Building PPP for the provision of ICT access

for disadvantaged communities

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Harsha de Silva

Lead Economist, LIRNE*asia*

LIRNE*asia*

Learning Initiatives on Reforms for Network Economies

- Keep to the focus of “building partnership for the provision of ICT access”
  - ICT access is not only how to sustain a telecentre
    - Discussions on the importance of building partnerships for sustaining telecentres has already happened here
  - Focus is on connectivity infrastructure and financing
    - eBario gets free connectivity?
    - India’s proposed 100,000 CSC gets free connectivity?
    - What is “free service” stops; fear in Orissa?

Plan of presentation

- Some facts
- Current status of ICT access
- Public-Private Partnerships
- Strengthening PPP
- Role for ESCAP and others

Some facts in the developing world

Fact

- Budgetary constraints
  - Cut ‘development’ expenditure
- Infrastructure
  - Reduced availability
  - For disadvantaged communities; sometimes not available

Fact

- Public sector
  - Development objectives
  - But, many instances; low quality service delivery
- Private sector
  - Profit objective
  - “Better”, “cheaper”

Fact

- PPP
  - contractual agreement between a public and a private sector entity whereby the private entity commits to provide an identified public service
  - If designed and implemented properly, can produce “win-win” outcomes

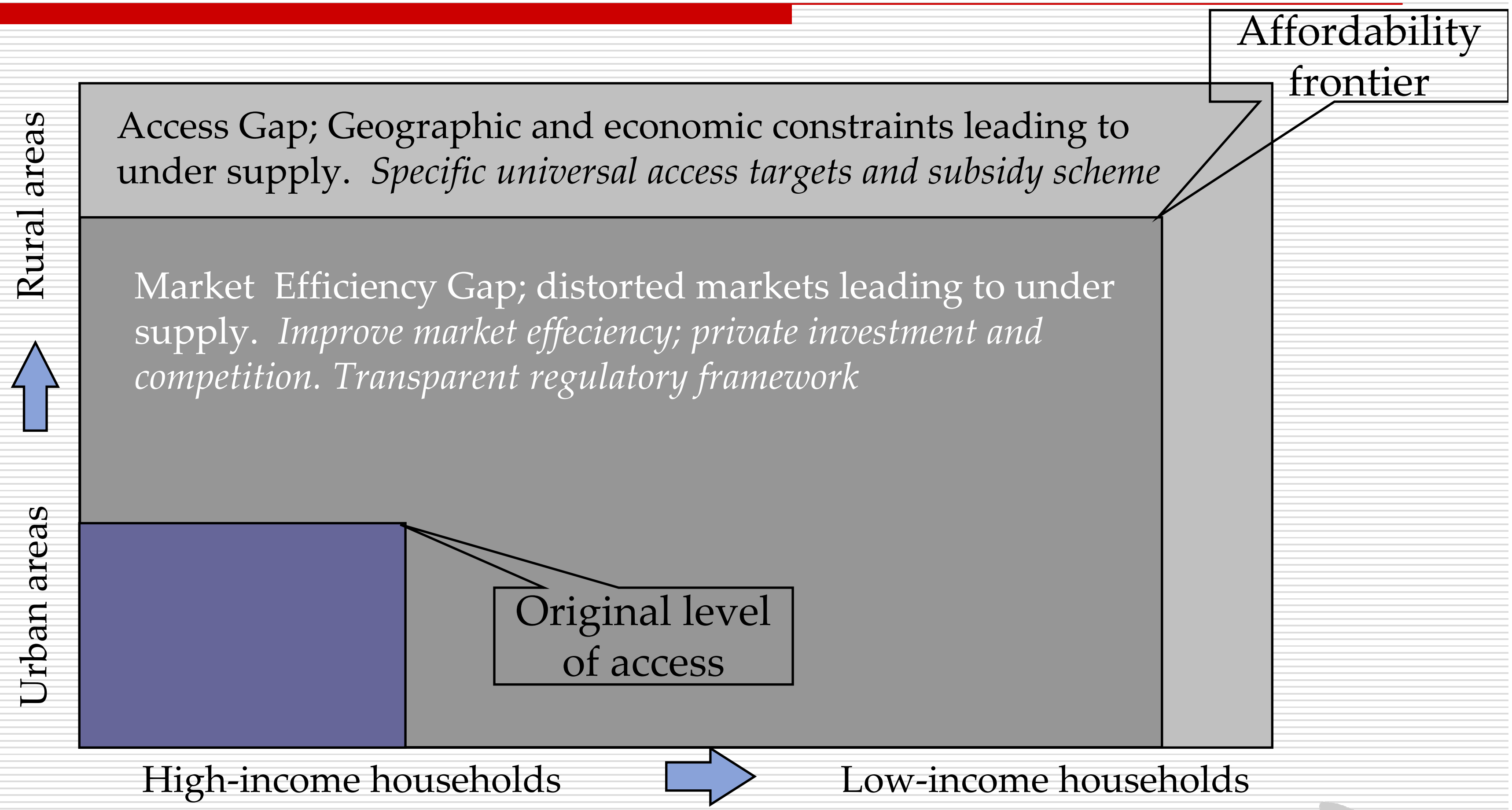
Motivating factors for PPP

- Reduce budget allocations
- Improve availability and service of [public] infrastructure
- Mobilize private sector expertise
  - Design and construction
  - Management and operations
  - Structuring financing
- Better risk allocation
- Utilize limited public funds to better meet development objectives
  - Telecom connectivity? Polio vaccination?

Current Status of ICT Access

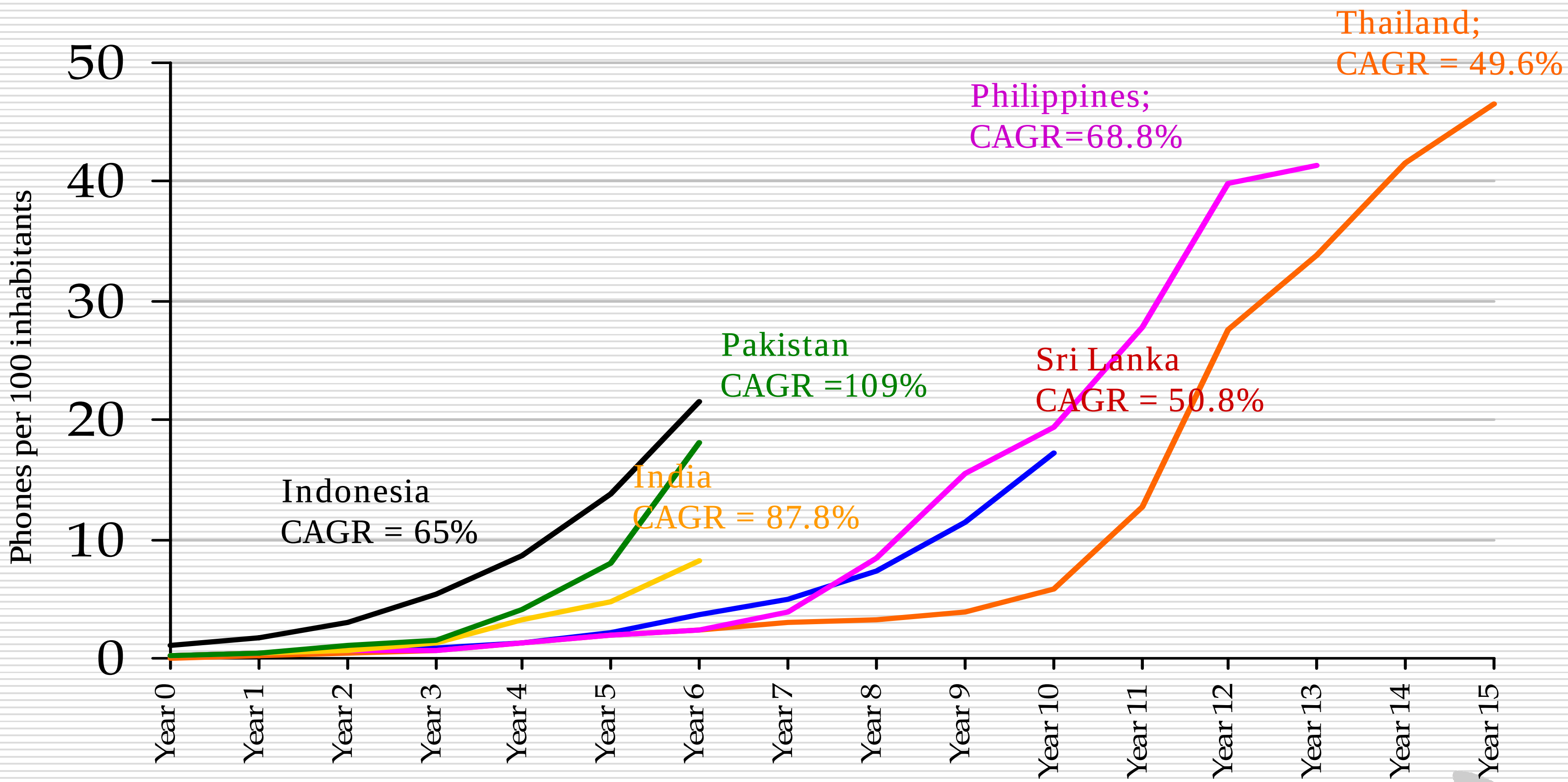
Focus is only on infrastructure; connectivity both backbone and last mile

What is “totality of the access gap”



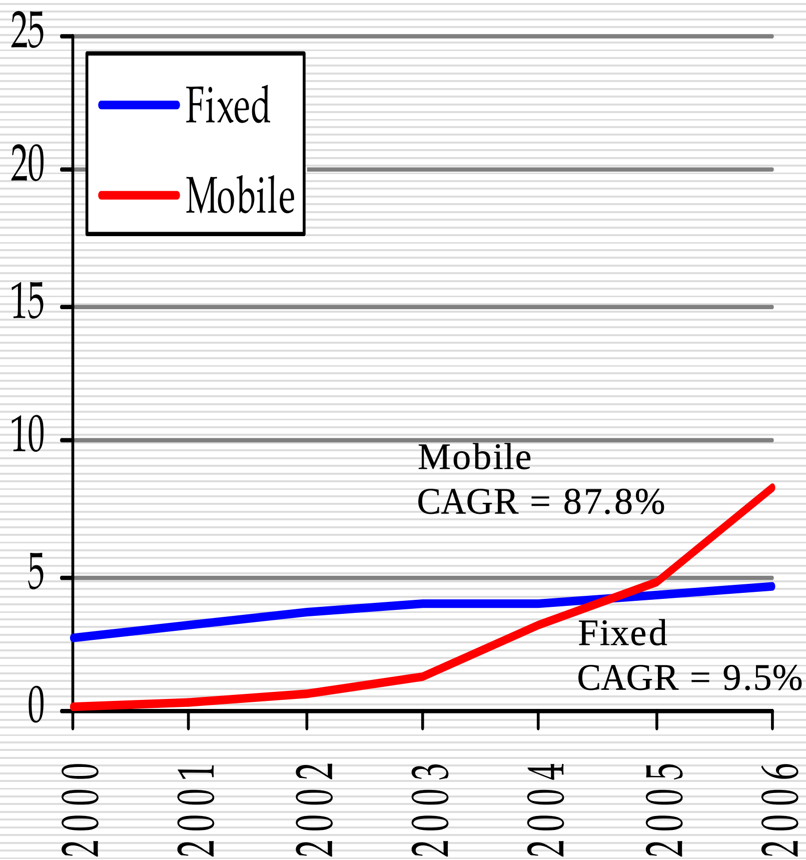
Mobile phones per 100 inhabitants

as at end FY 2006



Notes: India on an April – March reporting period ; Pakistan on a July – June reporting period; Other countries follow Jan – Dec (calendar year) reporting periods; Philippines Year 3, 4, 11, 12 are calculated numbers assuming average uniform growth (or decline) due to unavailability of data. Sources: India-TRAI; Thailand– Company Reports; Pakistan-PTA; Philippines-NTC; Sri Lanka-Company reports; Indonesia-1999 from DGPT, 2000 onwards from company reports

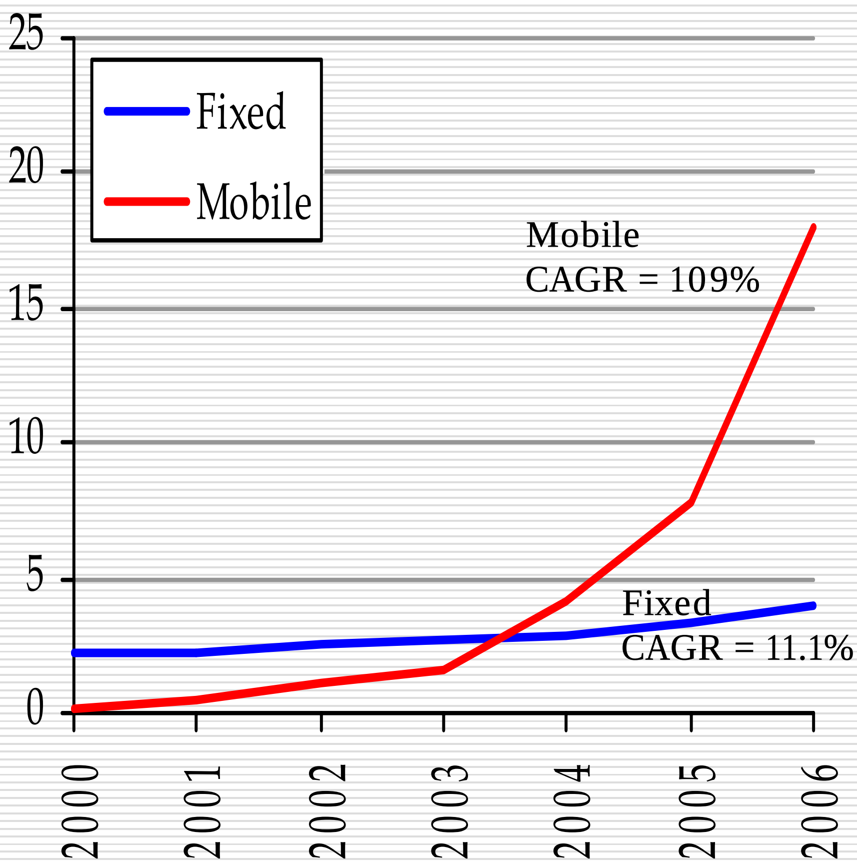
India



- Fierce competition in mobile sector; market entry and price. Not so in fixed;
  - Late 2002 forbearance of mobile tariffs → free fall; mobile = fixed by 2005
- Effective regulator [TRAI]
  - USO and ADC damper; now overcome

Source: TRAI, COAI, AUSPI

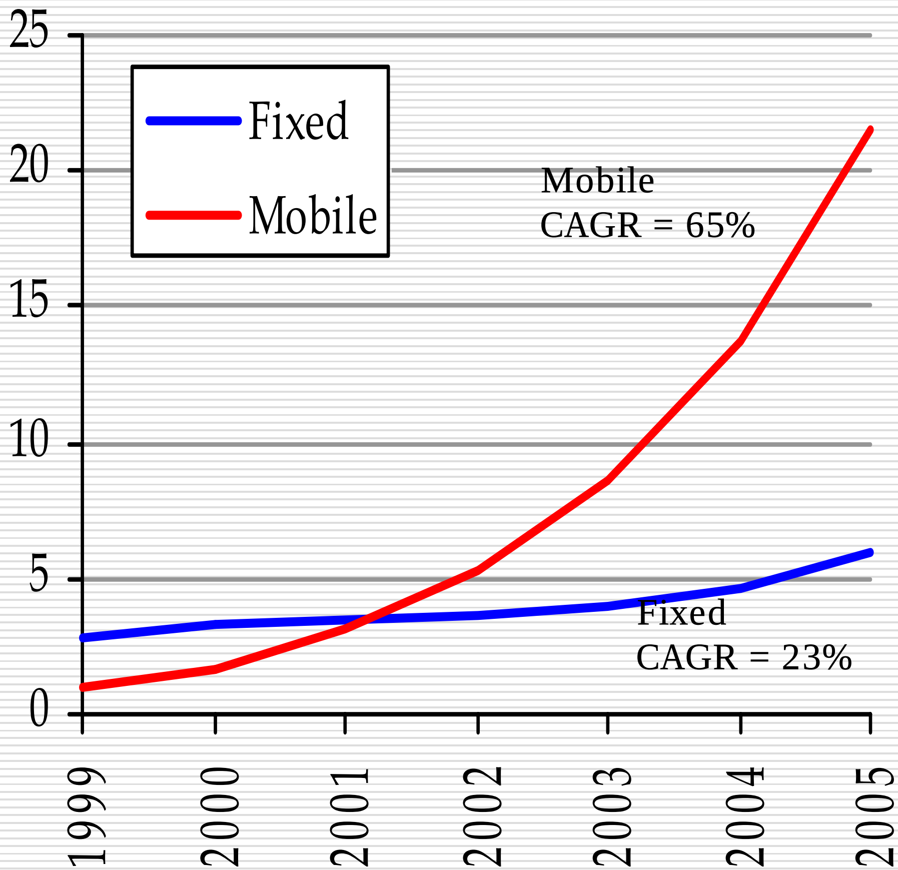
Pakistan



- Strong competition in mobile sector post 2003 reform; but not so in fixed
  - Fixed still 98% incumbent; recently privatized, spike after WLL entry 17 issued, 4 operational
  - Mobile 4 main players, several others. 100% foreign ownership
- Liberalization along the lines of text book; regulator established, competition increased, incumbent privatized
- Effective and transparent regulation; credibility

Source: PTA

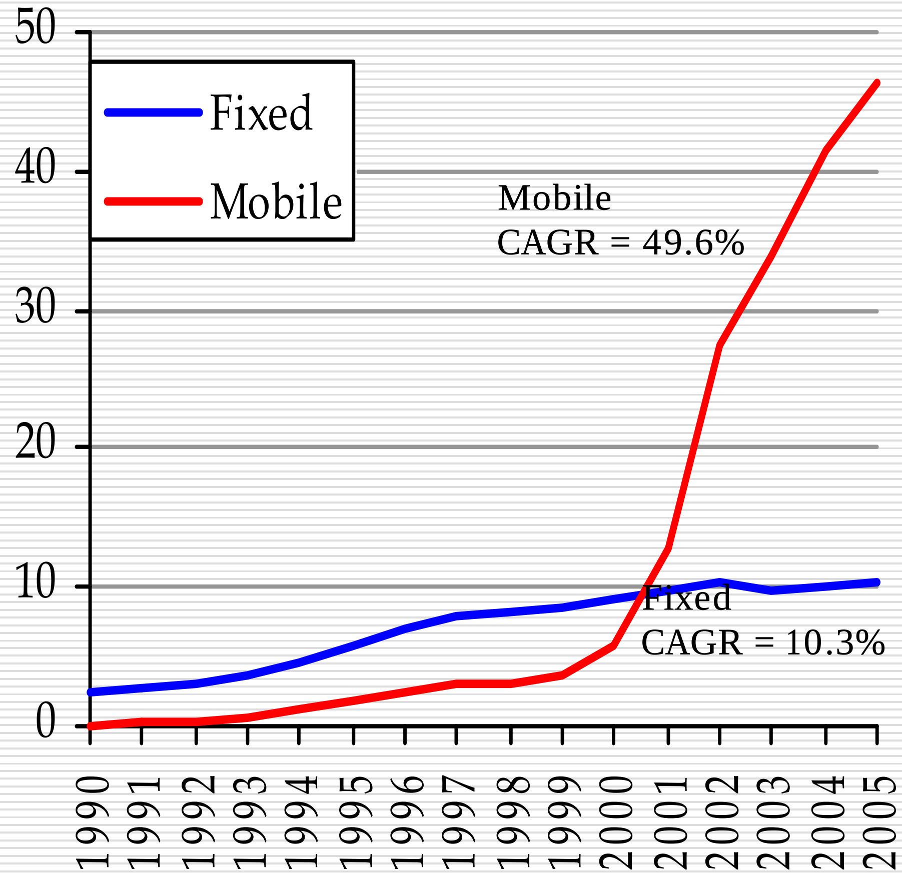
Indonesia



- Fairly high competition in mobile; limited in fixed
- Regulator setup long after opening up and privatizations
- Every time new entrant, or threat of such → growth
- Racing for new territory

Source: 1999 from DGPT, 2000 onwards from company reports

Thailand



- Up to 2000 no effective competition → lackluster growth
  - Fixed: *reached* limit
  - Mobile: collusion
- 2000-01 entry of new disruptive competitors
  - Spectacular growth
  - Price war
- Still serious regulatory issues
  - Concession agreements override authority; SOE not within competition law etc.
- Political backlash of sale of mobile operator; foreign ownership issues?

Source: Company reports

Story so far…

- Closing the market efficiency gap
  - Moving the pre-reform frontier out towards the affordability frontier
- What about the access gap
  - Is the access gap static?
  - Answer is two-fold
    - Improving technology → cheaper service; supply push → rural to remote
    - Innovative business models → improved “demandability” [Prof. Dinesh Chapagain] or demand pull

Professor C K Prahalad

- "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"
  - The Fortune at the Bottom of the Pyramid: Eradication Poverty Through Profit
  - Is this "vested interest"? [Mr. Debi Prasan Patnaik]
- Evidence
  - Increasing profitability of Telcos serving more and more rural poor
    - Declining ARPU
  - Surveys at the BOP

Mid-2006 Survey by LIRNE*asia*

India, Pakistan, Sri Lanka, Philippines, Thailand

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

The "Bottom of the Pyramid"

- 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

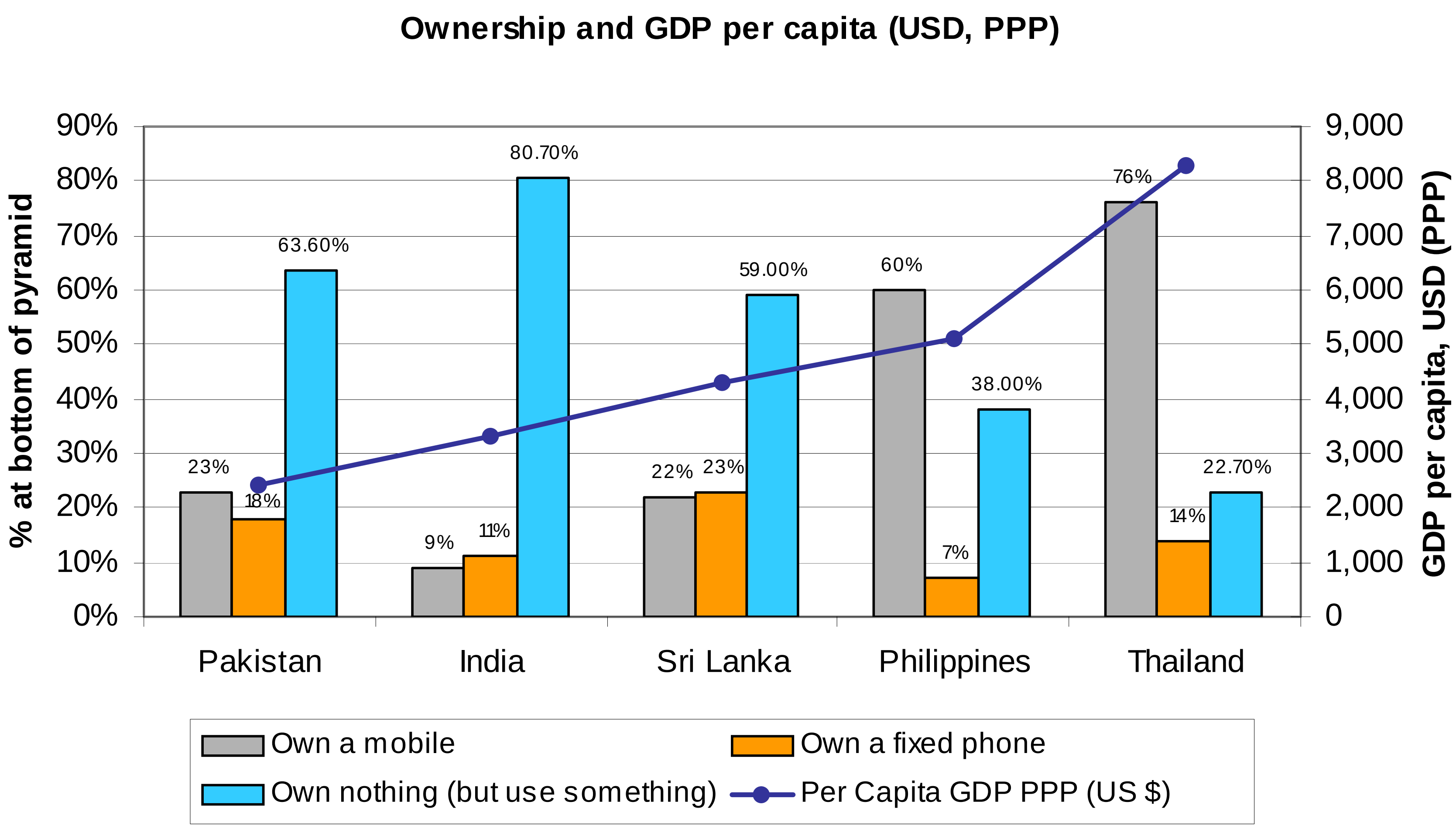
*excluding FANA/FATA – Tribal Areas; **excluding N&E Provinces

Overall access is very high

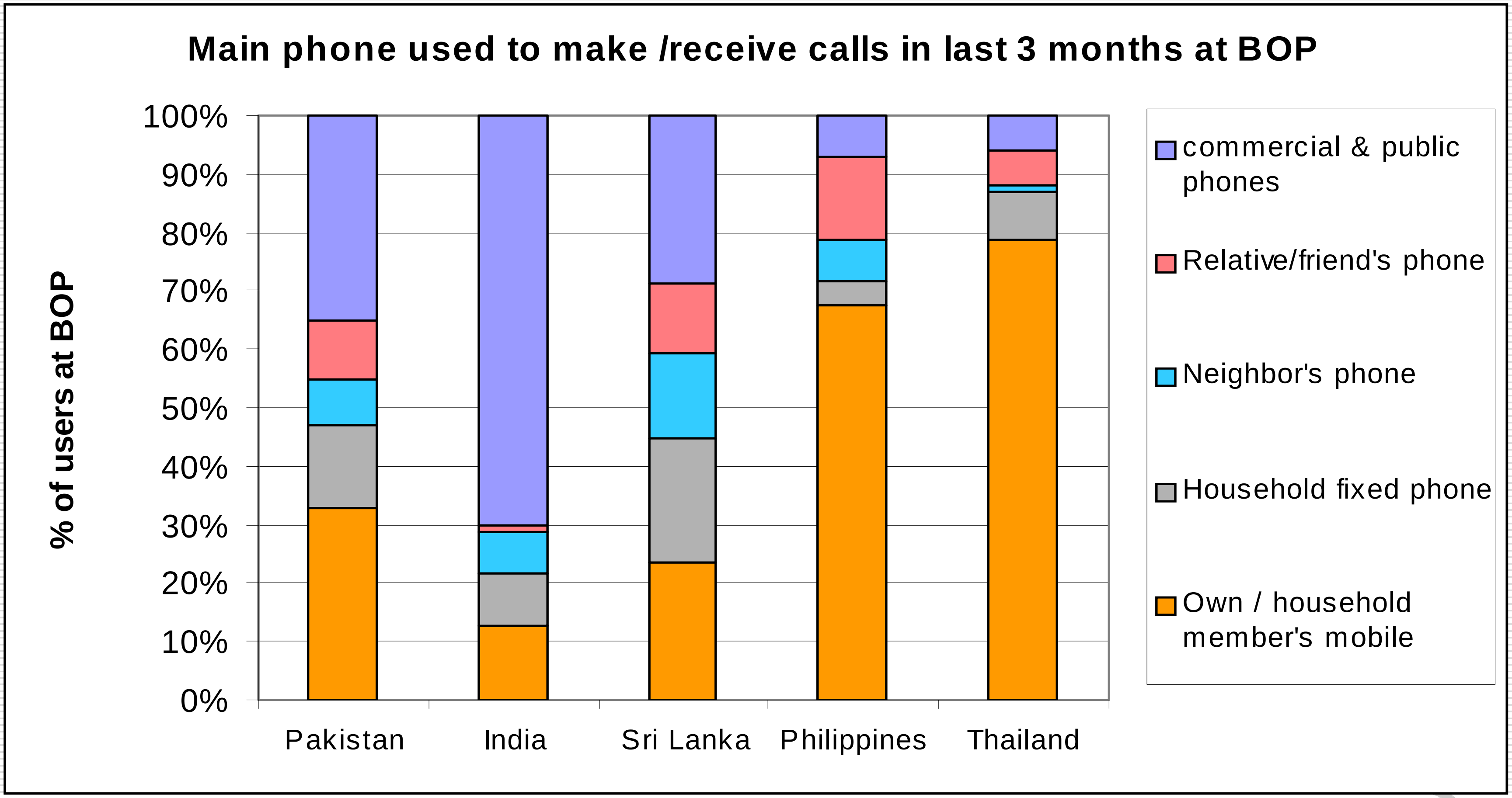
	South Asia			South East Asia	
	Pakistan	India	Sri Lanka	Phils.	Thailand
Accessibility *(used a phone in the preceding 3 months)*	98%	94%	92%	93%	95%

Most can get to a phone in 5 minutes

But, ownership is low



So, share phones



What about the “Internet”?

Dr Doojin Choi: Korea 90% high-speed access

	Pakistan	India	Sri Lanka	Philippines	Thailand
Use the Internet Urban;Rural	0% 3.0;0.7	0% 0.2;0.1	1% 2.1;1.4	9% 12.8;4.3	10% 22;2.3

	Pakistan	India	Sri Lanka	Philippines	Thailand
Not heard of Internet	36%	72%	29%	14%	36%

Access frontier is changing fast

- 1999
  - UN Secretary General Kofi Annan at ITU Telecom “Half the world's people have never made or received a telephone call”
- 2007
  - Seems like centuries ago…
  - Or is it?

But some access gap remains

- PPP → a possible way to address the shortfall
  - Mr Debi Prasan Patnaik; 80% of India?
  - Prof. Alwin W. Yeo; Terribly remote Barro?

Public-Private Partnerships

Strategies, mechanisms, arrangements

Categorization

- Institutional vs. Contractual
  - Many models; many variants
- Some examples

Immediate transfer of ownership to private entity [could be partial]

- Ownership
  - Private [or jointly owned]
- Risk
  - Private party bears risk
- Buy-Build-Operate [BBO]
  - Asset sale or divestiture
  - Complete or partial
  - Access for disadvantaged communities [here; rural poor only]
  - USO obligations; not always met

- Build-Own-Operate [BOO]
  - Numerous Greenfield projects; both successful and not so successful
    - India: Infrastructure sharing; mobile towers
  - Lesson from Nepal [only as a case and not meant to discredit anyone]
    - Difficult areas [not so difficult areas as well; flat, hills, mountains; electricity]
    - Political unrest
    - USD 12m least-cost subsidy for RTN in EDR
    - 2 public phones each in 534 VDC
    - 5 year exclusive license; open 8 hours/day

Justifiably closed

July-August 2005: Average minutes of use/day = 0.36

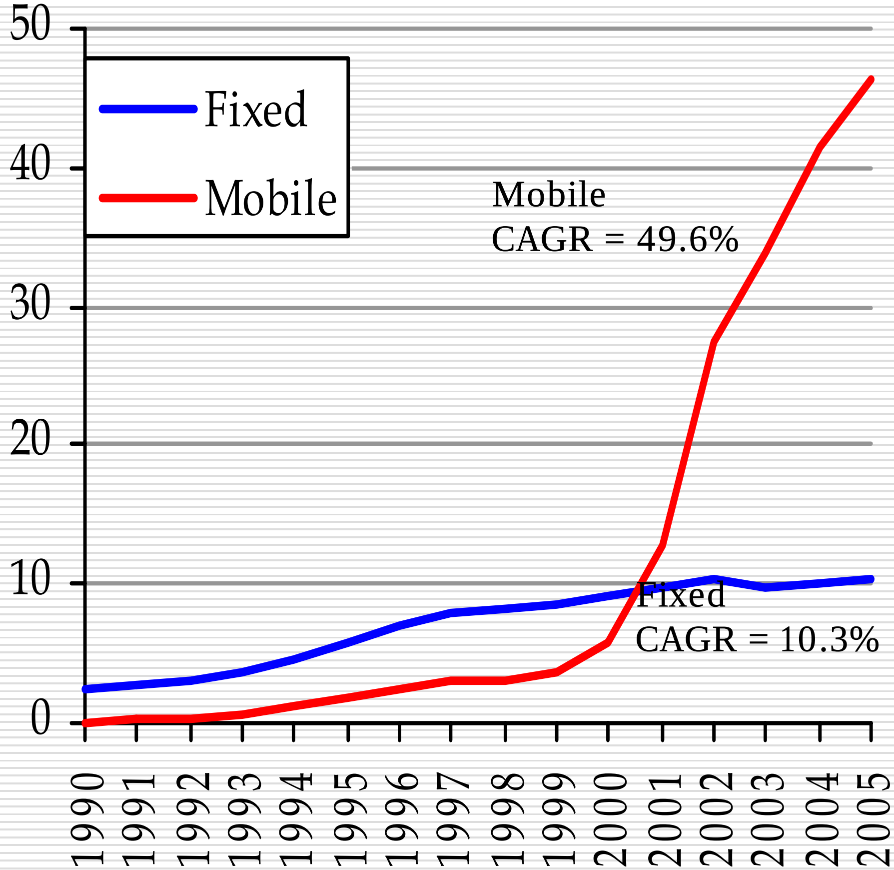
- PPP in trouble due to weak political-regulatory environment
  - Major exclusivity violations by incumbent
  - Arbitrary interconnection charges on RTN
    - X 18, then x6
  - Technology choice

Immediate or subsequent public ownership

- Ownership
  - Ultimate public ownership
- Risk
  - Private party bears bulk of risk during period of building and concession duration
- Build-Own-Operate-Transfer [BOOT]
  - Private party profit from operation
  - Public party gets asset for little effort at a future date
  - Numerous examples

- Build-Operate-Transfer [BOT]
  - Concession or franchise; private party runs financial risk of sustainability
- Build-Transfer-Operate [BTO]
  - BTO less risky for private party as investment recouped early
  - Thailand example
    - State wanted to keep ownership of telcos, but needed private investment
    - Exclusive concession contracts; 25-30 years

Thailand BTO PPP



- Fixed concessionaires had subscriber limits imposed; unable to grow
  - Loses
- Mobile concessionaires had no limits
  - Profits

Source: Company reports

Life-cycle public ownership

- Design-Build-Operate [DBO]
  - Ownership with public party
  - Risk with public party
  - Role of private party minimal
- Design-Build-Finance-Operate [DBFO]
  - Private party risk is greater
- Helpful when politically difficult to bring in private investments
- Numerous examples
  - Usually shorter periods

Strengthening Public-Private Partnerships

Crucial elements of success

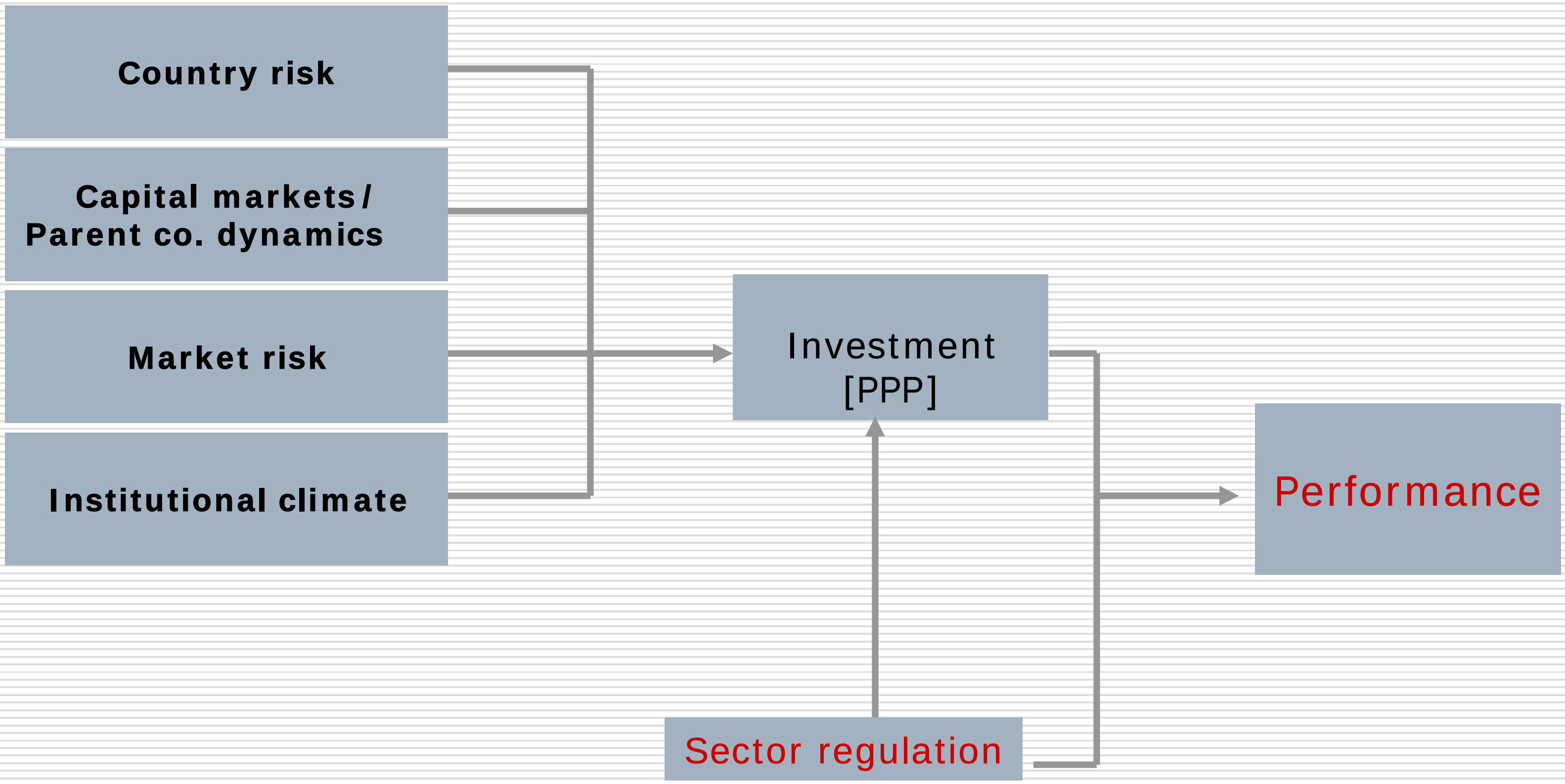
- Clear framework for life-cycle of PPP
- Understanding of innovative PPP models
- Appreciate opportunities PPPs have for unlocking value

Clear framework for PPP life-cycle

- Need clear framework for
  - Policy
  - Legal
  - Regulation
- Estache and Pinglo (2004)
  - Calculated the risks associated with the possibility Government's dishonoring contracts → Cost of capital may increase by up to 2 to 6 percentage points depending on the country or region
    - The Nation; 13 December 2007: PTT, Thailand's largest Oil & Gas firm might be de-listed; GOT might have to pay approx USD 30 billion to buy back shares → If SC decides 'wrongful' privatization

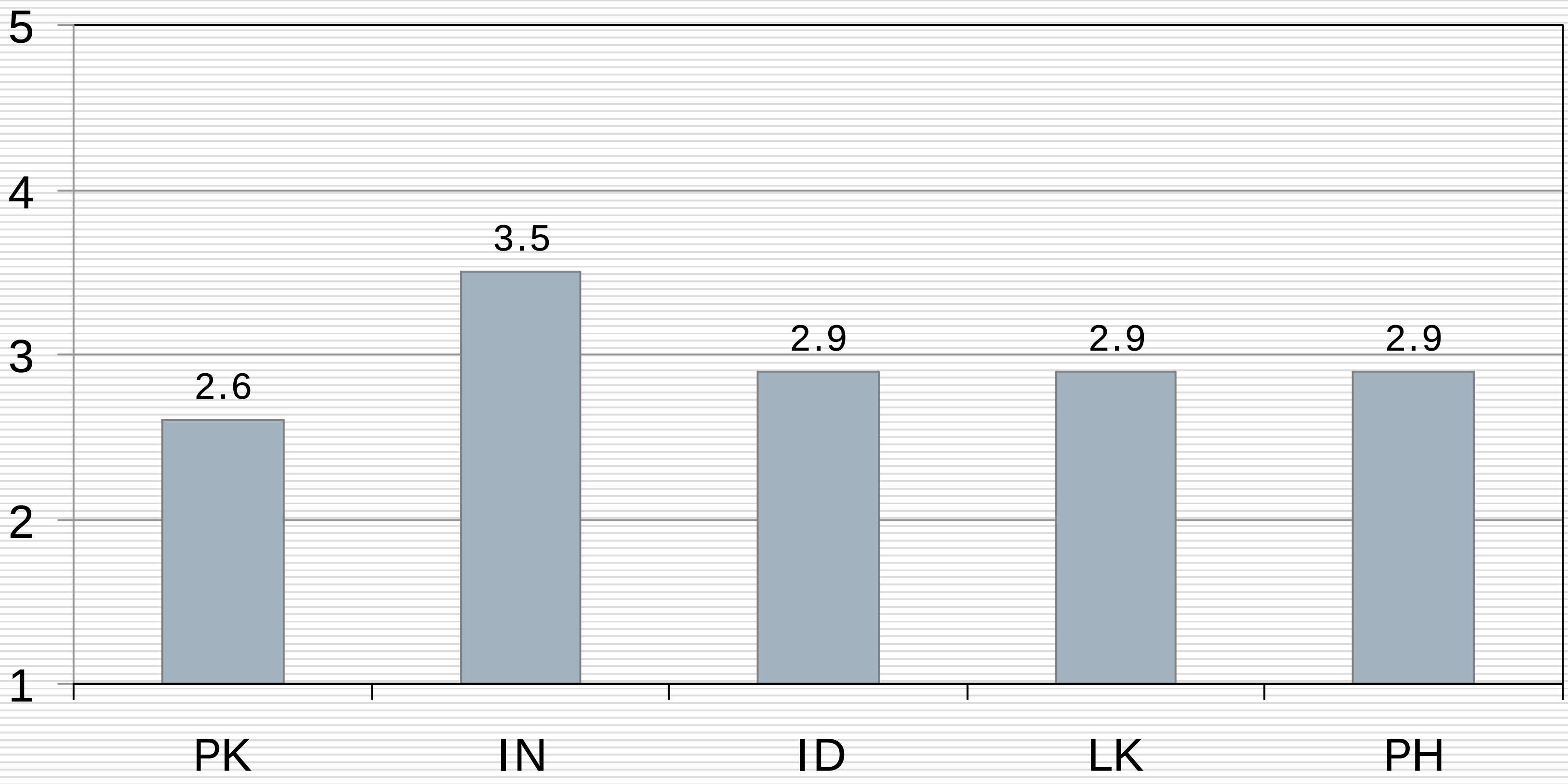
- LIRNE*asia* work in the region measure TRE; a perception score on the regulatory environment for telecom
- Consider 5 dimensions
  - GATS Regulatory Reference Paper [International legitimacy]
    - Market entry
    - Scarce resources
    - Interconnection
    - Anticompetitive practices
    - Universal service
    - Add: Tariff regulation

Causal chain



TRE score on tariff regulation, 2006

Min 1; Max 5



Source: Samarajiva, 2007

Understanding innovative models

- Deviate from the traditional models
  - Bundling
    - To provide access to disadvantaged communities by adding ‘advantaged communities’
  - Vertical integration
    - Multi-tier approach; M. A. Paul
  - Take-or-pay
    - SPV to link with RTN and Telecentre
    - Wholesale purchase guaranteed; retail supply guranteed
  - Prof. Kalli Kan’s Wireless city example
    - Variant of BOO; Municipality participation [and regulation]

Role for ESCAP [and others]

Important

- Understand ‘reality’ of access issues
  - When and where PPP
  - Importance of market mechanisms
  - We heard today
    - “Government must subsidize”
    - “Without Government support nothing is possible in ICT”
- Create awareness
  - Informed decision making

Understand 'reality'

- Market efficiency gap vs. access gap
  - Prof. Alwin W Yeo's eBario project
- Telecentres vs. mobile
  - "Telecentres, full of computers but without customers … A common question in many parts of the world"; Telecentre.Org, December 2007

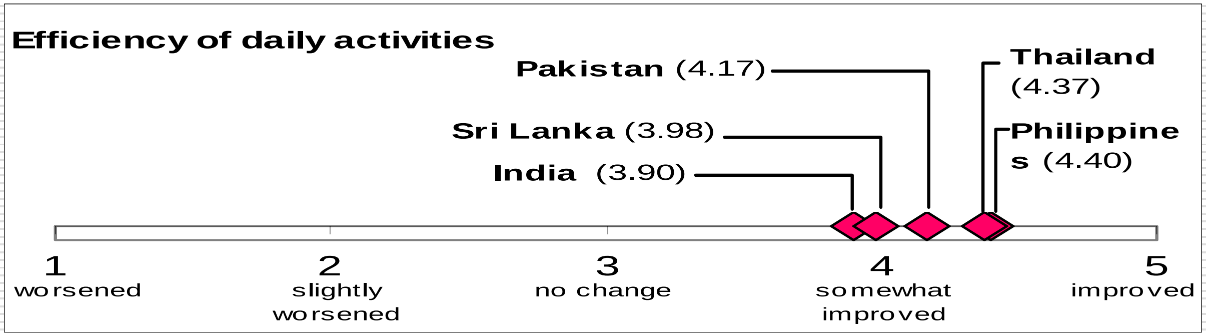
Create awareness

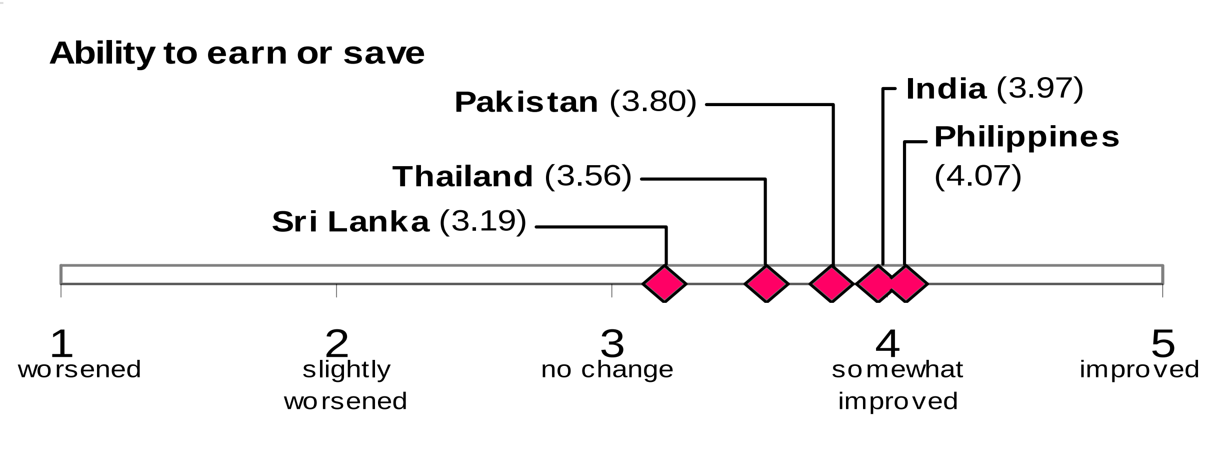
Korea; Dr Doojin Choi: No.1 DOI; wide-spread use

- Among all stakeholders
  - Public and private entities
  - PSocialPP [Prof Chapagain, eBario]
  - Disadvantaged communities; benefits of access “demandability”

Source: LIRNE*asia*

From 2006 BOP survey…





Source: LIRNE*asia*

Important

- Understand 'reality' of access issues
  - When and where PPP
  - Importance of market mechanisms
- Create awareness
  - Informed decision making
- Build capacity
  - Particularly in the public-sector to negotiate with private sector on PPPs
- Provide, where necessary, funding for targeted subsidies

Thank you.

Harsha de Silva

desilva@lirne.net. www.lirne.net