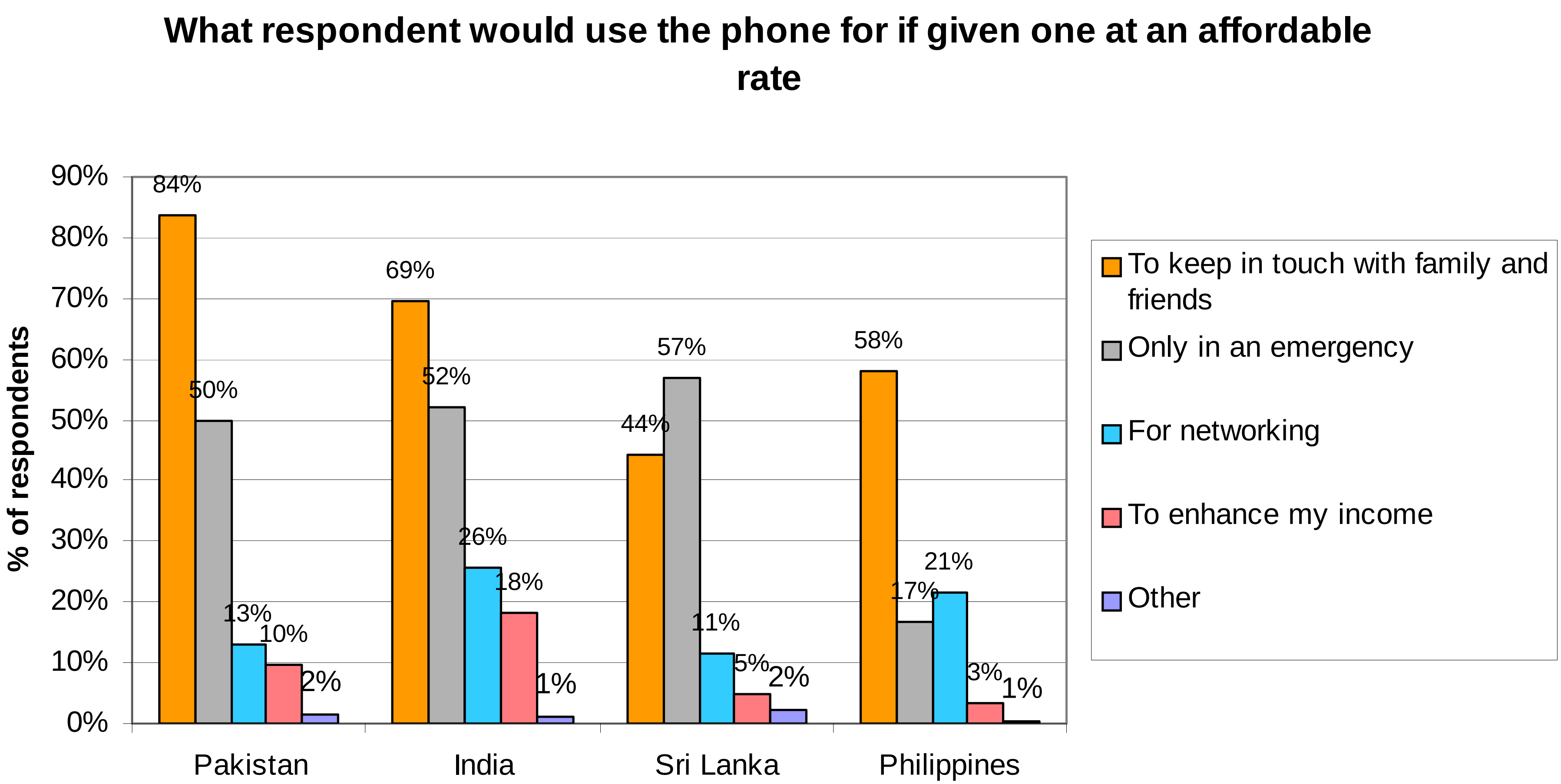


But keeping in touch is key – for owners and non-owners

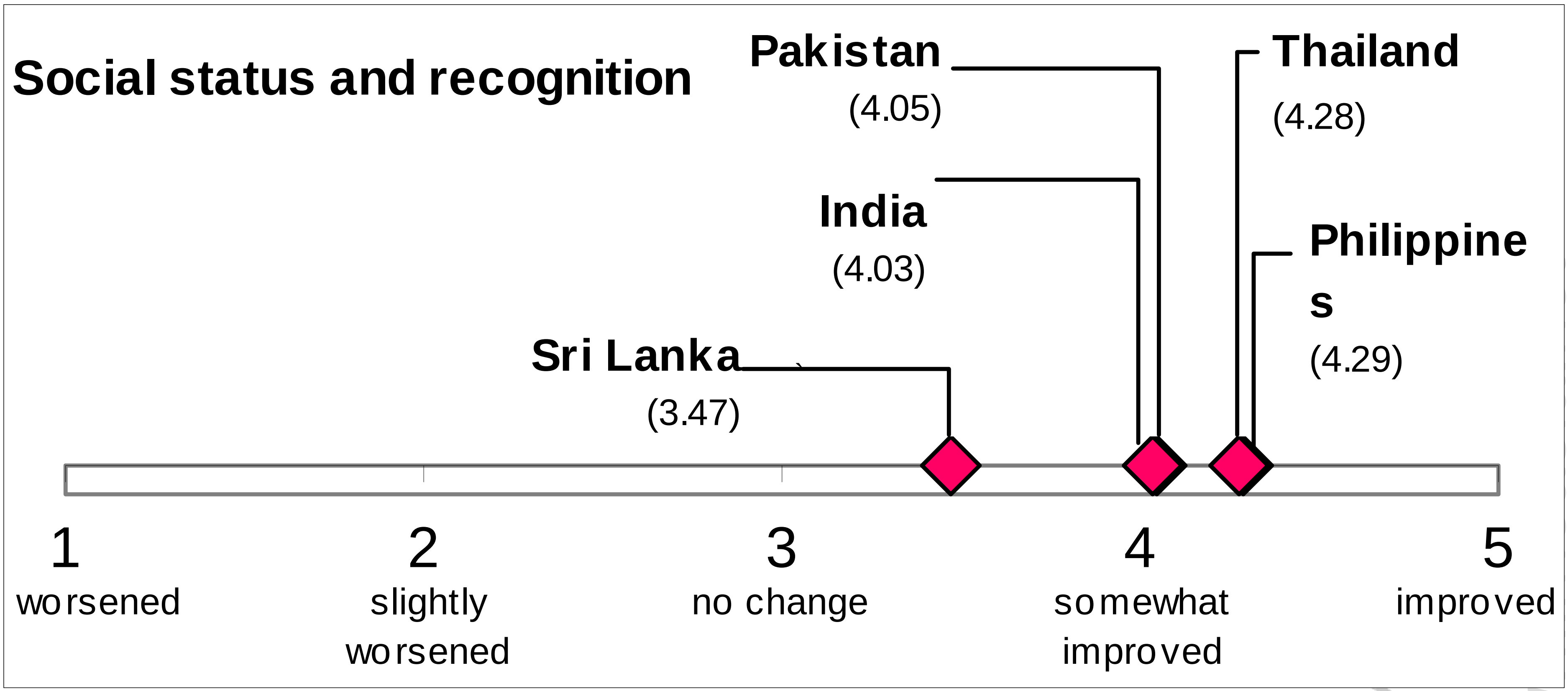


Source: Diary

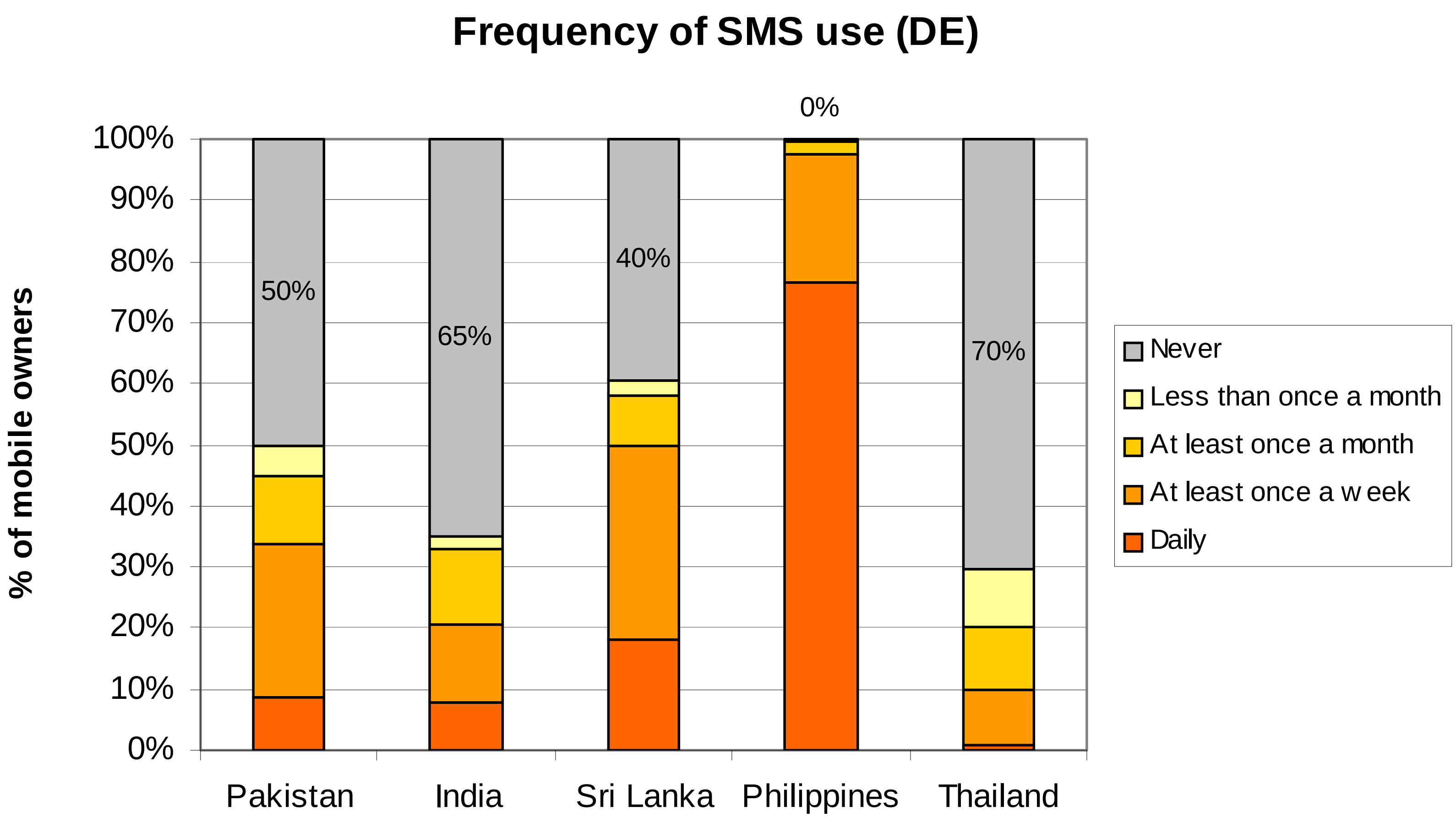
Non-owners: If connected, many would use phone for keeping in touch



Telephones seen as improving social status and recognition of the owner (1-5 scale)



SMS as the main non-voice application; highest in Philippines, lowest in India (declined in the last quarter)



Mobile as a voting device

- "A key advantage of a phone, as seen by participants, is its ability to promote democratic participation. The example presented was a reality TV show . . . to select a 'Super Star' . . . based on the SMS/phone voting by the public. . . . Study participants viewed this as a case of telecom enabling the 'unheard' to voice their opinion. . . . They felt that their voice was heard; that they have been elevated from the level of mere observers to that of active participants in democratic processes. . . . None of them complained of having to pay five times the regular cost of an SMS to place their votes."

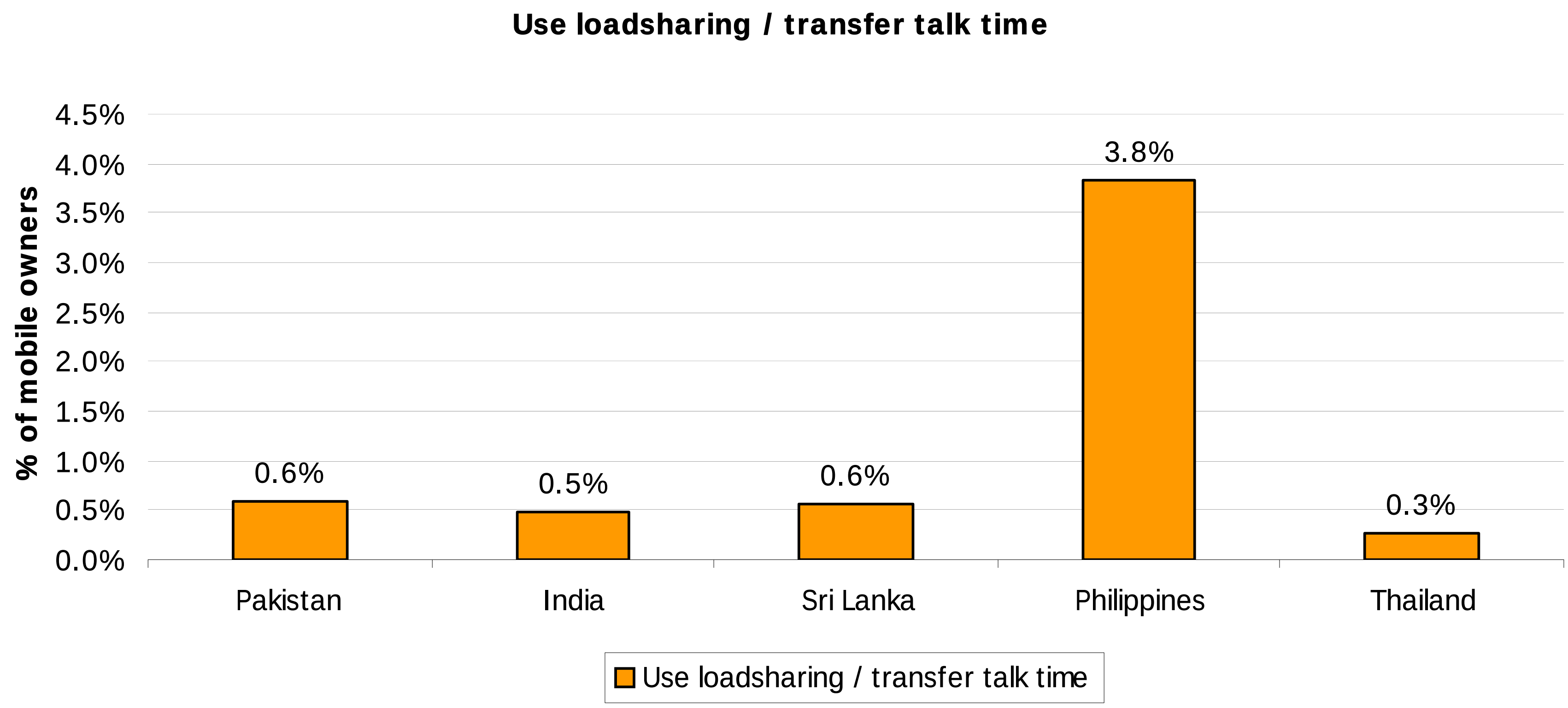
From a focus group on phone use; reference is to an American Idol type show

Payment systems in place for more-than-voice applications

	Pakistan	India	Sri Lanka	Philippines	Thailand
Pre Paid @ BOP	99%	95%	92%	99%	96%
Post Paid @ BOP	1%	4%	8%	1%	4%

- For example, Sri Lanka's largest GSM operator (~ 3.6 million subscribers)
  - 86% prepaid subscribers, overall
  - Approx. 50% of prepaid top-ups are via electronic reload (50% via card system)
  - 12,000+ electronic reload outlets
  - Mobile payment system recently launched for the first time in S Asia
    - Philippines is the world leader

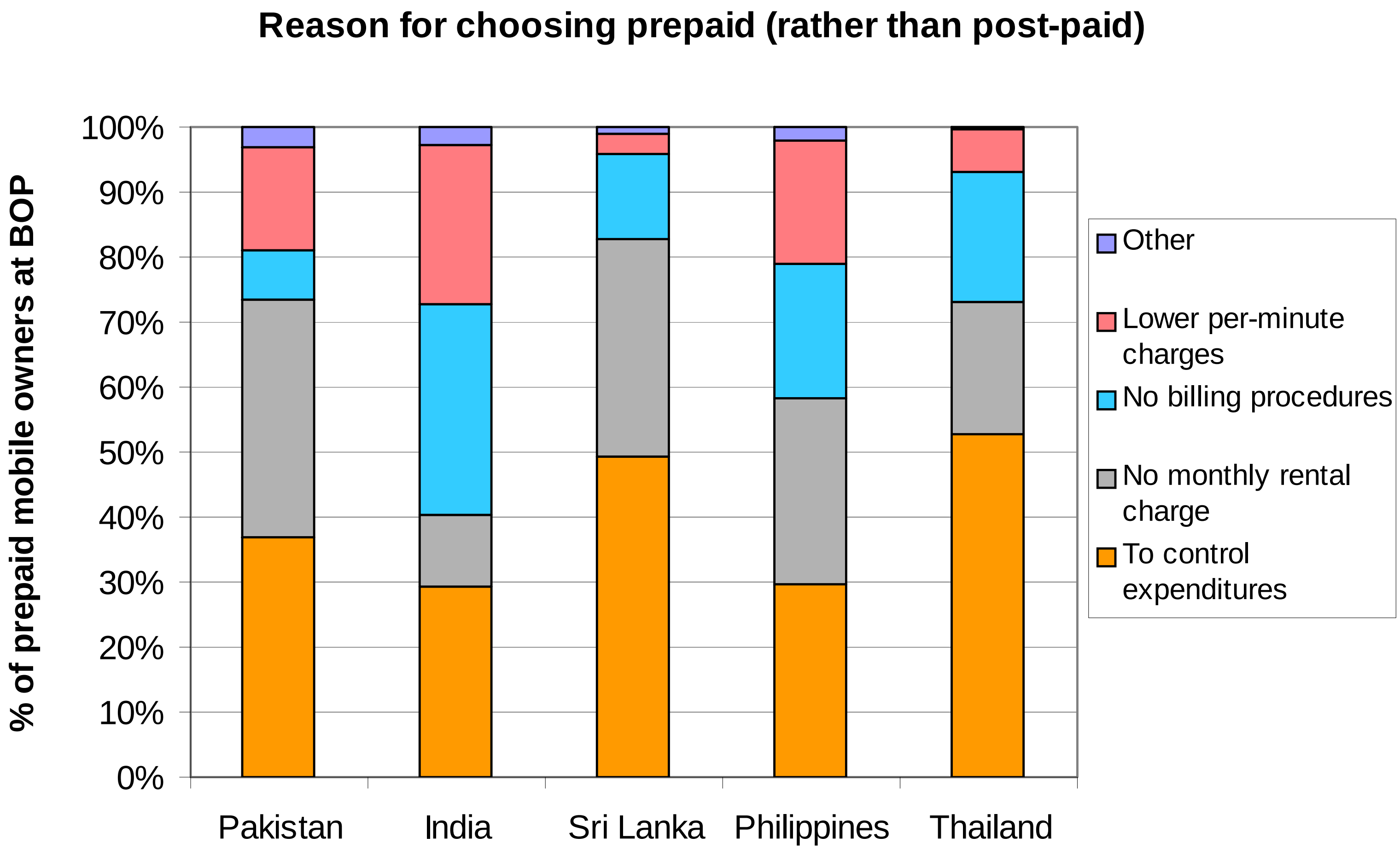
Load-sharing / transfer catching up at BOP



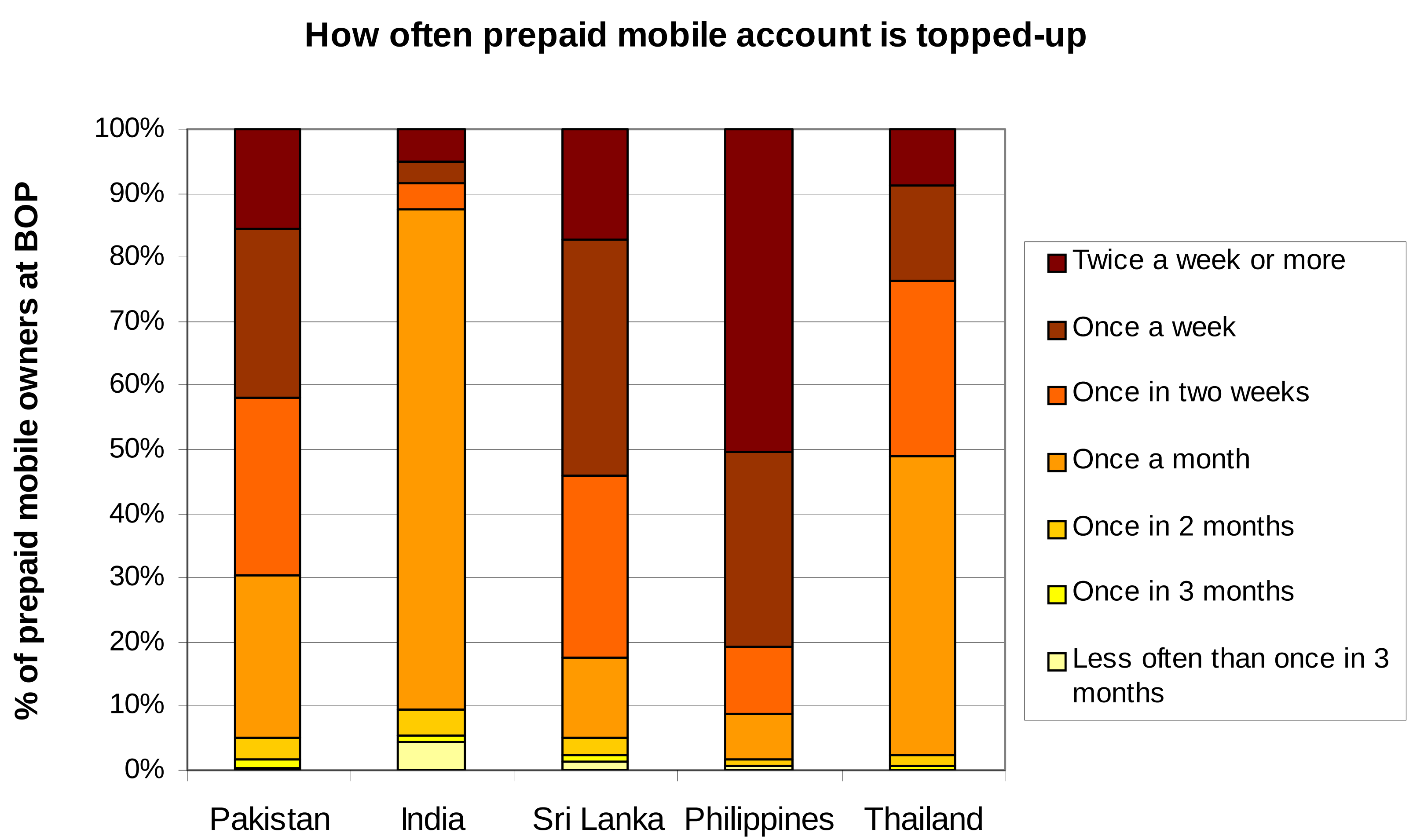
	Pakistan	India	Sri Lanka	Philippines	Thailand
Use load-sharing / transfer talk time **(millions)**	0.10	0.11	0.01	0.93	0.03

Reasons for choosing prepaid

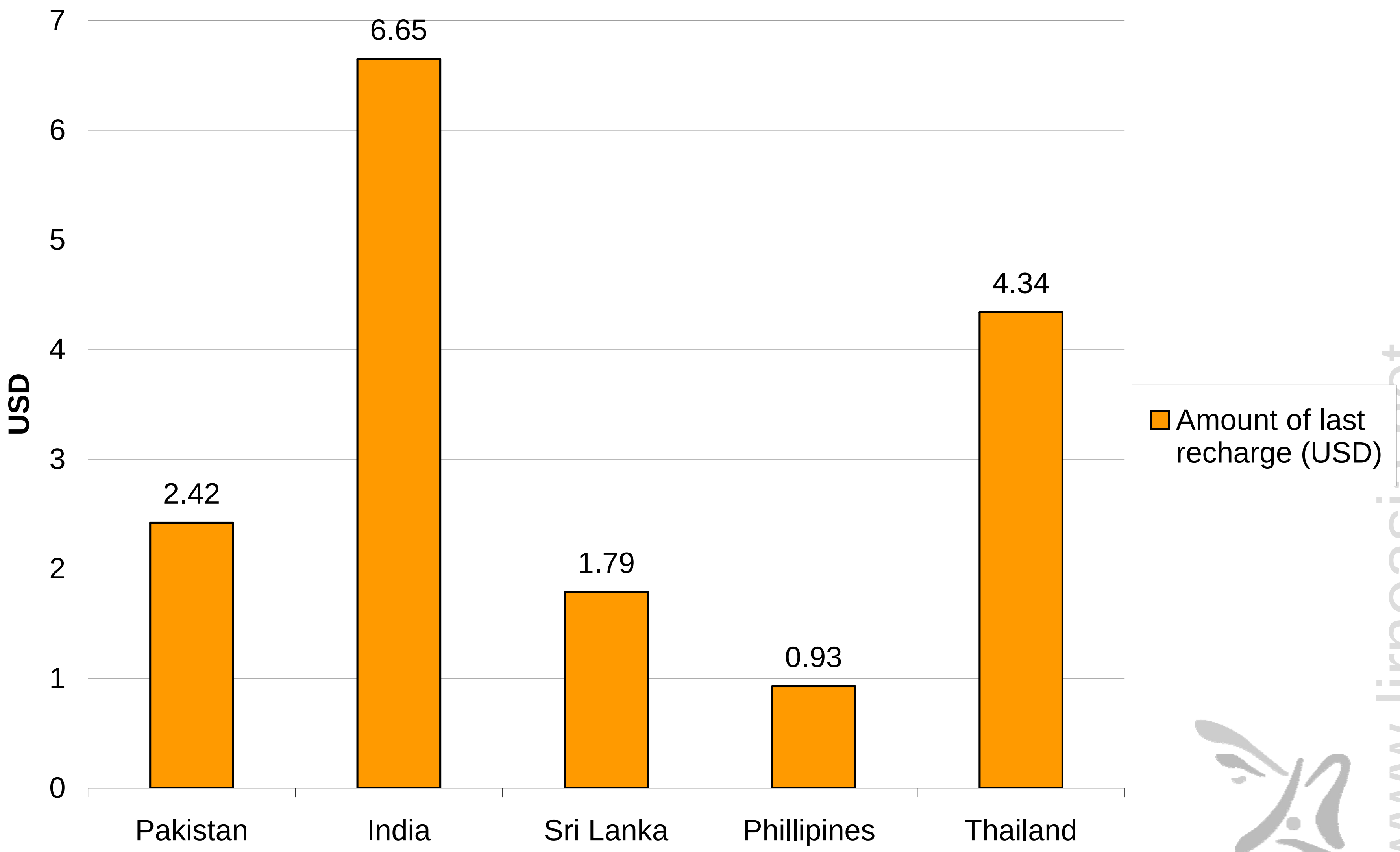
- Prepaid helps to 'control expenditure;' reasons are largely cost-related



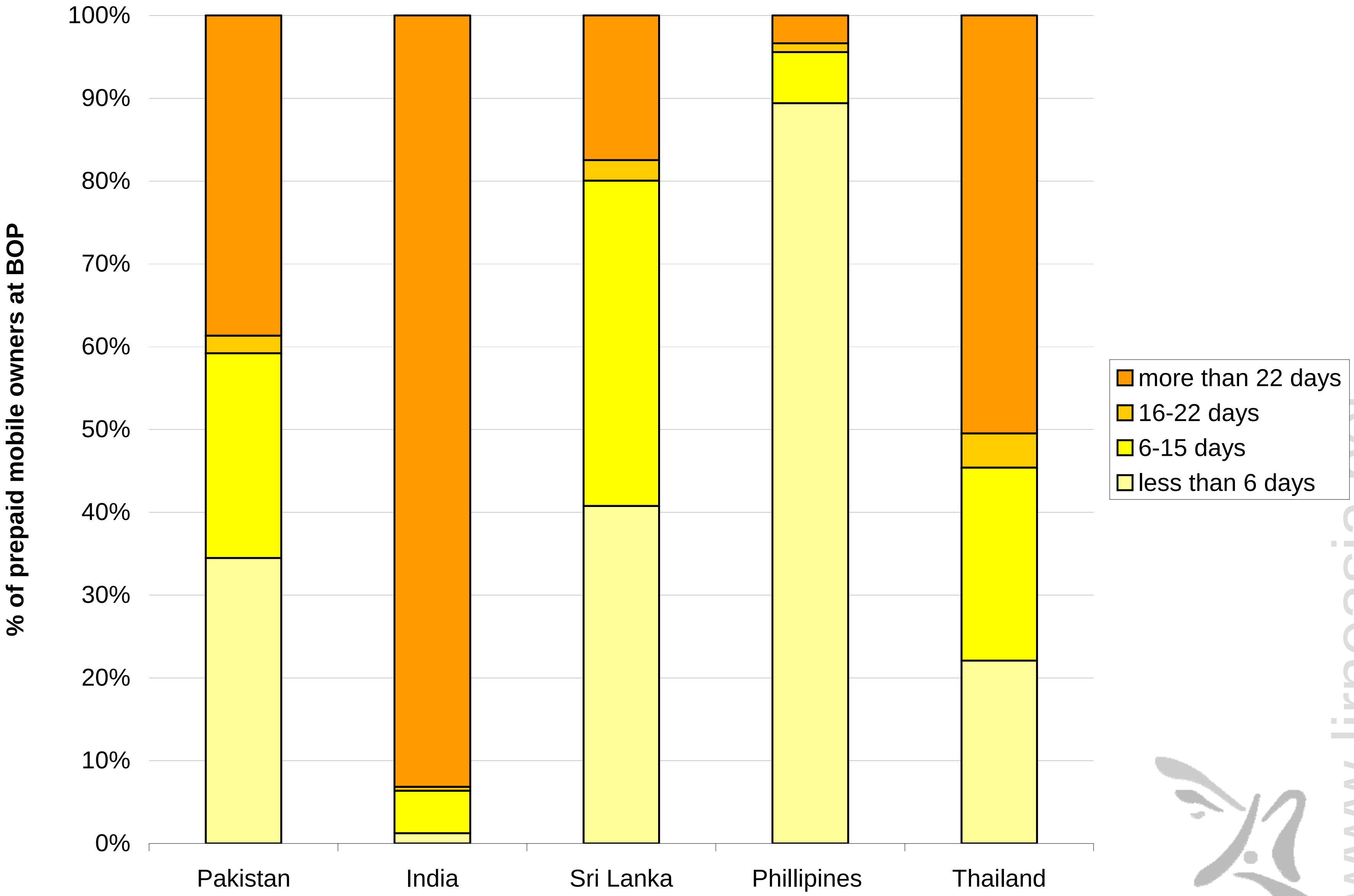
Frequent top-ups in Pakistan, Sri Lanka and the Philippines



Amount of last recharge

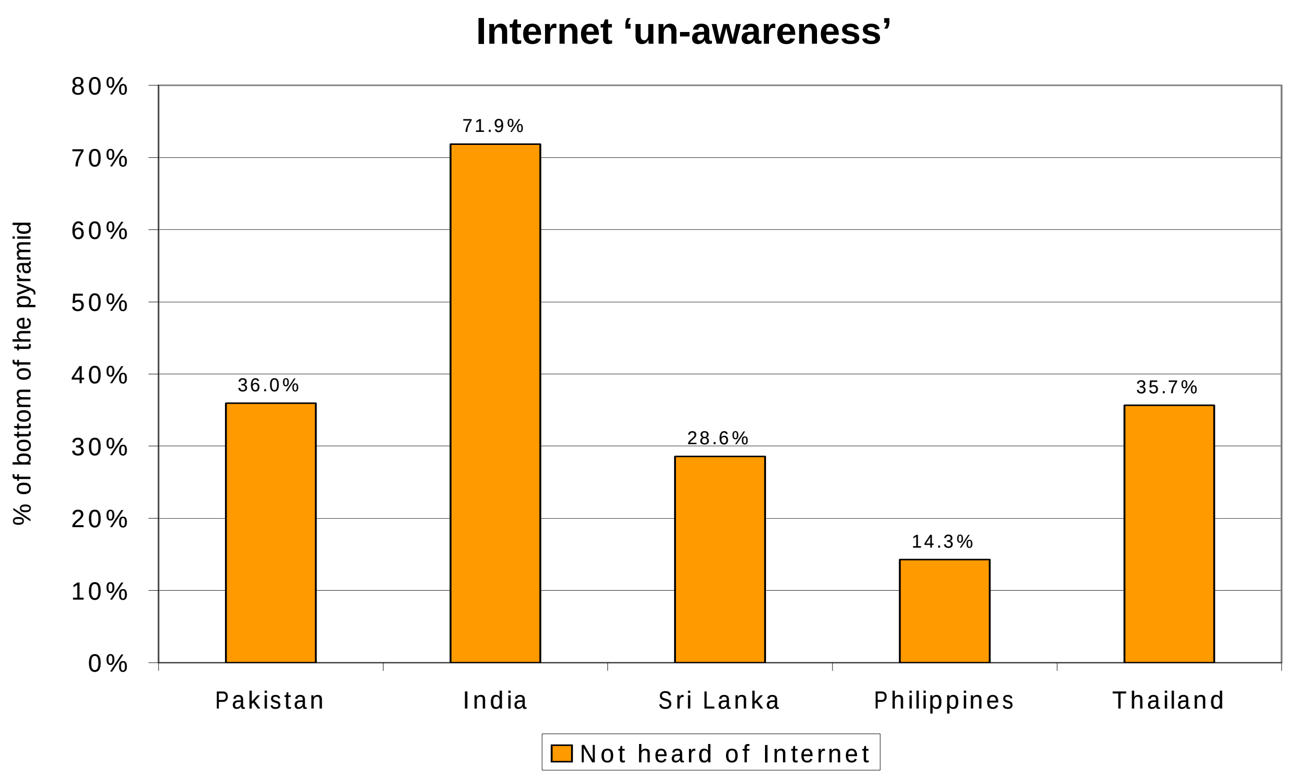


How long the last recharge expected to last (calculated)



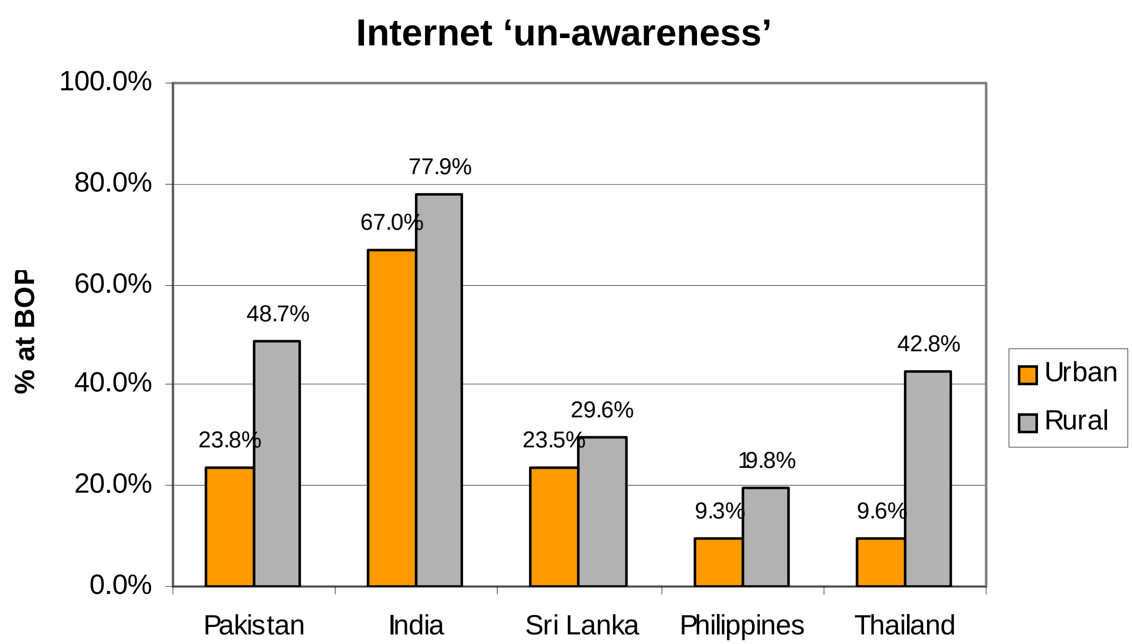
Currently few at the BOP use the Internet; even fewer know what it is

	Pakistan	India	Sri Lanka	Philippines	Thailand
Use the Internet	1.9%	0.3%	1.5%	8.8%	10.4%



Even less so in rural markets

	Pakistan		India		Sri Lanka		Philippines		Thailand	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Use the Internet	3.0%	0.7%	0.2%	0.1%	2.1%	1.4%	12.8%	4.3%	22.0%	2.3%

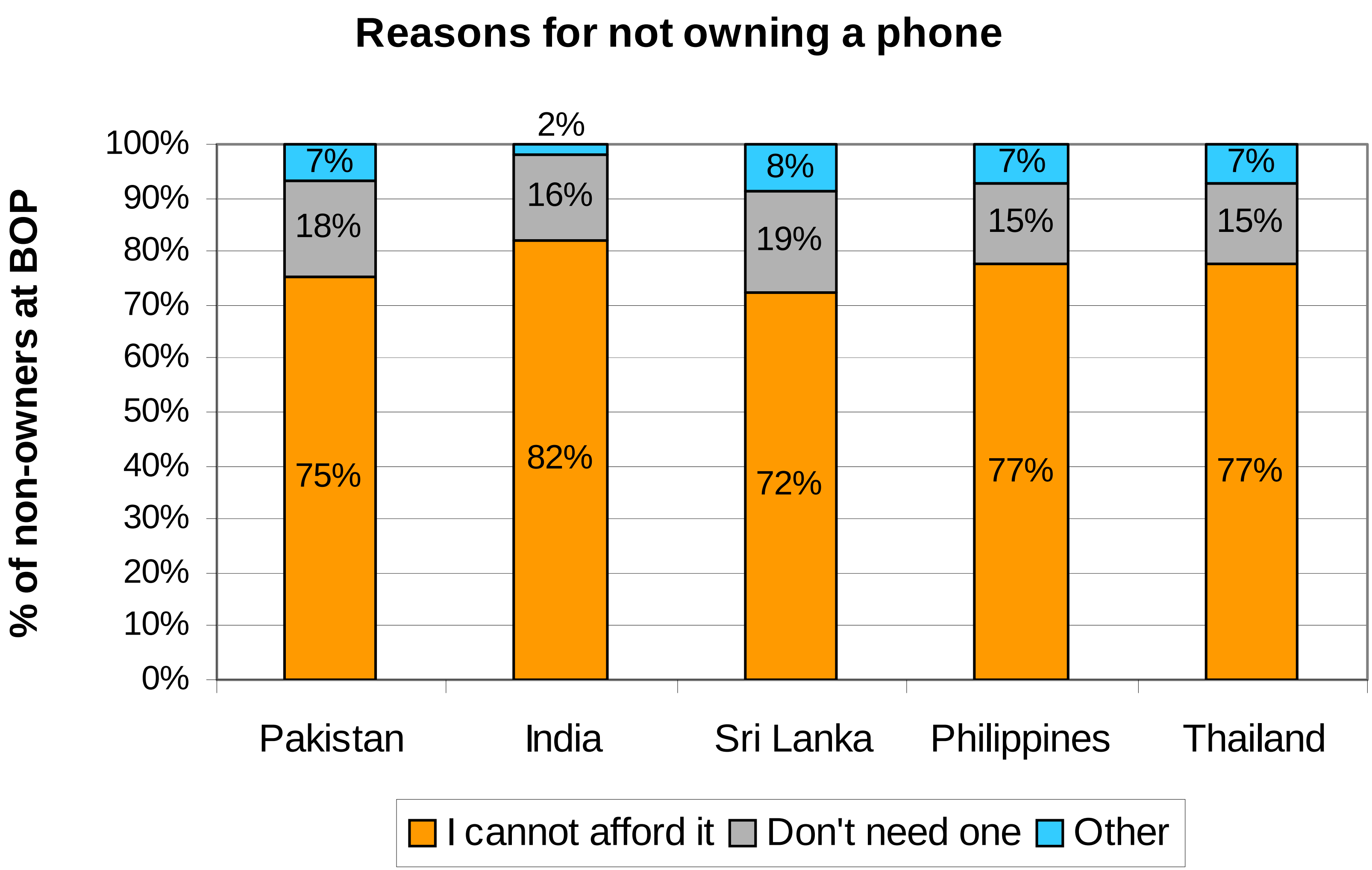


Large urban-rural gap in knowledge in Pakistan, Philippines and Thailand

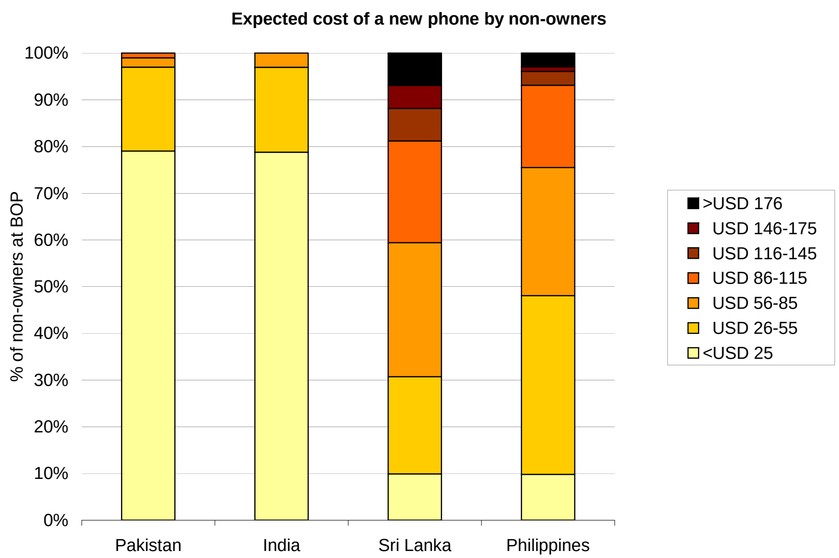
Bottom of the pyramid

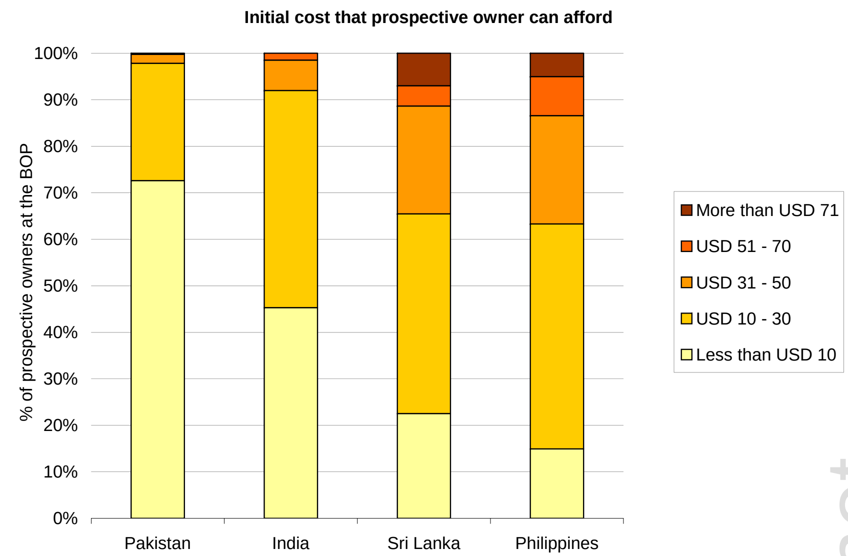
Non-owners → owners: barriers

Key barrier to ownership is affordability



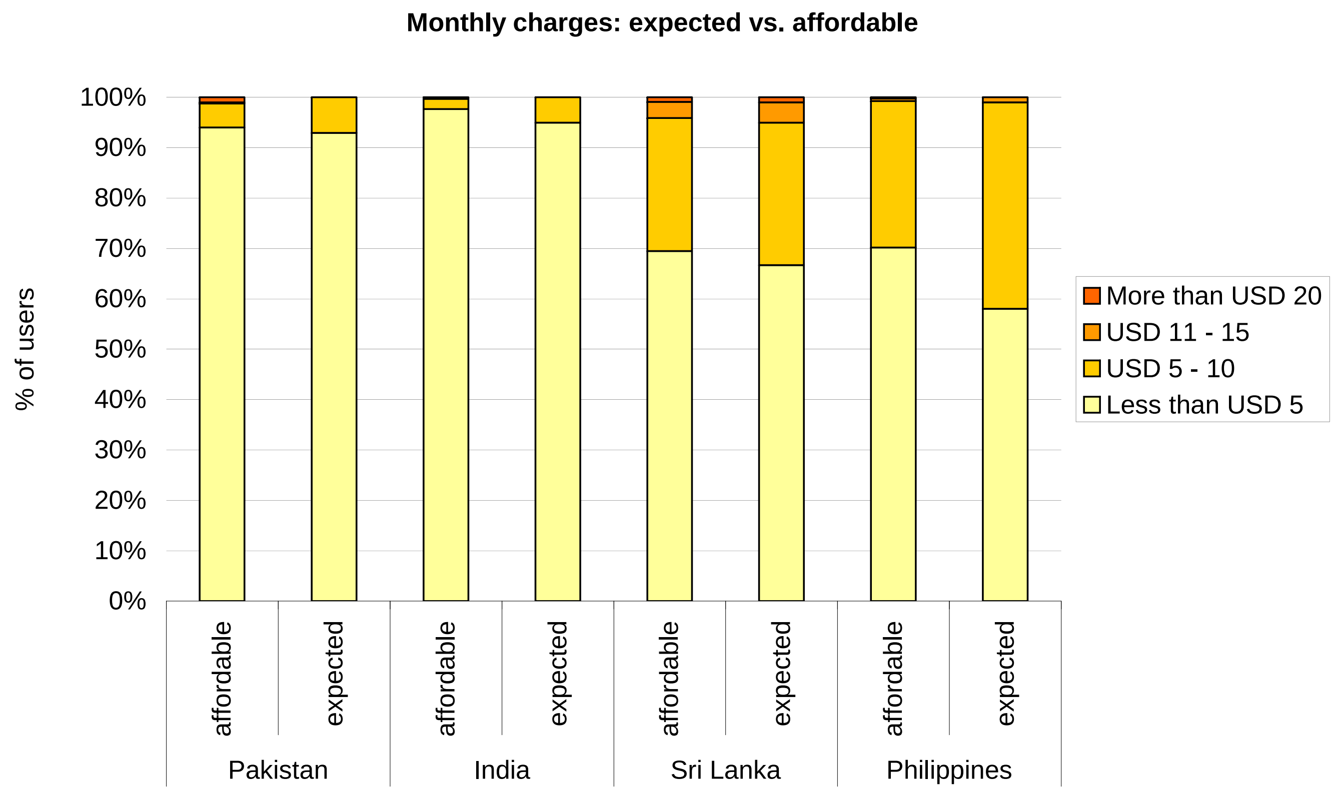
The cost of getting connected…Expectation vs. affordability gap





- E.g. 70% of non-owners at BOP in Sri Lanka believe that the cost to get connected will be greater than USD56
- Only 11% can afford more than USD50
- Can get new mobile and connection for USD 33; lower with second-hand phone
  - Price of mobiles with additional capabilities needs to come down

Use cost: most can afford less than USD5 per month on communication



- Expectations and affordability are in line
  - Most expect the monthly cost to be less than USD5, which most can afford to pay
  - Also in line with ARPUs of mobiles (USD 3-4)

In sum

In sum

- Emerging Asian markets (esp. BOP) are too large to be ignored
  - BOP are not necessarily heavy users, but they do use mobiles for social purposes more than anything
    - Even non-owners are participating in telecom
    - Potential owners, if connected, would also use phones for social purposes
- BOP mobile market is growing; much of the BOP will first experience the Internet via mobiles
- Prerequisites for ‘more than voice’ applications are in place
- If affordability barriers are brought down, many more will become owners and therefore potential more-than-voice users

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Telecom sector contributes to LK economic growth, while prices decline 5 edit

Published by **samarajiva** April 12th, 2007 in **General**.

The Central Bank of Sri Lanka's **2006 Annual Report** states that: "The GDP deflator, which measures the price changes of all goods, produced in the economy, increased by 10.3 per cent in 2006 compared with the rate of 9.9 per cent in 2005. High price increases were recorded in most sub-sectors except in mining and telecommunications, where prices were lower compared with the previous year. Higher fuel and material costs together with the depreciation of the Sri Lankan rupee during the year led to the increase in prices of most finished goods and services."

This is quite different from the spurious growth shown by government-owned enterprises driven by the higher rupee value of the output of the Petroleum Corporation which contributed to 90 per cent of the entire output of government-owned enterprises.

LIRNEasia researcher invited to ITU meeting on disasters in Alexandria, Egypt 0 edit

Published by **samarajiva** April 12th, 2007 in **Disaster**.

Nuwan Waidyanatha, the Project Manager of the Last-mile HazInfo Project, has been

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