

GSM 3G India

The next billion at the BOP

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fieldwork by A C Nielsen; funded by IDRC

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Plan of presentation

- A look at telecom access and use at the *bottom of the pyramid* in Developing Asia
- Perceived benefits from direct access
- Where is the *next billion*
- Food for thought

Methodology

Quantitative



Random sample 8,660 F-to-F interviews; in 5 countries (India 4,000) 50% diary

Qualitative



6 Focus Group Discussions per country (30)



Final output



Bottom of the Pyramid defined

- Many definitions of poverty, here **SEC D and E**; between ages 18-60

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

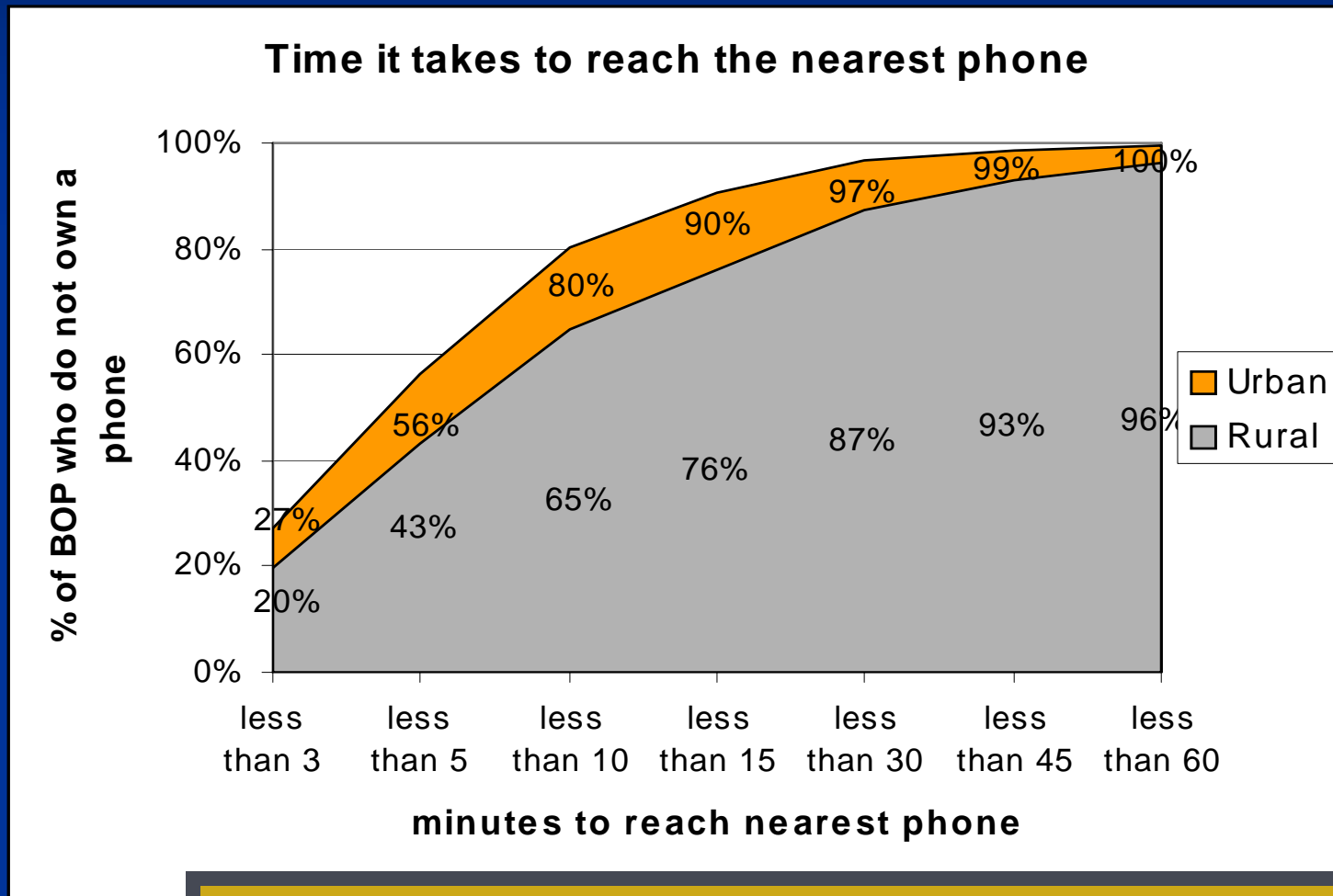
Bottom of the Pyramid
everyone has access, but not
ownership

Overall access is very high

- Used phone in the last 3 months

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

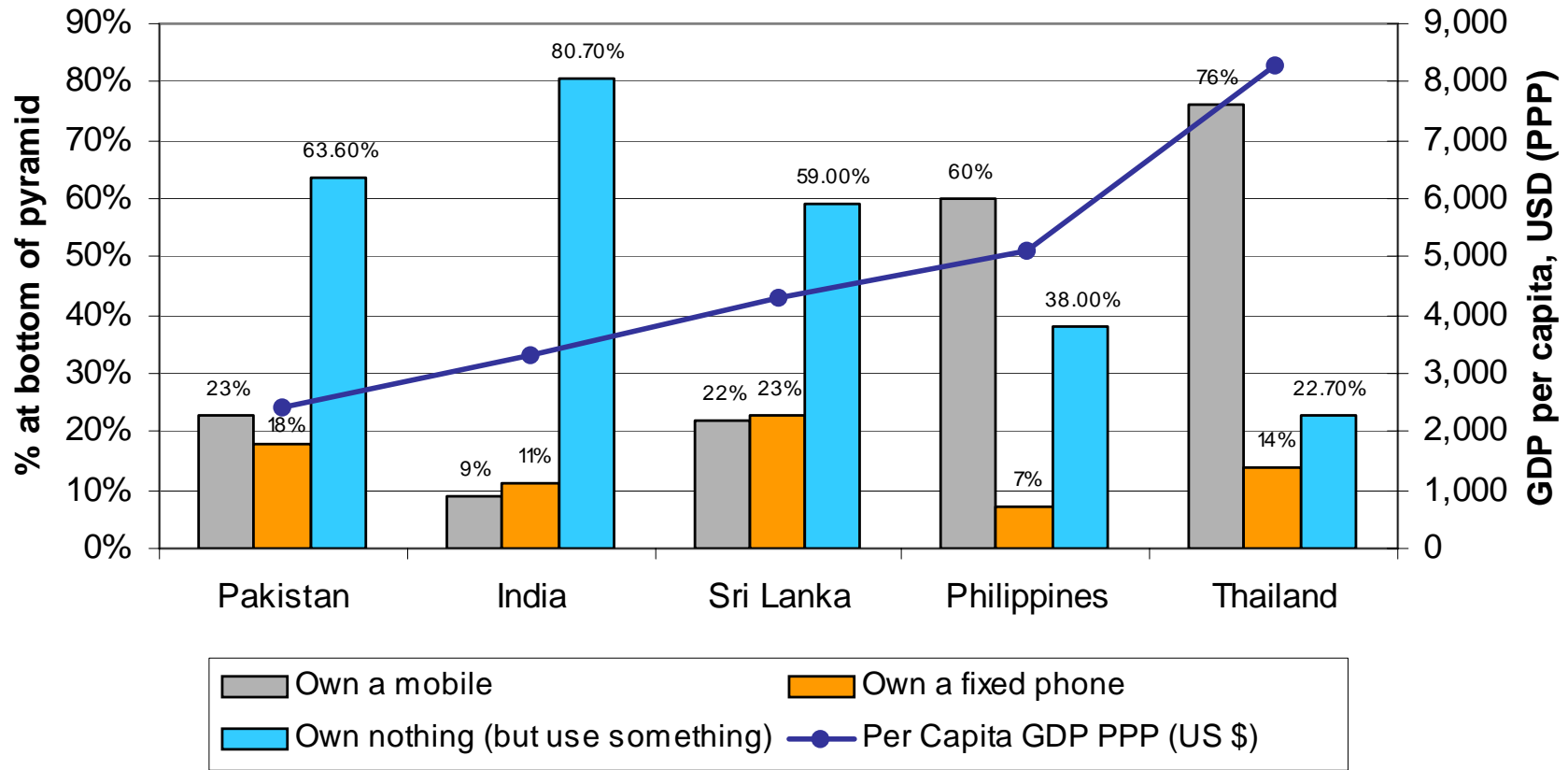
Overall access is very high*



Most at BOP can get to a phone in less than 1 hour

But ownership is low | 20% of Indian BOP

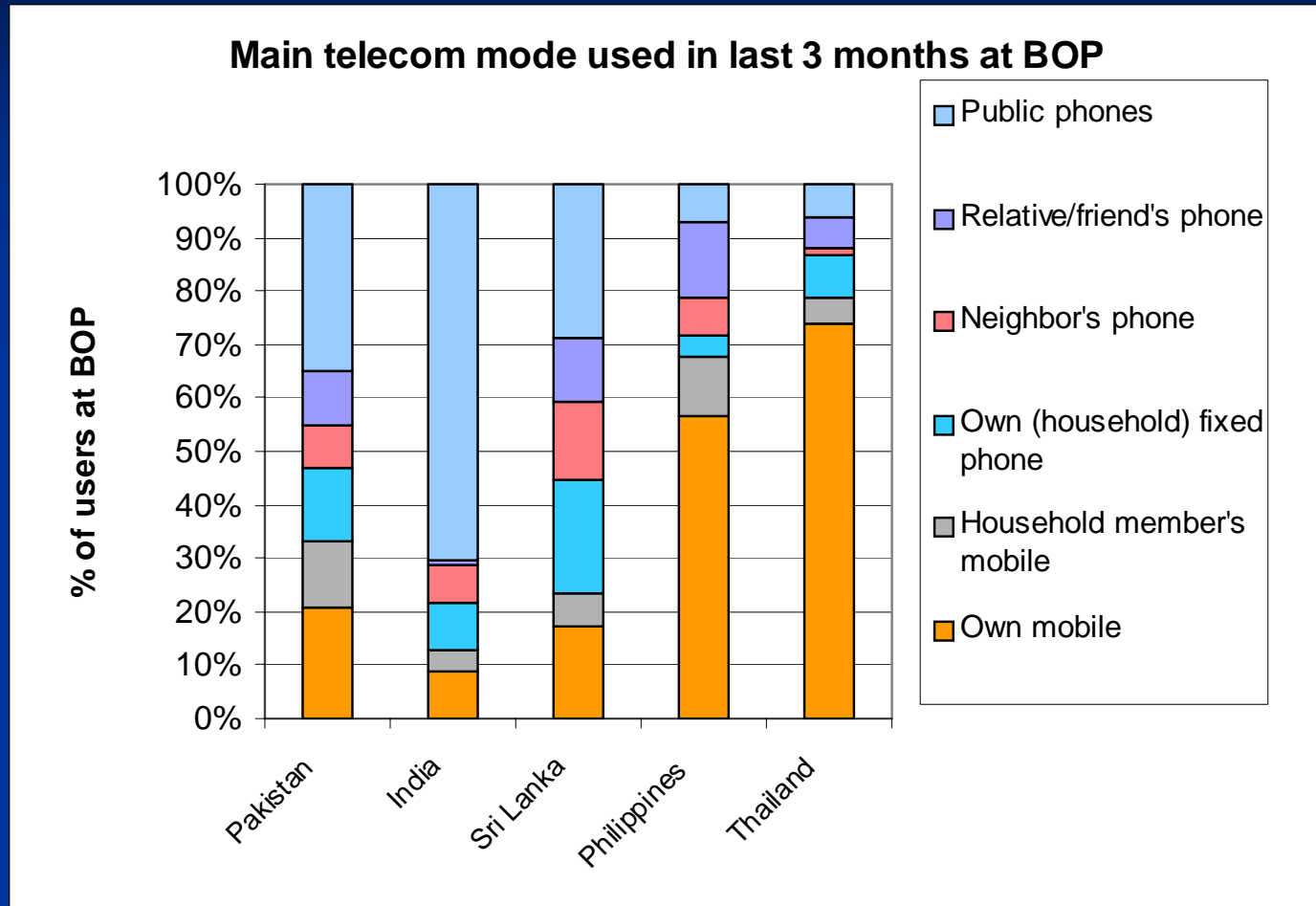
Ownership and GDP per capita (USD, PPP)



| | Pakistan | India | Sri Lanka | Philippines | Thailand |
|---|----------|-------|-----------|-------------|----------|
| Total number of phones per 100 population | 29.38 | 13.96 | 29.10 | 45.30* | 57.80** |

Source: National regulatory agencies (mid 2006); * 2005, **2004 [F 4.6 M 8.2; U 32 R 2]

So, mainly use public phones*



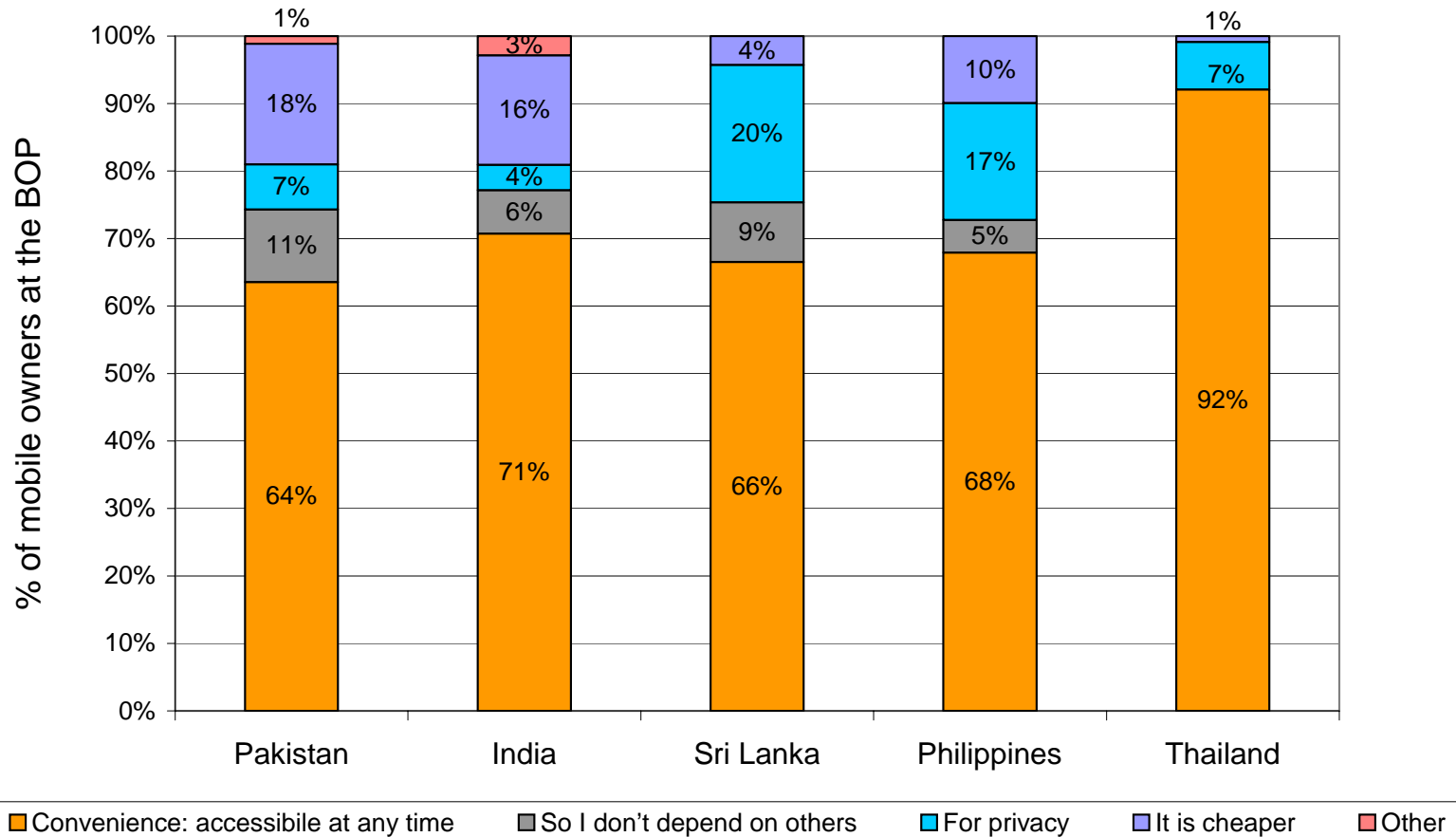
In India at BOP over 70% use public phones

Bottom of the Pyramid
some do own phones

20%

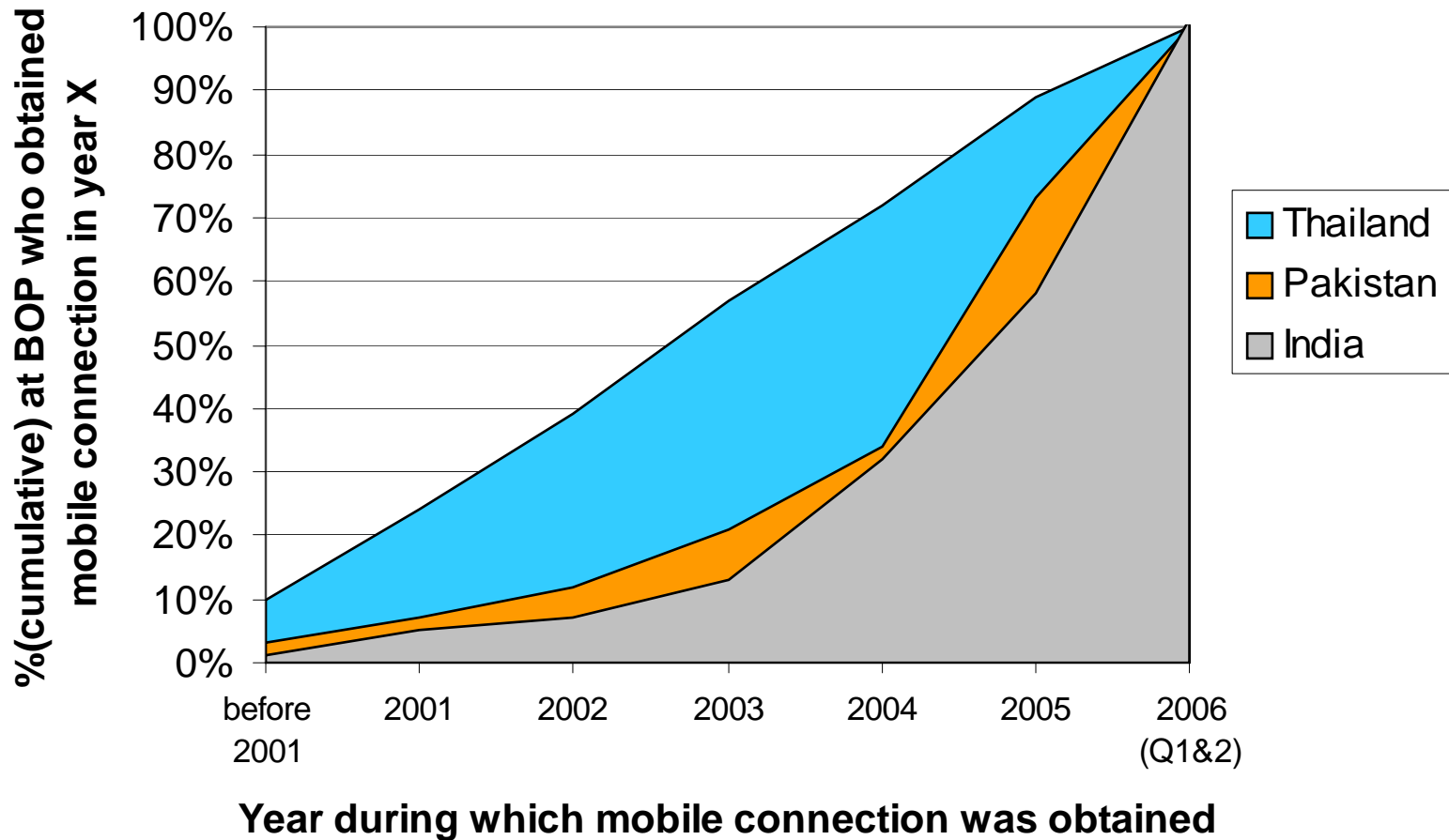
Why own a (mobile) phone?*

Primary reason for choosing to own a mobile (SEC D & E)

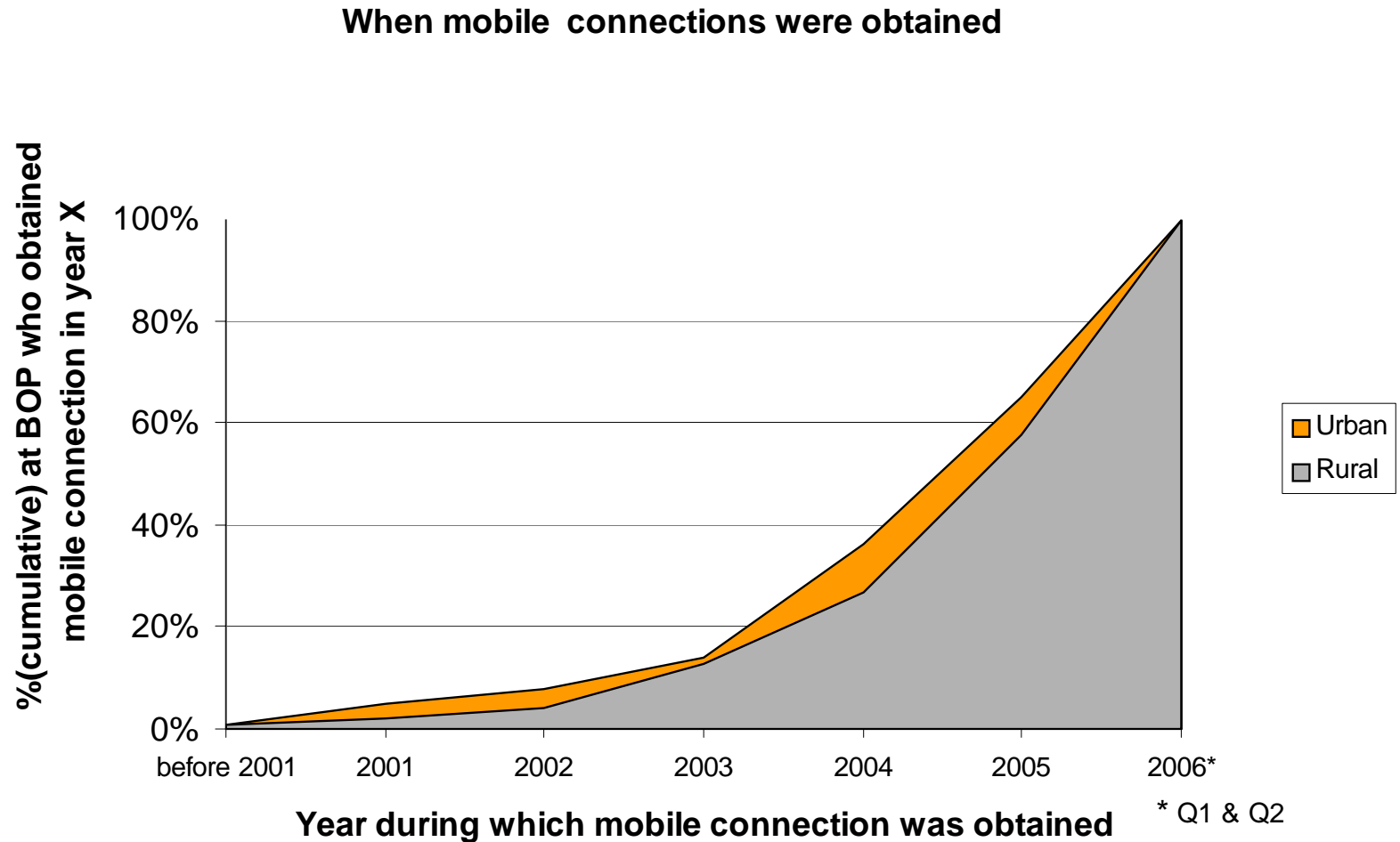


Convenience is key; privacy is more of a concern for higher income countries

India: most are recent owners

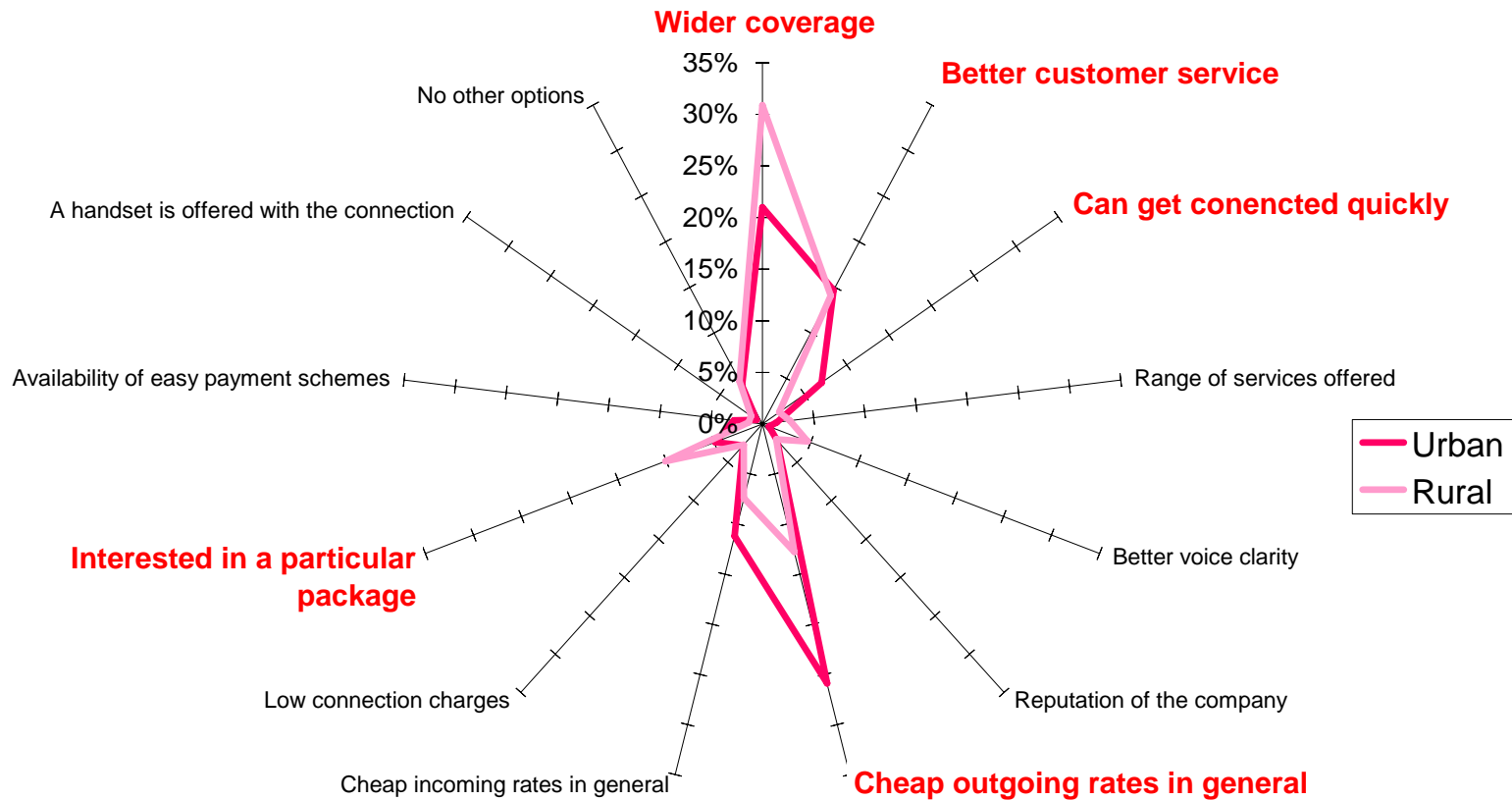


Both in urban and rural areas



Coverage more important in rural India; tariff in urban India

Reasons for selecting primary mobile service provider: India (SEC DE)



Bottom of Pyramid
value-conscious. strategic.



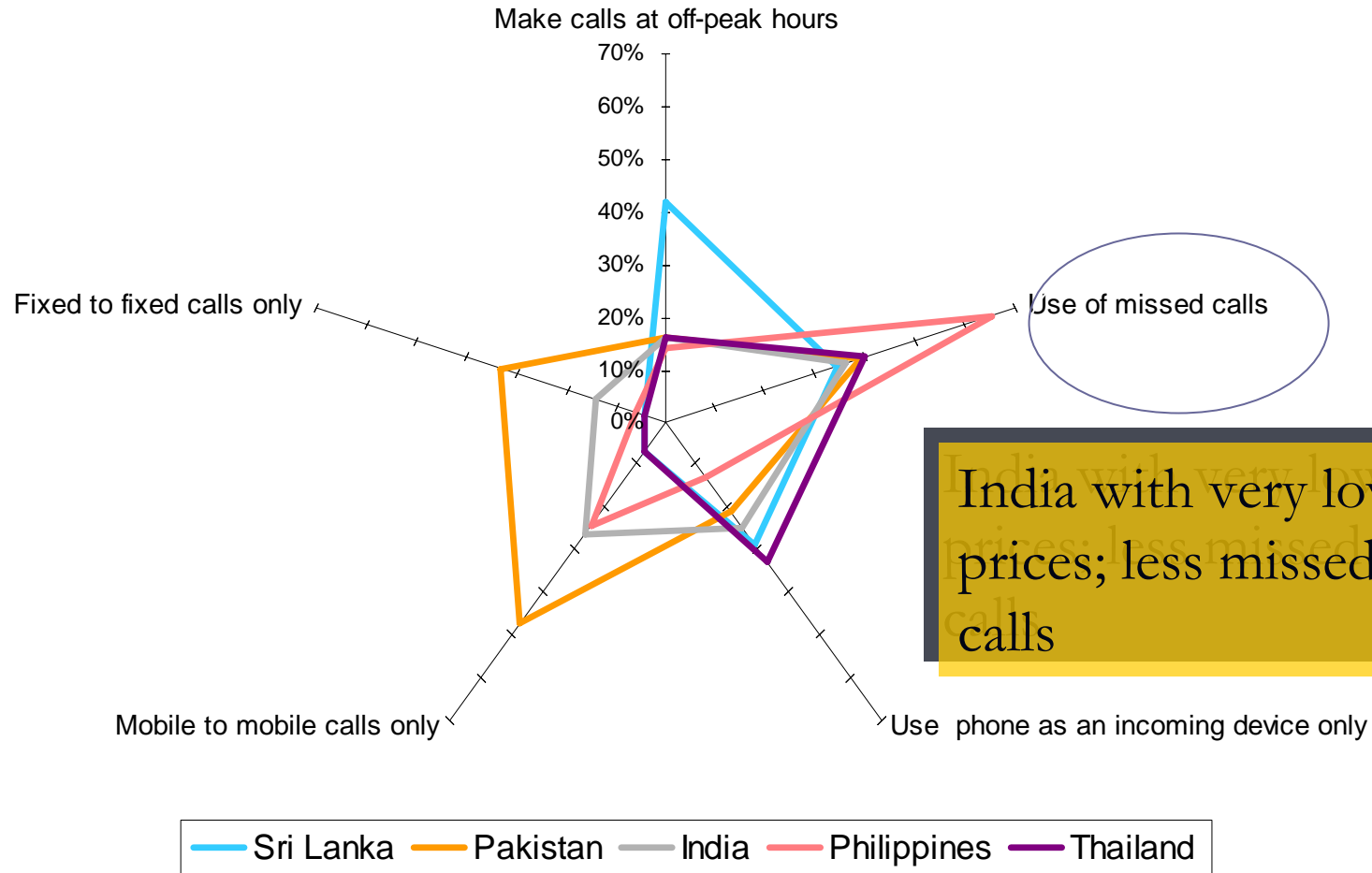
BOP is prepaid, *mobile**

| | Pakistan | India | Sri Lanka | Philippines | Thailand |
|----------|----------|-------|-----------|-------------|----------|
| Pre Paid | 99% | 95% | 92% | 99% | 96% |

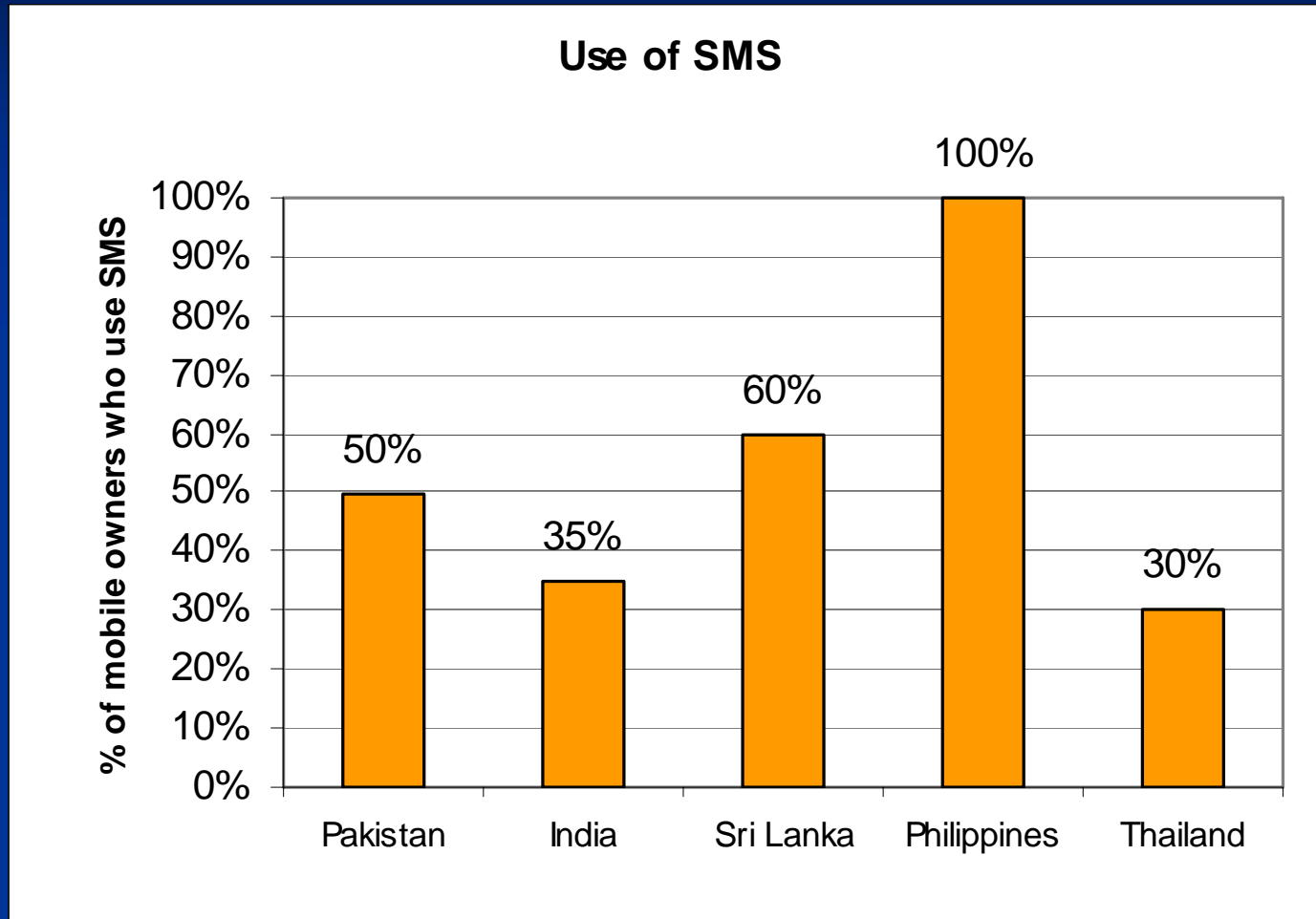
To control expenditure; no monthly rental charge

Missed call alert: a universal strategy

Use of 'strategies' to minimise call costs (by owners)



Philippines: SMS capital of the world*



Lack of local-language capabilities on handsets? Meaningful information?

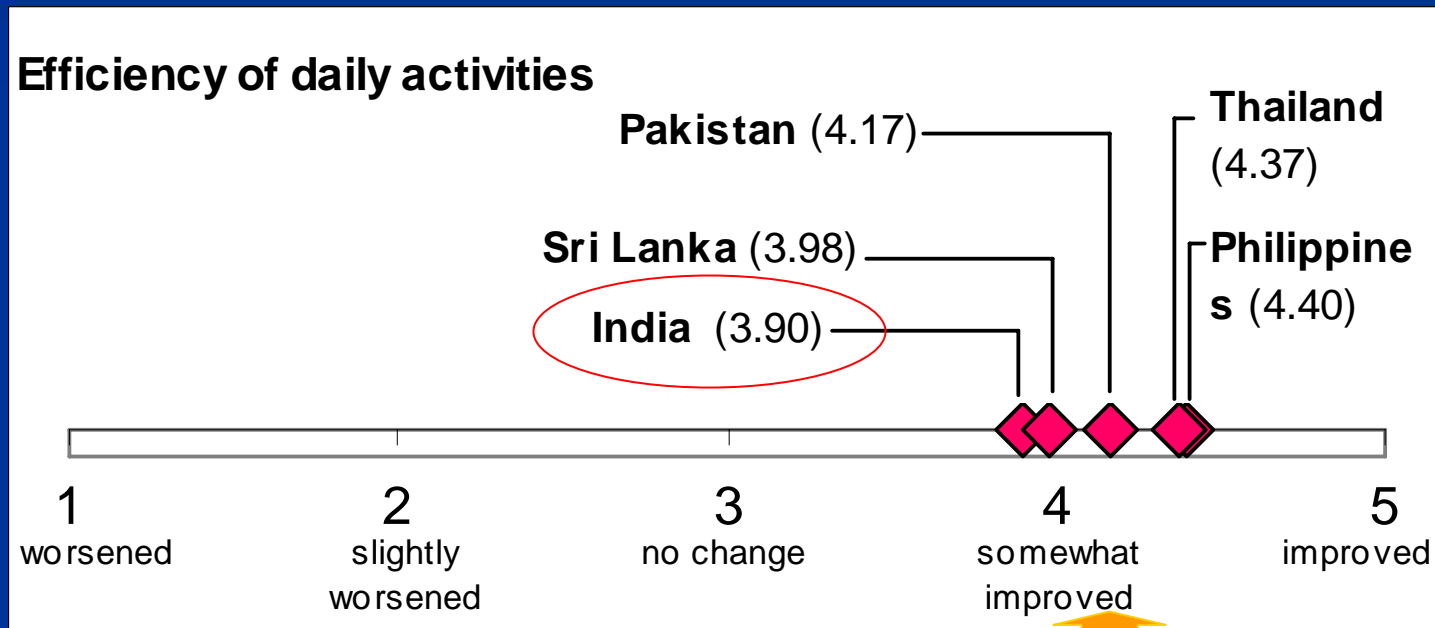
Bottom of Pyramid
telephone brings benefits

Economic benefits from direct access

- Income generation through the sale of telecom services; *Grameen model...*
- Indirect
 - Use of a phone by an auto-rickshaw driver
 - Obtaining agricultural price info by farmer
 - Cost savings made by making a call as opposed to taking a bus ride into town

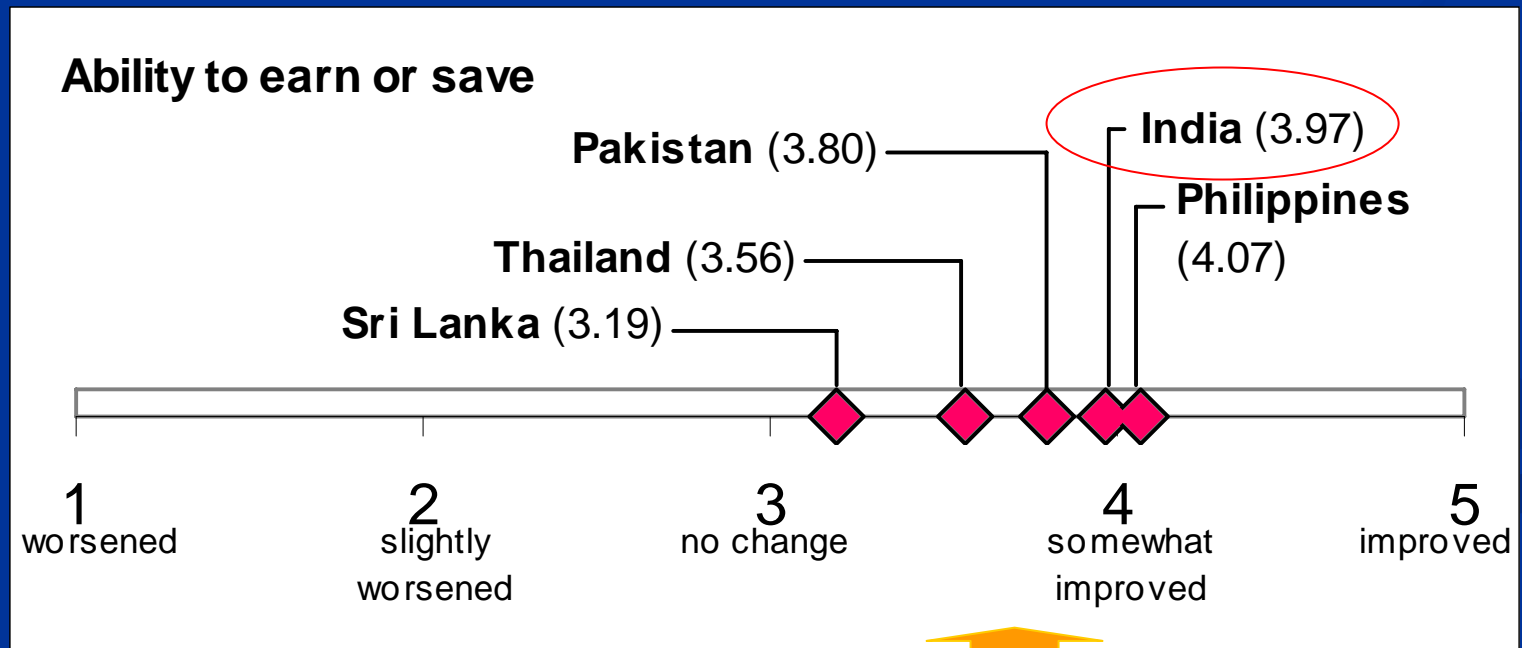
Efficiency of daily activities

- BOP sees the benefit

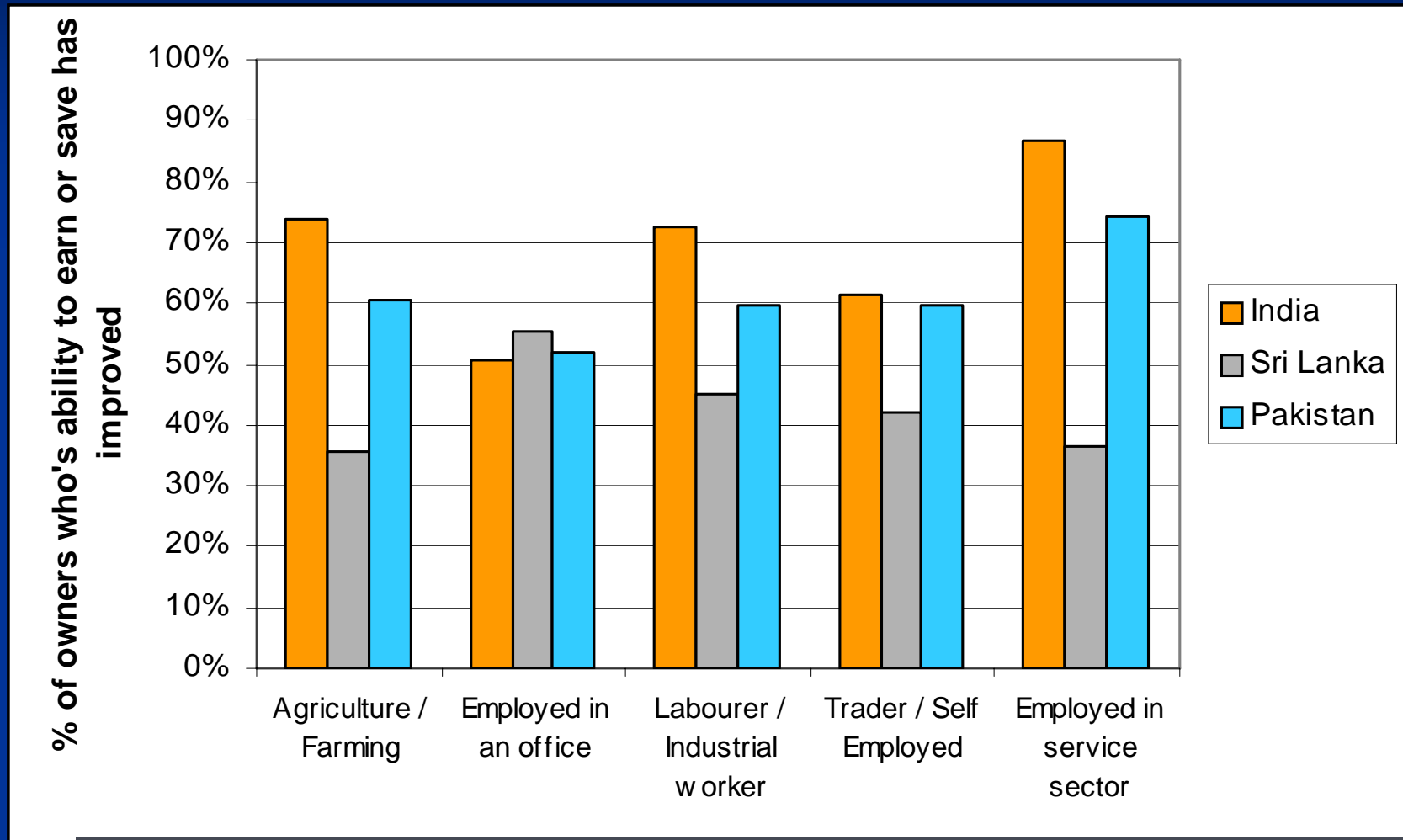


Efficiency → income benefit?

- India BOP perceives economic benefit
 - Large transactions costs avoided?



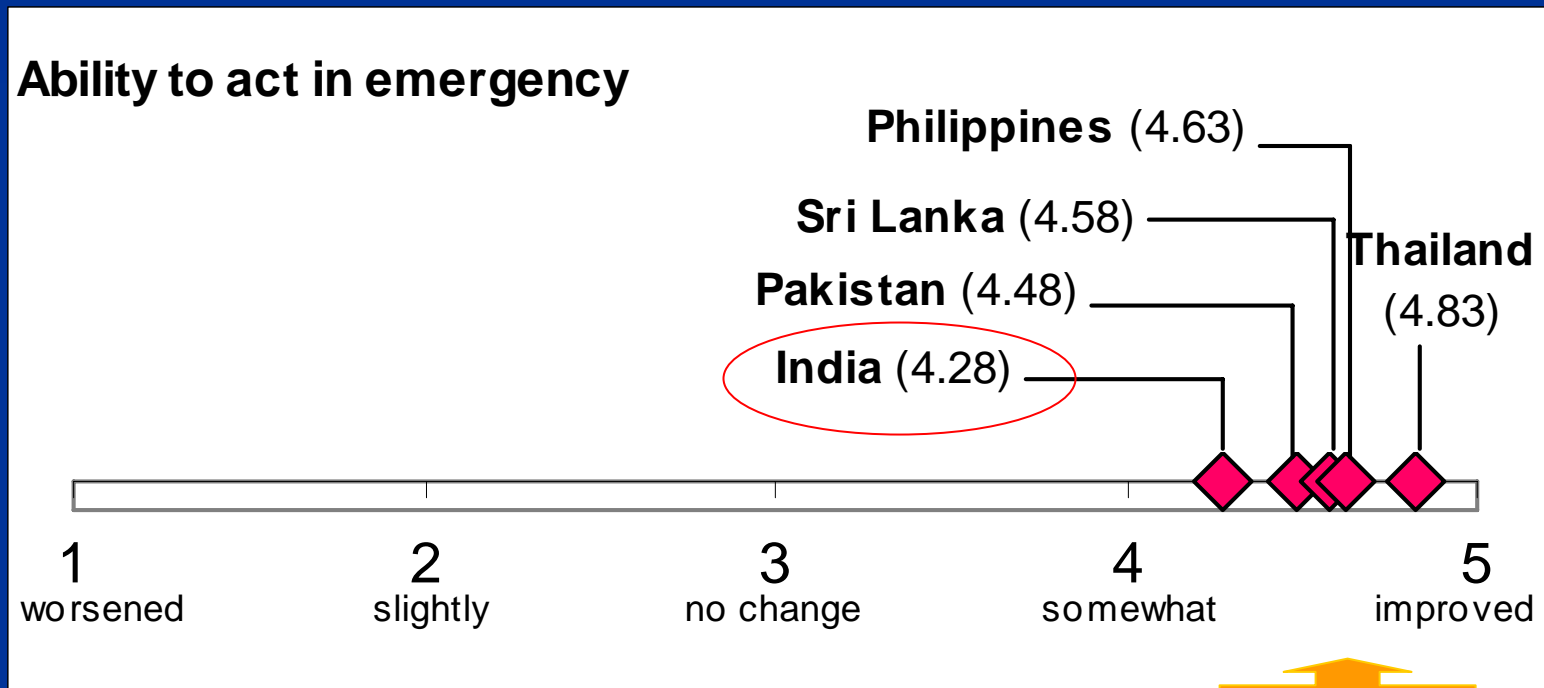
Seen both in services and agriculture



Saving travel time and costs, checking price information, sale of minutes?

But, sense of security is main benefit

- Ability to act in an emergency is key

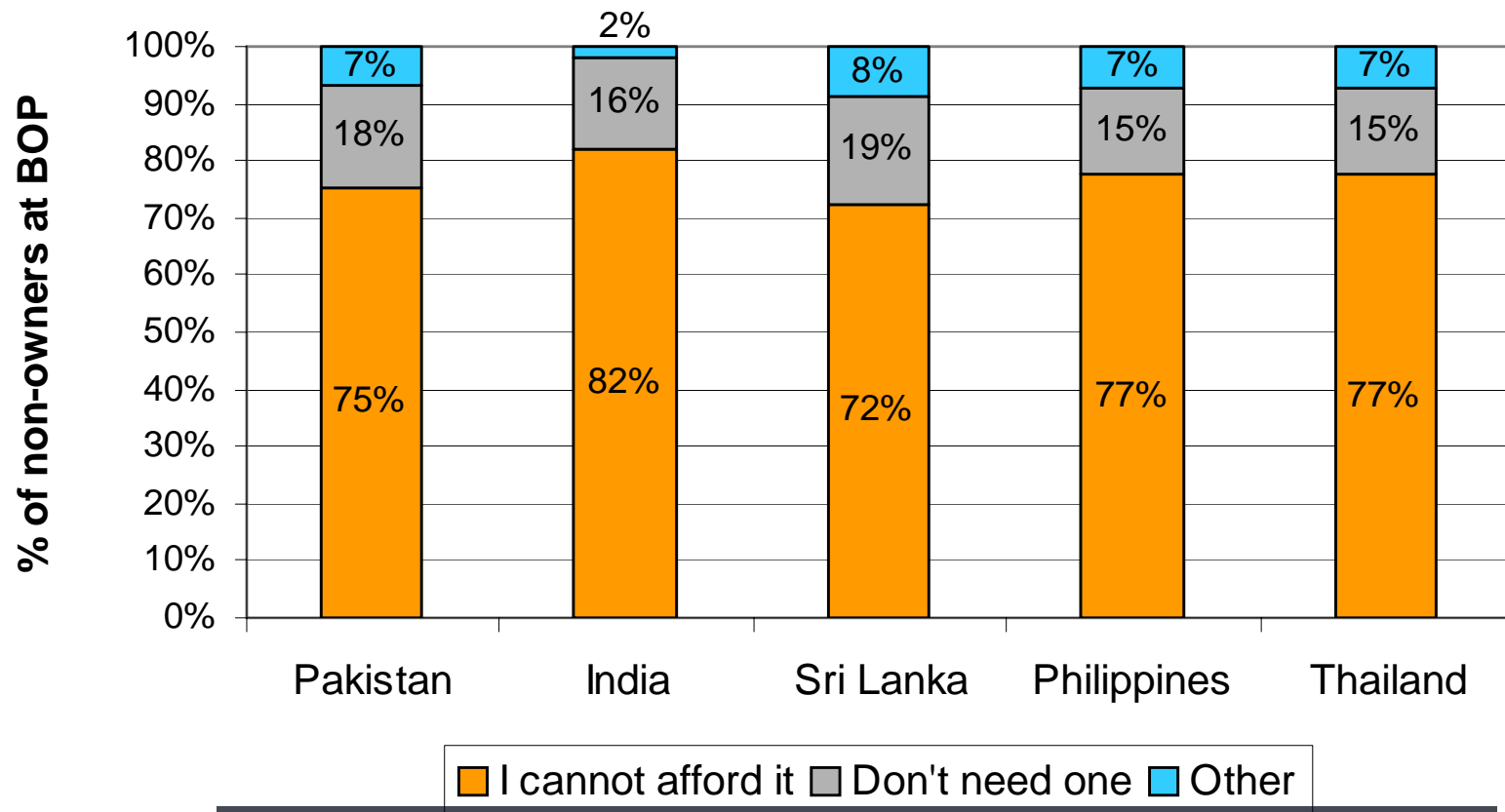


Bottom of the Pyramid
most don't own phones...

80%

Why **not** own a phone?*

Reasons for not owning a phone



Affordability is the key barrier to phone ownership

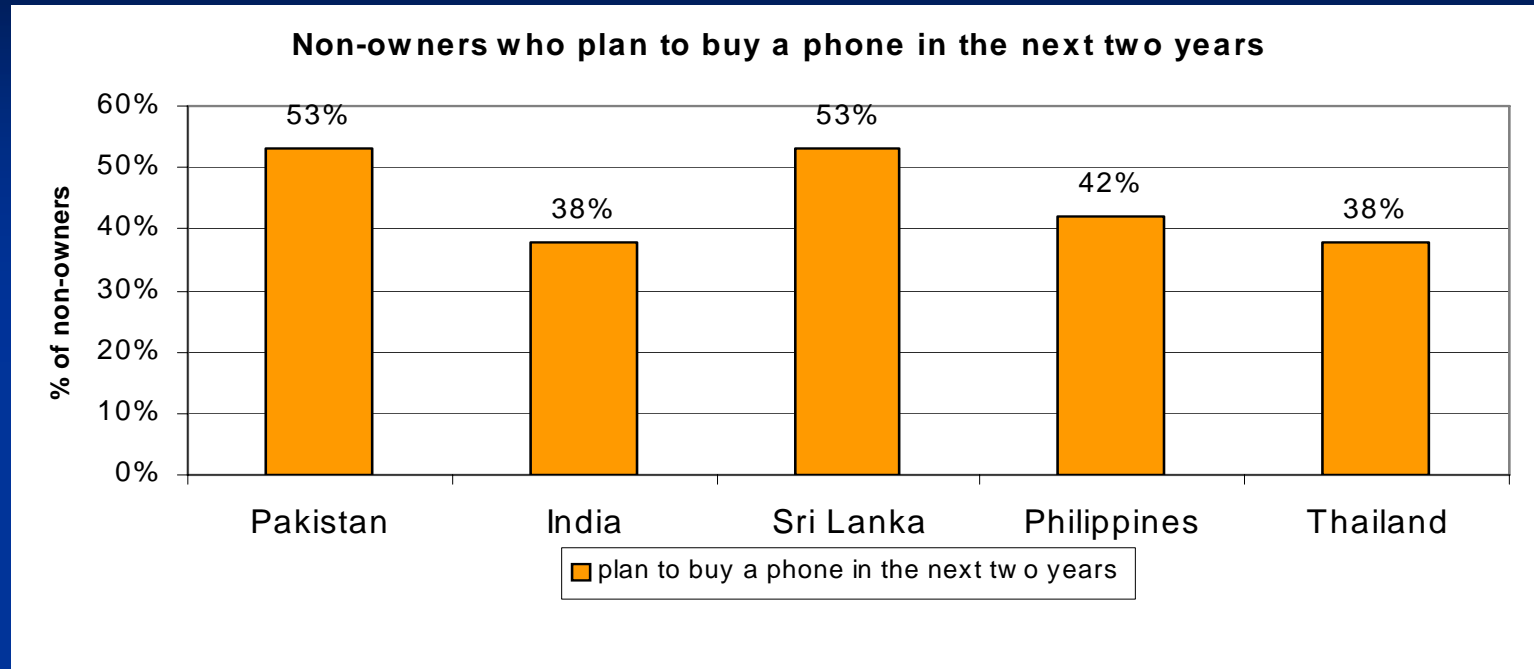
Next Billion

addressable market goes below
USD100 a month income

Current

- 2.5 billion phones as at September 2006
 - 500 million in last 12 months
- General expectation
 - 3 billion by 2008 (500 m in 1 to 1 ½ years?)
 - 50% Asia Pacific (including China)

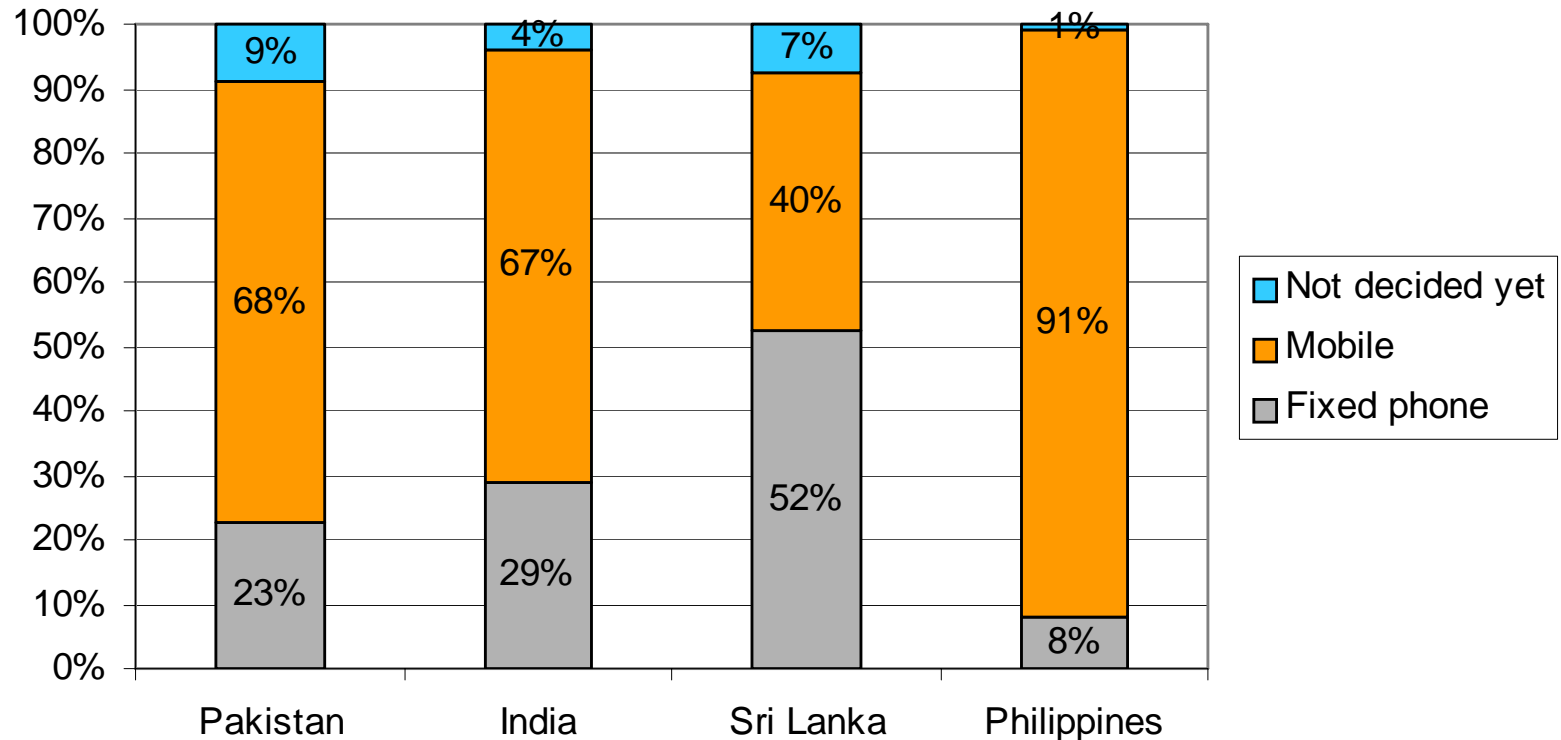
The next billion?*



| | South Asia | | | South-east Asia | |
|---|------------|------------|-----------|-----------------|----------|
| | Pakistan | India | Sri Lanka | Philippines | Thailand |
| Vertical growth, millions (HH obtaining additional connections) | 4 | 21 | 0.3 | 3 | 0.1 |
| Horizontal growth, millions (non-owners joining market) | 26 | 80 | 1 | 7 | 1 |
| Possible new connections at BOP, millions, next 2 years | 30 | 101 | 1 | 10 | 1 |

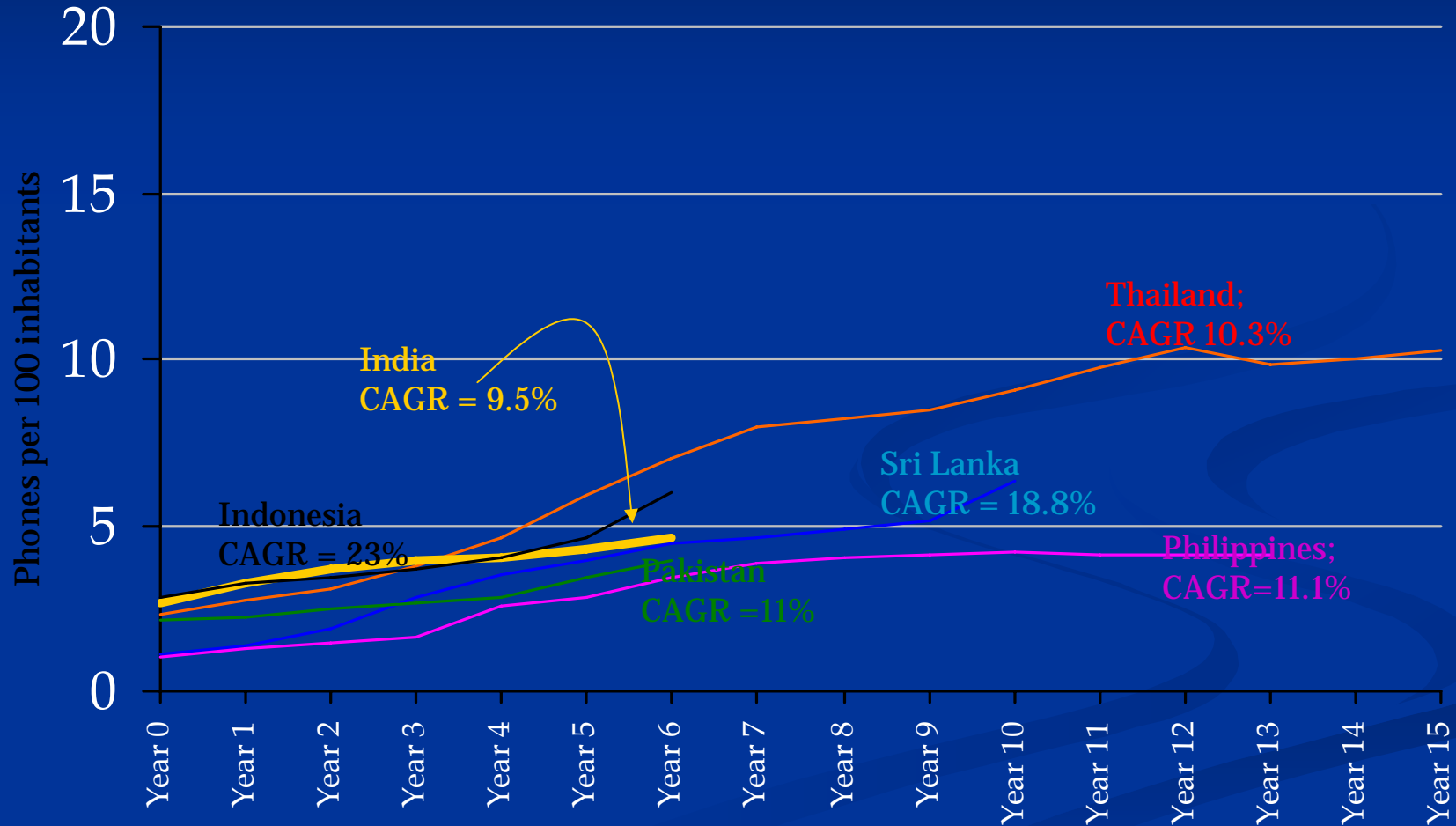
Growth mainly mobile*

Type of phone prospective owners would buy

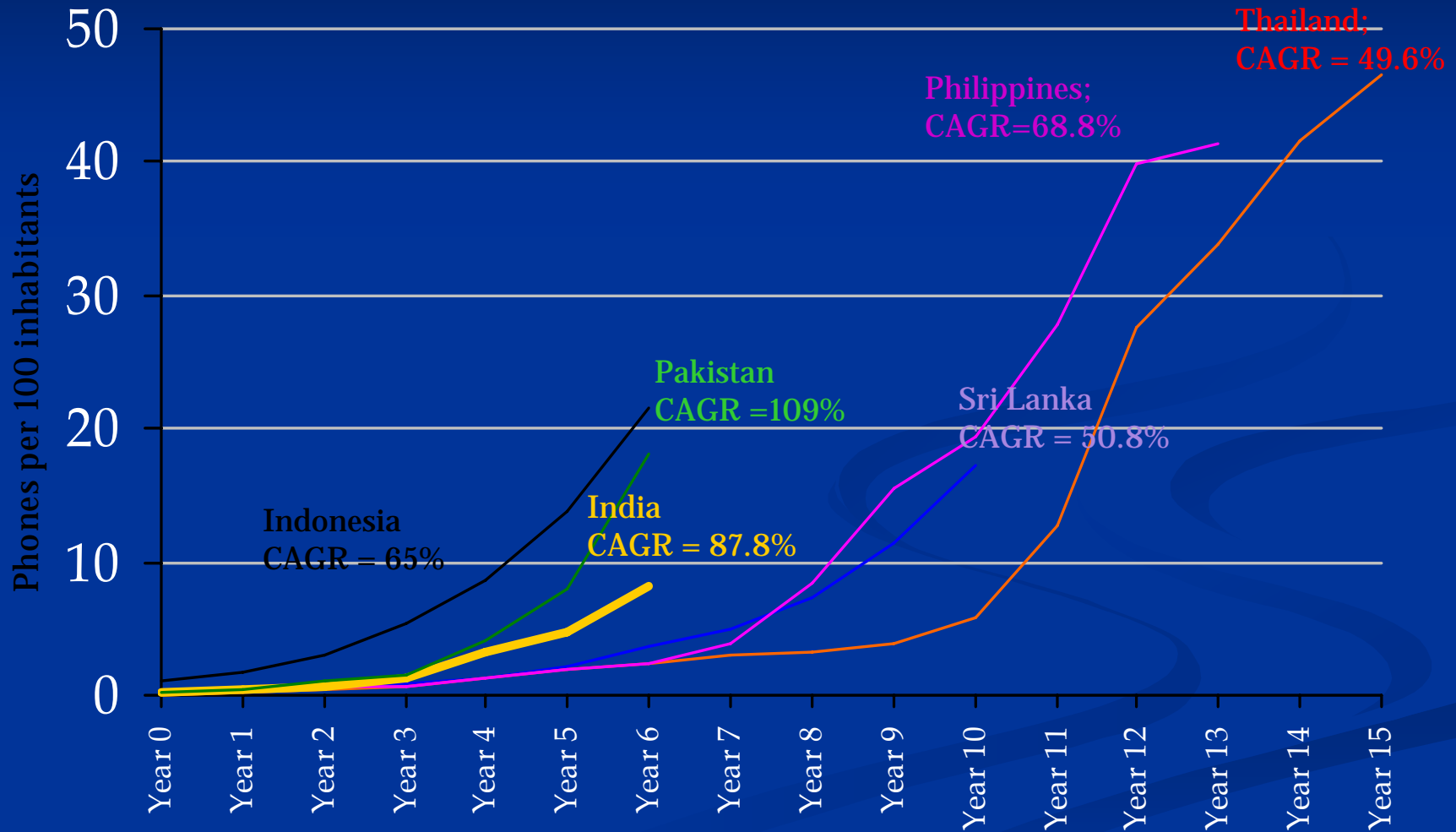


Better value proposition in India (also Phils and Pakistan)?

Fixed phones growth since liberalization (India post NTP 1999)



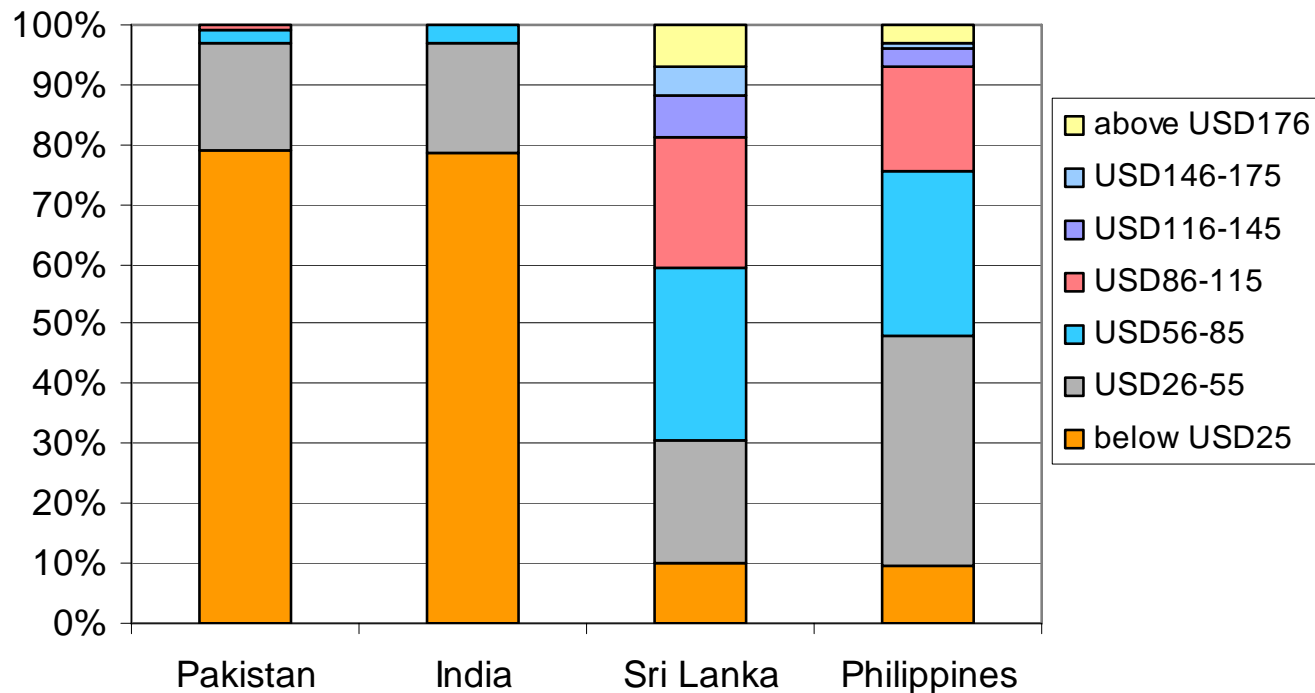
Mobile phone growth since liberalization (India post NTP 1999)



Initial cost of getting a phone

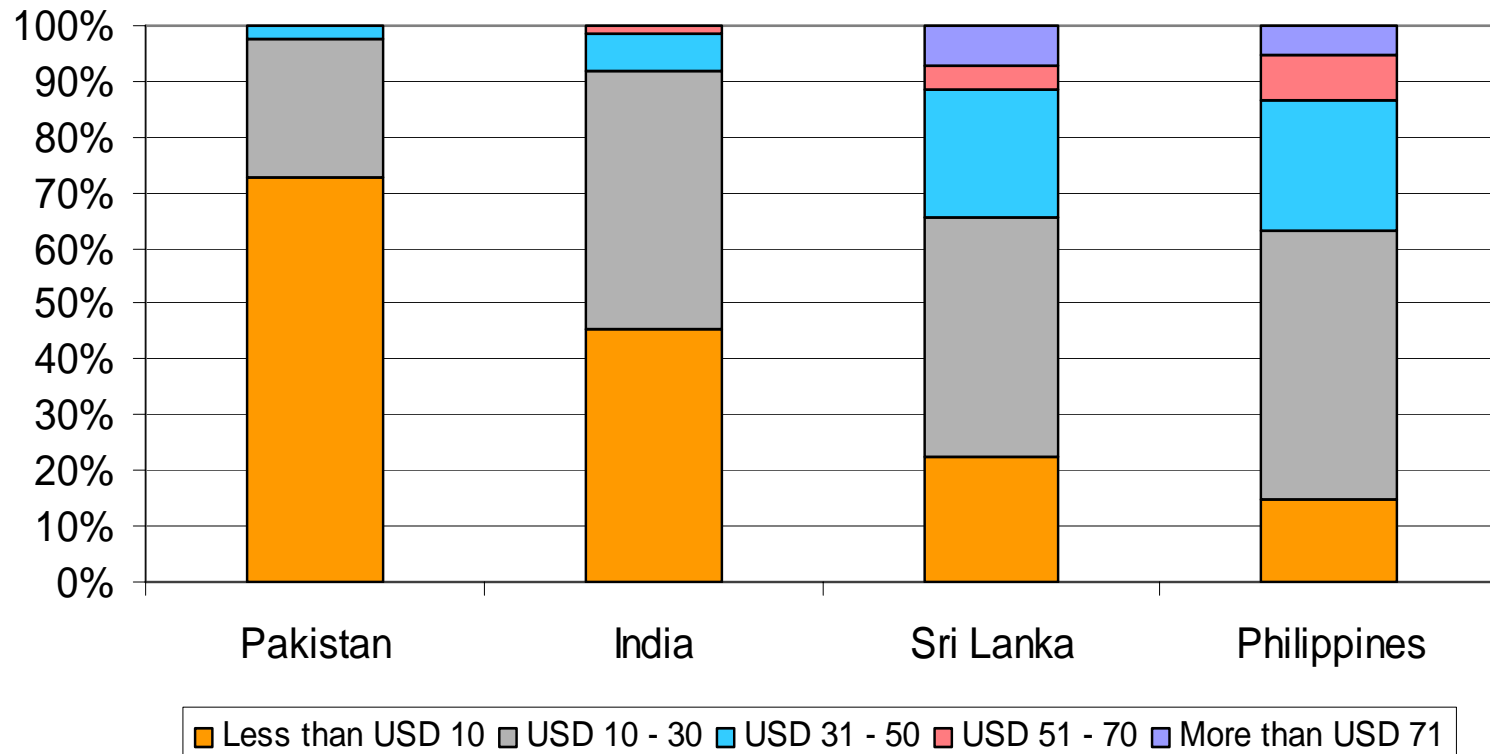
- 80% expect to pay USD 25 for handset

Expected cost of a new phone by non-owners



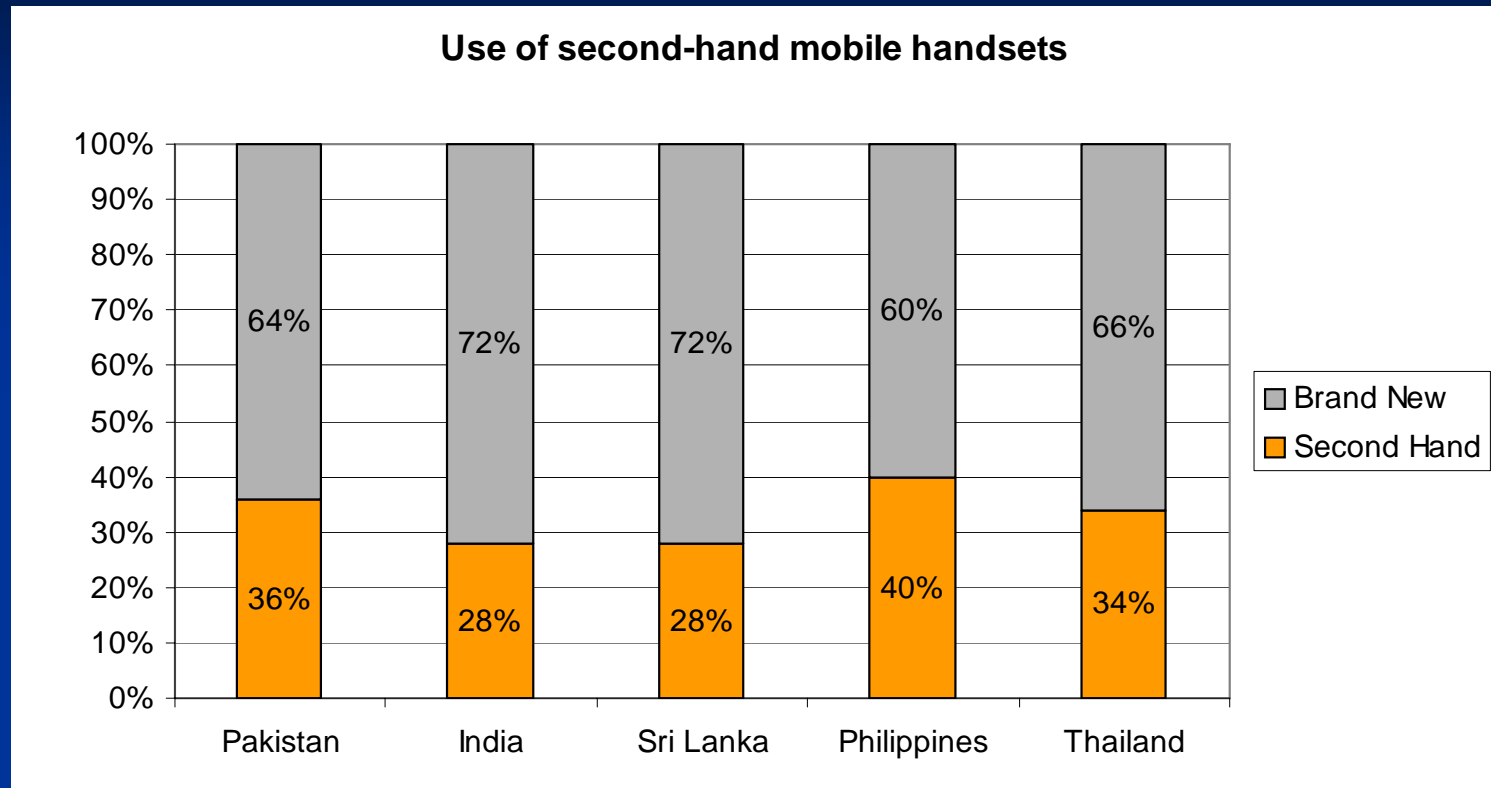
Need + affordability → Demand*

Initial cost that prospective owner can afford



Almost 45% willing to put down USD 10. Initial cost do not match affordability; the mismatch between need and affordability has to be addressed. Re-look at installment plan?

Second-hand phones?*



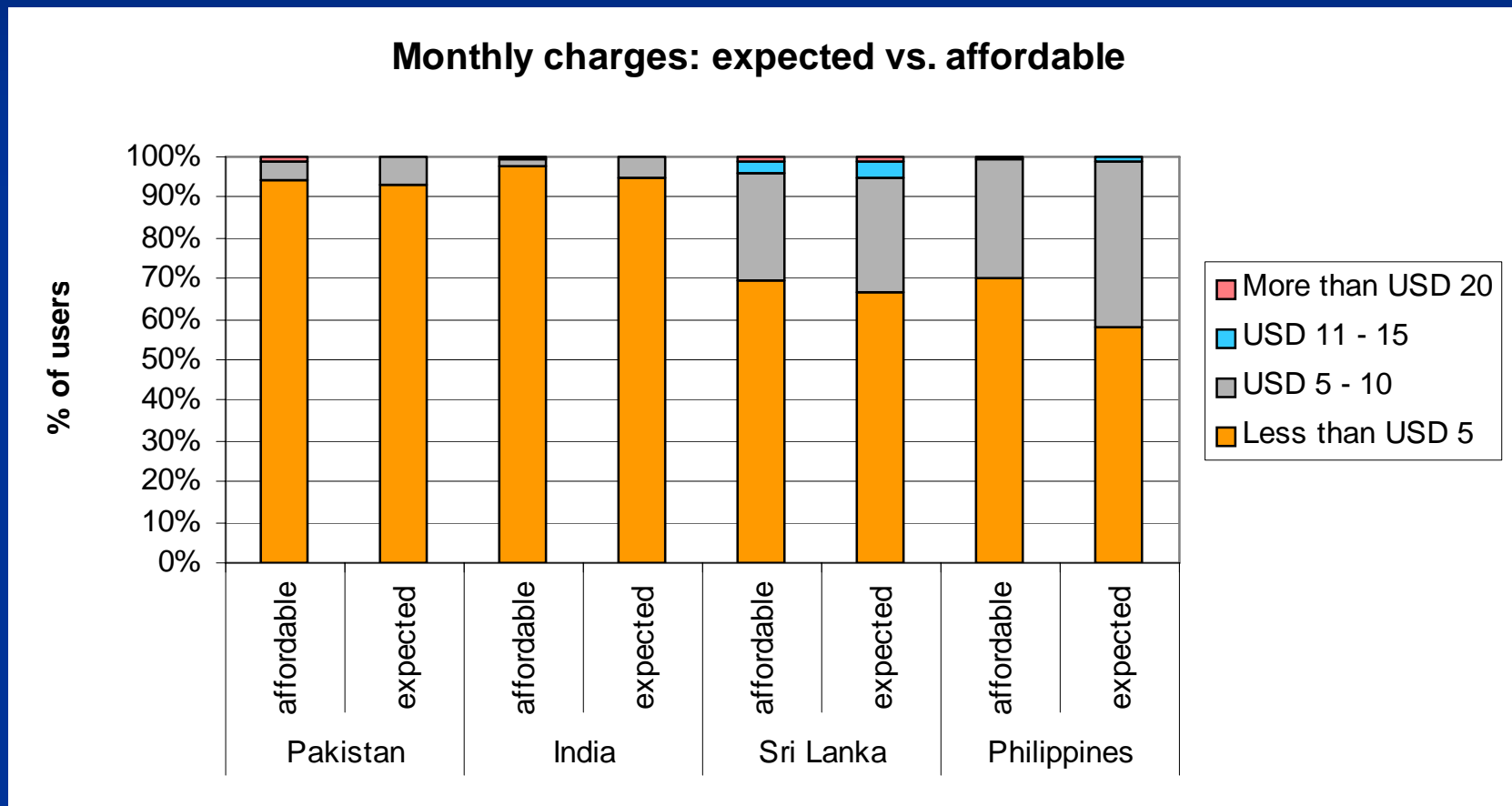
| | Pakistan | India | Sri Lanka | Philippines | Thailand |
|-------------|----------|-------|-----------|-------------|----------|
| Second-hand | 45 | 37 | 54 | 45 | 66 |

Many **spend more than monthly income to initially purchase brand-new handset**; heavy Filipino mobile use aided by use of second-hand phones?

Low-cost handsets (e.g *Ultra-low-cost handset*) will have good potential

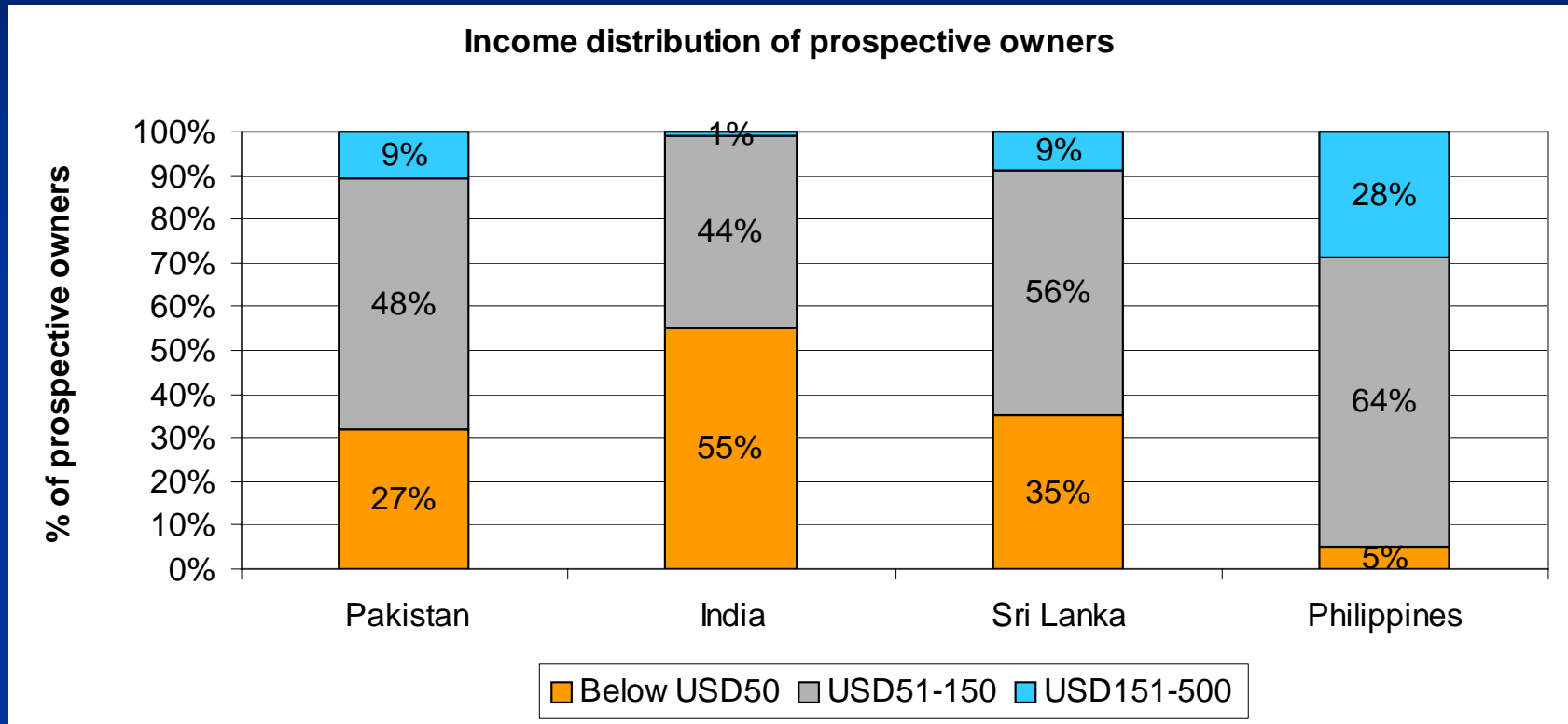
Usage costs*

- Most expect monthly charges to be below USD5



Expectations and affordability are aligned

Is a phone possible on USD2 a day?*



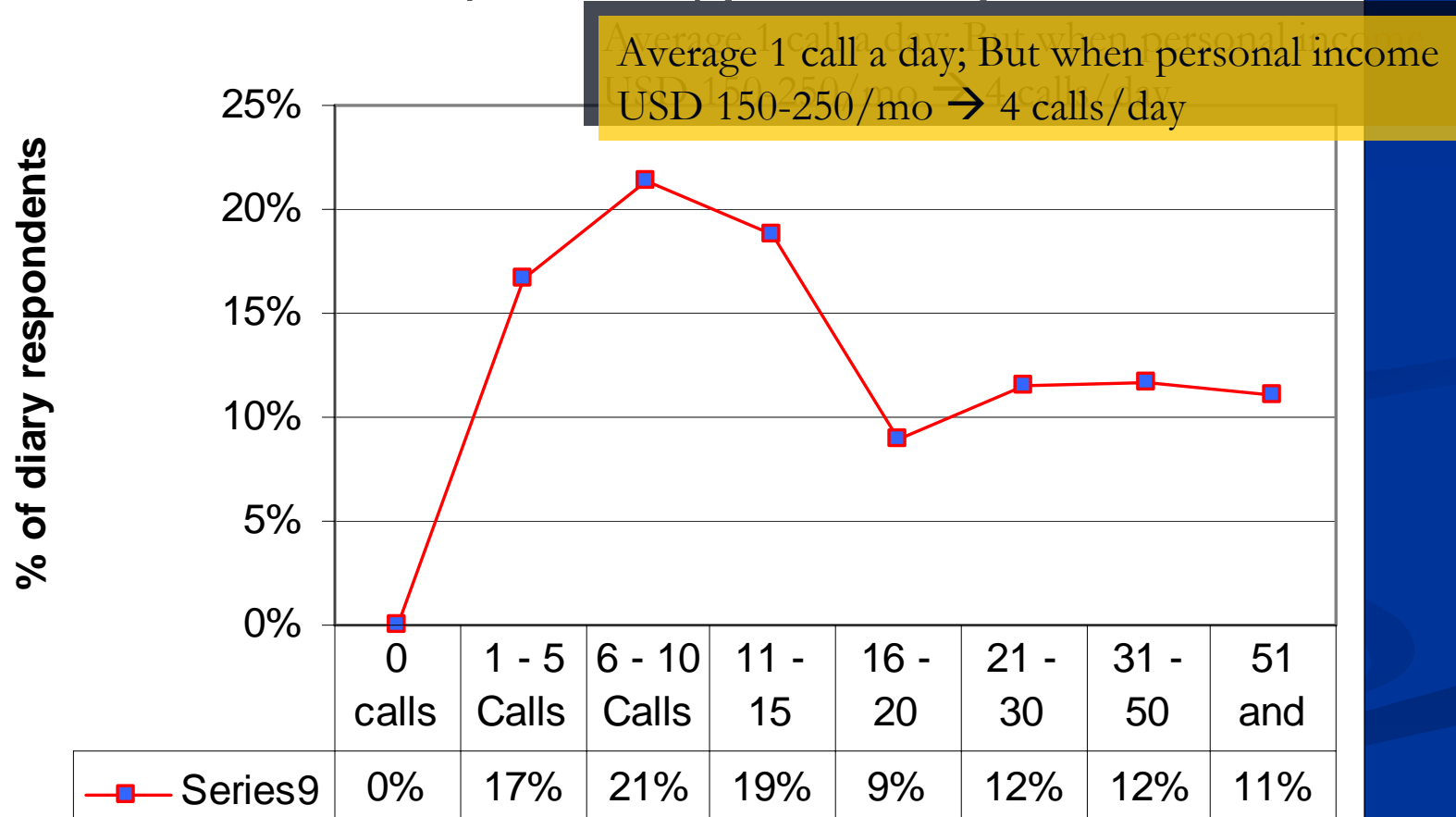
The **addressable market** does not stop at USD100 per month; it goes down further.

Usage patterns
owners + non-owners

1000%

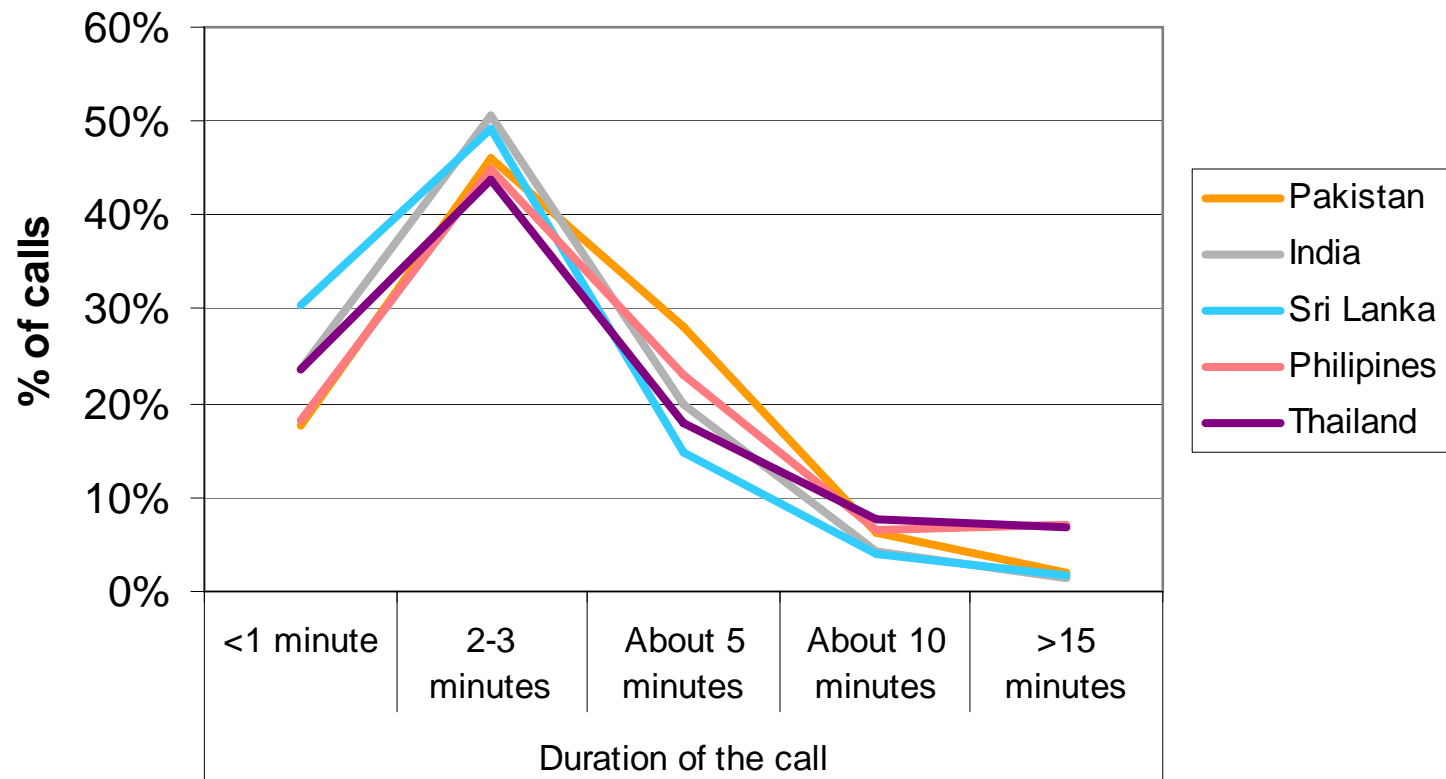
BOP usage is low; *India**

No of calls (in and out) per 2 week period



No hanging on the phone...*

Average call durations of diary respondents



Source: Diary

Industry MOUs are far higher. This data is for all; **owners and non owners.**

BOP in summary

- Almost everyone has access to a phone, but very low ownership
- Benefits of ownership (direct access) are known
 - Perceived as improving efficiency *and* income in India
- Next Billion: affordability is a key barrier
 - 150m at the BOP in IN, PK, LK, PH, TH in next 2 years
 - The addressable market does goes below USD100 a month
 - Individual use is still very low; Internet far far away

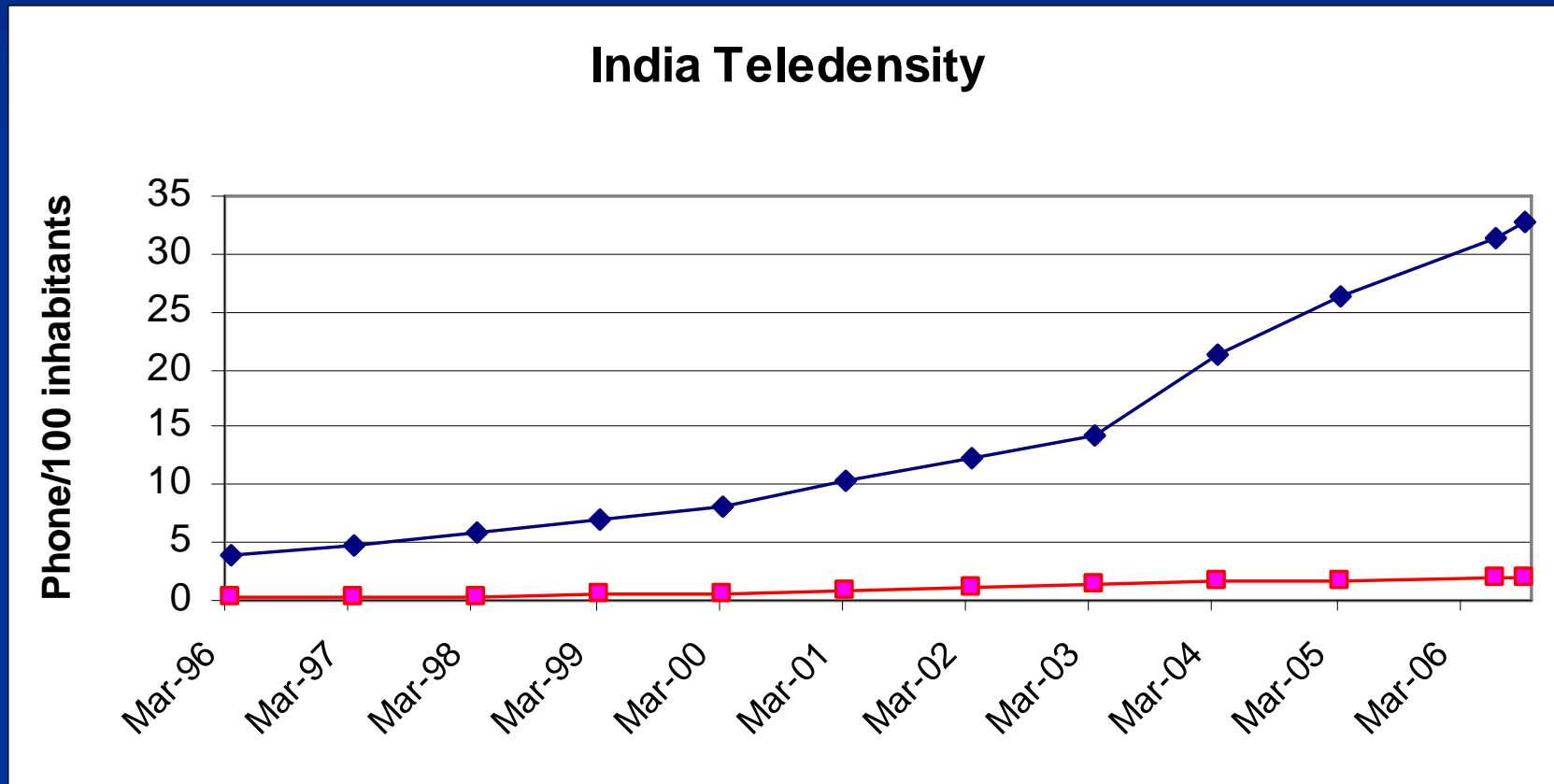
To think about...

- Telecom operators
 - **Leverage** benefits of direct access
 - Security, friends & family
 - Particularly in India: cost saving + income enhancing
 - Increase **awareness** on efficiency → economic gain
 - Convergence; **collaborate on meaningful content**
 - SMS based services vs. Bollywood movies
 - Innovations to enable **cheaper** calls
 - e.g. any-amount prepaid balance top-ups

To think about...

- Handset manufacturers
 - Affordable handsets with **local language** SMS capability
 - Ultra low-cost phones with “**warranty**”?
 - Installments?

Long way to go in rural India...



Source: TRAI

“...if we stop thinking of the poor as a burden and start recognizing them as value conscious consumers, a whole new world of opportunity will open up”

C.K. Prahalad. The Fortune at the BOP.



Thank you.

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