Research ➔ Policy: Lessons from LIRNE*asia* (2004-12) & CPR*south* (2007-12)

Rohan Samarajiva

4 Sep 2012

CPR*south*-CPRafrica Young Scholar Seminar, Port Louis, Mauritius

This work was carried out with the aid of a grant from the International Development Research Centre, Canada and the Department for International Development, UK

IDRC CRDI DFID Department for International Development Canada

Lack of policy-relevant research is not a problem unique to the South

- Telecommunications Policy Review Panel was a three-person committee mandated by the Canadian Minister of Industry in 2005 to review Canada's telecommunications policy framework
- Included in the TPRP's final report was the observation that, in Canada, a "relative paucity of academic work on what has been referred to as the 'regulatory craft'" has led to "heavy reliance on foreign (mostly U.S.-based) experts on economic, technical and even social regulation".

Demand-side or supply-side problem?

- "Only a handful of submissions to the panel relied on research undertaken by Canadians. Not many submissions to the panel were made by researchers as stand-alone participants."
  - 2 of 109 submissions to TPRP's first round of submissions, and 2 of 89 submissions to the TPRP's second round, for a total of 4 of 198, were from "educational institutions". Adding to these the individual submissions of 4 academics in the first round, and 2 in the second round, suggests that academics were responsible for 4.5 percent of submissions to the study panel.

What communication policy researchers in Canada are interested in studying

- Relative merits of Canadian content
- Universal access to communication networks and technologies
- The CBC's public broadcasting mandate
- Future, development & protection of Canadian screen, music, and other cultural (or "creative") industries.
- Social movements around communication issues
- Intellectual property, especially copyright

Demand is said to be for research on . .

- Network neutrality
- Copyright issues
- Access programs

- No research on
  - Co-regulation/self-regulation & accountability

Did supply match demand?

- Evidence that most people who study communication issues in Canada
  - Are actually in a field called cultural studies that seeks to engage in an “epic struggle for consciousness” rather than “tinkering with practical arrangements”
    - Or, on the critical side of the critical/administrative divide ➔ by definition not likely to dirty their hands with policy
  - Include few/no economists and engineers
  - Make little or no use of quantitative methods, or marshal evidence in a systematic way

Research-policy nexus is being debated in US and Europe as well

- Bauer, Johannes M., Sungjoong Kim, Bella Mody & Steven S. Wildman (2004). The role of research in communications policy: theory and evidence. Paper at International Communications Association, New Orleans.
- Garnham, Nicholas, Robin Mansell, Johannes Bauer, W. Edward Steinmueller, Martin Fransman, Jean-Paul Simon, Peter Johnston, Anders Henten, & William H. Melody (2004). Contradiction, confusion and hubris: a critical review of European information society policy by Nicholas Garnham, with comments. Paper presented to EuroCPR 2004, Barcelona.

Ideas in policy process, acc. Bauer et al.

Stages of policy process

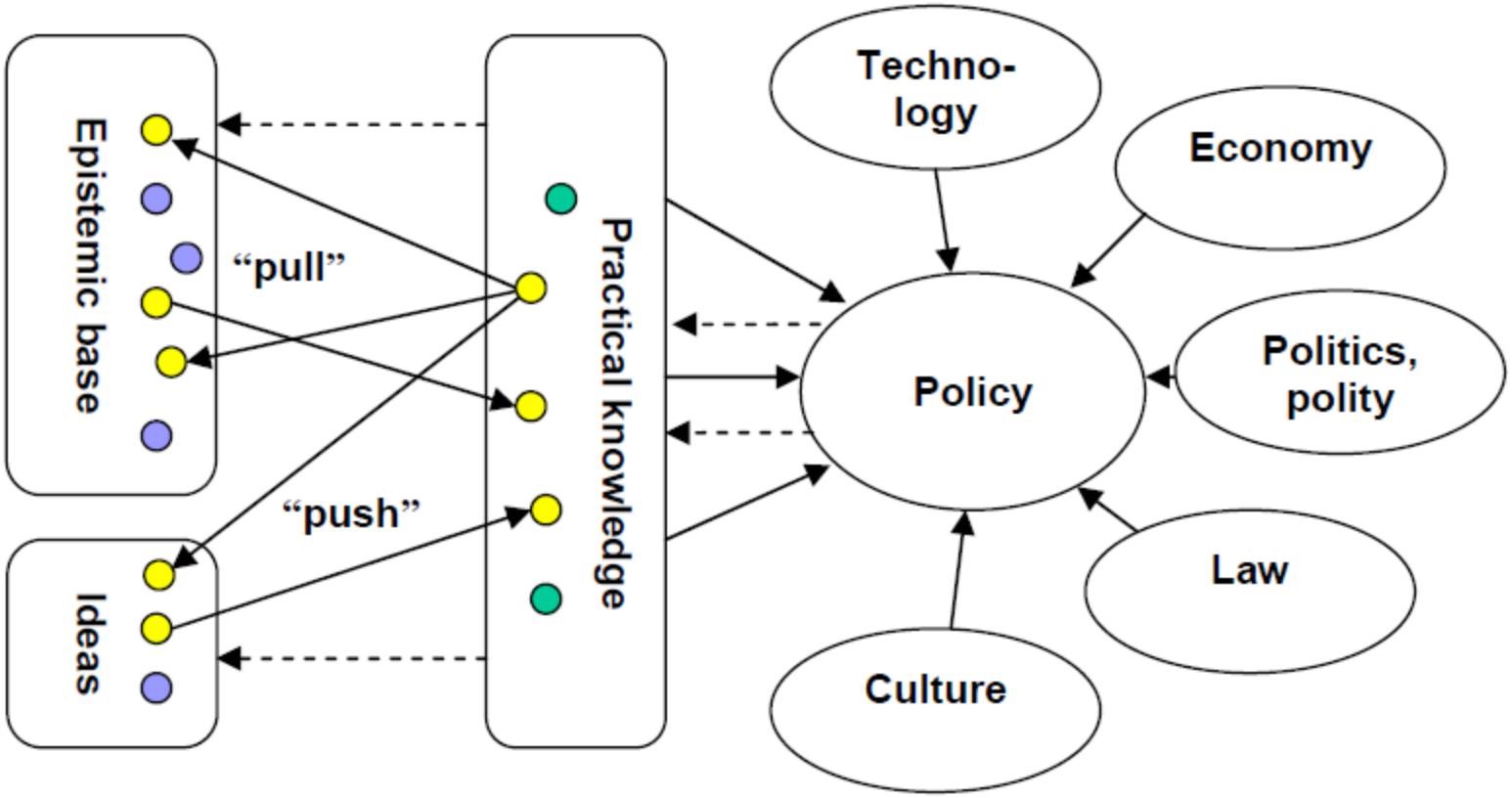
- Agenda setting
- Policy formulation
- Policy adoption
- Policy implementation
- Policy evaluation
- Policy modification (or policy
- termination)

Role of ideas

- Research and ideas play a role at all these stages
- General frames are more important in earlier stages and at mid-level
- Operational ideas are relatively more important at later stages

Figure 1

Stylized relations between knowledge, ideas and policy



Inspired by Mokyr (2002).

Mismatched incentives in academia, according to Bauer et al.

- "In the academy it is evident that policy-oriented, applied research is less prestigious than theoretical work. This is even more the case for outreach and work with policymakers, which is generally not valued as highly as publications in refereed journals. Thus, the incentives in the academy are presently in conflict with the conditions of transferring research systematically to the policymaking arena."

LIRNE*asia* seeks to . . .

- Change policy
- Change thinking among decision makers
    - Activating other actors who can affect policy
- Change the capacity of actors

Types of Policy Influence (Lindquist)		
Expanding Policy Capacities	**Broadening Policy Horizons**	**Affecting Policy Regimes**
• Improving the knowledge or data of certain actors • Supporting recipients to develop innovative ideas • Improving capabilities to communicate ideas • Developing new talent for research and analysis	• Providing policy makers with opportunities for networking or learning within their jurisdiction or with colleagues elsewhere • Introducing new concepts to frame debates, putting ideas on the agenda, or stimulating public debate • Educating researchers and others who take up new positions with a broader understanding of issues • Stimulating quiet dialogue among decision-makers (and among, or with, those involved in knowledge production).	• Modifying existing programs or policies • Leading to the fundamental re-design of programs and policies • Helping create a new policy regime in an emerging field.

Time to see measurable outcomes increases

How can one intervene in policy-regulatory processes?

- Through presentations to policy makers
  - [Policy Briefs]
- At expert fora and dissemination events
- At conferences & events that policy makers, regulators and stakeholders attend
- By means of interventions on draft regulations and consultations
- Through media interactions and Op-eds intended to modify the "symbolic universe" of actors
- Through training programs
- By building capacity among junior- to mid-level aspiring policy intellectuals [CPRsouth]

LIRNE*asia*'s efforts to change policy

Examples of successful engagements with policymakers & regulators (not all were successful)

India

Changing universal service policy

Sri Lanka

Rolling back regressive tax on mobile charges

Indonesia

Lowering leased-line prices

Bangladesh

Contributing to rules on broadband quality of service

Modifying terms of mobile license renewal

USO in India

- Regulation and Investment Paper, Sept, 2004
- LIRNE*asia* responded to Telecom Regulatory Authority of India's Consultation Paper 16/2004: Growth of Telecom Services in Rural India: The Way Forward, Oct 2004
  - Key recommendations –
    - Extending Universal Service financing to mobile
    - Infrastructure sharing
- Early USO research presented at Expert Forum attended by TRAI Secretary Rajendra Singh in Sept 2005; draft paper went to TRAI before that
- *Indian Express*, op-ed - Rural telephony: TRAI got it right finally!, 31 Oct 2005
- Conversations with Shanthanu Consul, administrator USF, DoT at ITU Telecom World; Dec 2006, Jan 2007; formal presentation in March 2007

Consultation Paper 16/2004: Growth of Telecom Services in Rural India: The Way Forward
Comments by LIRNE*asia*

I. Responses to questions in Chapter 7

Q1. This consultation Paper has discussed various issues related to Growth of Telecom Services in rural areas. Please give your comments on them and suggest any additional point to achieve higher growth of telecom services in rural India.
A1. Please see following commentary on the Consultation Paper.

Q2. Should 'Niche Operators' as discussed in this Consultation Paper get a support from Universal Service Fund?
A2. Yes. Please see para 6 of the commentary on the Paper.

Q3. Instead of subsidizing final product, should the subsidy be given on inputs like Bandwidth and spectrum charges?
A3. No. It is best that a uniform system be enforced, with transparent, output-based subsidies implemented independently.

Q4. In this paper it has been proposed that telecommunication facilities capable of offering multiple services including telephony using modern wireless technologies for access offer a near self sustaining model in rural areas which can be implemented through subsidization of input costs from Universal Obligation fund. Do you agree with this proposition? Offer your comments.

The Indian EXPRESS
JOURNALISM OF COURAGE

You are here: IE » Story

Rural Telephony

Share | BOOKMARK

Payal Malik
Posted: Oct 31, 2005 at 0002 hrs IST

TRAI has recently come out with its recommendations on Growth of Telecom services in Rural India (www.trai.gov.in). It is an insightful attempt to address the anomalies of the current universal service obligation (USO) regime for the provision of rural telephone subsidy. In this article I describe the main lacunae of the current USO policy and outline how TRAI's proposals ameliorate these flaws; the interested reader is directed to an independent research study that reviewed the current rural telephony subsidy mechanism (www.LIRNEasia.net).

This study analysed (1)) whether the current USO

USO outcomes

- TRAI recommendations on Growth of Telecom Services in Rural Areas (October 2005) reflected LIRNE*asia* recommendations
- DoT floated the idea of permitting mobile operators to bid for USO subsidies, August 2, 2006
- USO Auctions for creation of mobile infrastructure and sharing of passive infrastructure so created, March 14, 2007

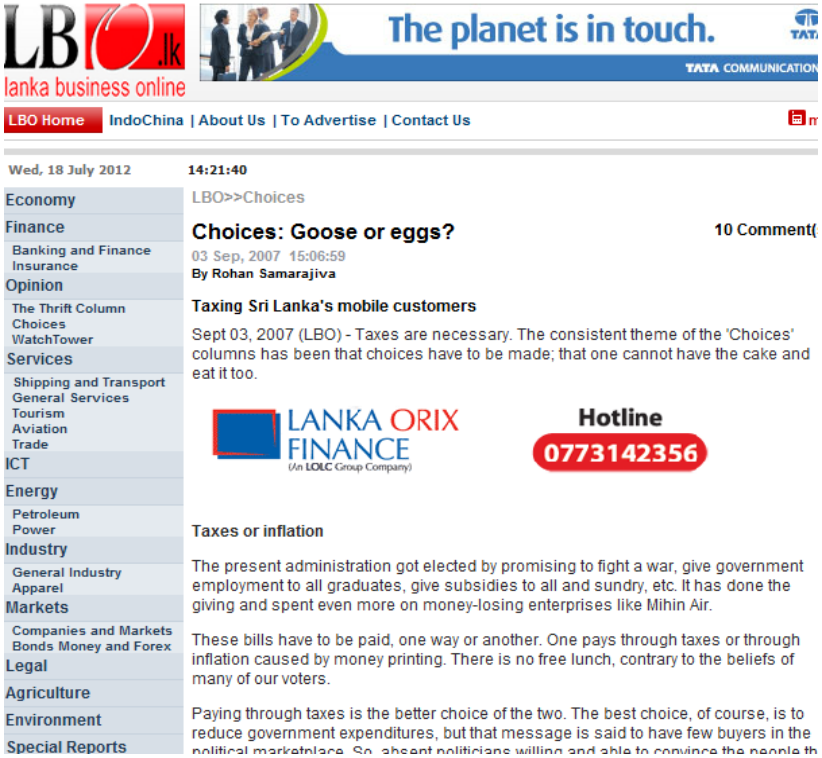
Not all interventions succeed . .

- Subsequent efforts to phase-down 5% USO levy did not, despite USD 4 billion + accumulating in Indian USO Fund

Unlikely without the credibility enjoyed by LIRNEasia, directly and through its CEO, a former regulator/university academic

Regressive mobile tax in Sri Lanka

- Newspapers reported LKR 50 tax to be imposed on every SIM on 3 Sept 2007
- LIRNE*asia* CEO framed the issue, drawing on demand-side studies, in his regular column; goes on TV
- Then Minister of Telecom reached out for more detail & moved floor amendment
- LIRNE*asia* research quoted in Parliament by Opposition spokesman



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The planet is in touch.
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Wed, 18 July 2012 14:21:40

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Choices: Goose or eggs?

10 Comment(

03 Sep, 2007 15:06:59

By Rohan Samarajiva

Taxing Sri Lanka's mobile customers

Sept 03, 2007 (LBO) - Taxes are necessary. The consistent theme of the 'Choices' columns has been that choices have to be made; that one cannot have the cake and eat it too.

LANKA ORIX FINANCE
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Taxes or inflation

The present administration got elected by promising to fight a war, give government employment to all graduates, give subsidies to all and sundry, etc. It has done the giving and spent even more on money-losing enterprises like Mihin Air.

These bills have to be paid, one way or another. One pays through taxes or through inflation caused by money printing. There is no free lunch, contrary to the beliefs of many of our voters.

Paying through taxes is the better choice of the two. The best choice, of course, is to reduce government expenditures, but that message is said to have few buyers in the

මේ වාගේ බදු පනත් කෙටුම්පත් ගෙනෙන්න අද උත්සාහ කරනවා. LIRNEasia කියන පර්යේෂණ ආයතනයේ මහාචාර්ය රොහාන් සමරජීව මහතා සහ දොස්තර හර්ෂ ද සිල්වා මහතා රුපියල් 50 ප්‍රතිපාදන බද්දට විරුද්ධව ඒයේ. පෙරේදා කථා කළා. එක්සත් ජාතික පක්ෂයත් මෙම තර්කය දිගට ම ගෙන ගියා. අද භවස් වන විට ගරු ඇමතිතුමා රුපියල් 50 ඉවත් කරනවා නම් අප සතුටු වනවා. සියයට 10ක වැඩි කිරීමත්, ඒ තරම් ප්‍රමාණයක් දක්වා වැඩි නොකර අඩු කරන්නය කියා අය ඉල්ලා සිටිනවා. මොකද, ඒකෙන් වදින්නේ සාමාන්‍ය මිනිසාටයි.

Anatomy of a regressive tax

	+General tax	pre-2007	Proposed		Revised	
Value	+17.5% VAT & SRL	+2.5% MSL	+7.5% MSL & 50	Tax as % of value	+10% MSL	Savings
200	235	241	303	51.3	259	-44
400	470	482	555	38.8	517	-38
600	705	723	808	34.6	776	-32
800	940	964	1061	32.6	1034	-27
1000	1175	1204	1313	31.3	1293	-21
1200	1410	1445	1566	30.5	1551	-15
1400	1645	1686	1818	29.9	1810	-9
1600	1880	1927	2071	29.4	2068	-3
1800	2115	2168	2324	29.1	2327	3
2000	2350	2409	2576	28.8	2585	9

Range of Prepaid ARPUs

Relative winners

Losers

Subsequent developments

- Mobile levy extended to Fixed
  - LIRNE*asia* had called for technology neutrality
- Additional mobile-only taxes imposed, taking around 32 cents of every Rupee
  - Despite strong interventions by LIRNE*asia,* including challenging politicians to media debates
- In 2010, all telecom-specific taxes and Value Added Tax were replaced by a single 20% tax, reducing tax burden on consumers but increasing that on operators slightly

Leased line prices in Indonesia

LIRNE*asia* research showed that ***"Indonesian leased line prices were 48 times that of India!"***

- Findings presented to Indonesian government & media in July 2005
- Results carried by multiple media outlets and picked up as a meme
- Results used by MASTEL and Internet Service Providers Association to lobby network operators for lower leased line prices
- Operators reduce prices prior to & after regulatory action

Rabu, 26 Oktober 2005 | Halaman Utama | Kolom | Forum | Tentang Kami | Info Iklan | Hubungi Kami

Warta Ekonomi
PERSPEKTIF BARU BISNIS & EKONOMI

APLIKASI Matrix ?

Kamus Bisnis | Hari Besar | Iklan Baris | Life Style | E-Gov | Event & Agenda | E-Company | Jendela Daerah

...ang Polling Berhadiah Edisi September 2005: Karyo Kardono Handoyo - xxxxx@yahoo.com , Michael Wijaya - xxxxx@yahoo.com ; F

Telkom dan Indosat Membuat Tarif Internet di Indonesia Mahal

0 Tanggapan

Rabu, 26 Oktober 2005 11:15 WIB - **wartaekonomi.com**

Tarif internet di Indonesia tergolong mahal. Ini membuat penetrasi internet di Indonesia menjadi rendah. Demikian hasil riset Lirne Asia (lembaga penelitian yang berpusat di Denmark) yang menyoroti penetrasi internet di Indonesia. Hasil riset ini dipresentasikan dalam diskusi bertajuk "Networking Meeting Workshop" yang diselenggarakan oleh Masyarakat Telematika Indonesia (Mastel), Sabtu (1/10) lalu.

Rohan Samarajiva, direktur eksekutif Lirne Asia, membandingkan mekanisme penetapan tarif internet di India dengan di Indonesia. Di Indonesia, untuk koneksi internet berjarak dua kilometer dari operator dikenakan tarif US$18.000 dolar per tahun, sedangkan di India hanya US$3.760. Untuk jarak 200 kilometer, Indonesia mematok biaya US$45.000 per tahun, sedangkan di India hanya US$7.603. "Ini berarti tarif di Indonesia lima kali lipat dari India," ujar Samarajiva. Untuk tarif internasional, pengguna internet di Indonesia harus membayar US$108.000 per tahun. Bandingkan dengan di India yang hanya US$29.000

Cari Artikel

Cari

Arsip Berita

- Rabu, 26 Oktober 2005 10:09 WIB **Sony Ericsson Kuasai 30% Pasar Ponsel Low-End** 0 Tanggapan
- Selasa, 18 Oktober 2005 09:01 WIB **Abror Mist Masuk Indonesia** 0 Tanggapan
- Senin, 17 Oktober 2005 08:59 WIB **BI Terbitkan Pecahan Baru Rp50.000 dan Rp10.000** 0 Tanggapan
- Jum'at, 14 Oktober 2005 08:58 WIB **Panggilan Darurat dari Samsung** 0 Tanggapan

Kliping

Tanggal : 26 / Sept / 2006

✓Bisnis Indonesia *Kompas *Koran Tempo *Lain-lain.....

Penyelenggara Internet keluhkan tarif sewa jaringan

Oleh Arif Pitoyo
Bisnis Indonesia

JAKARTA: Asosiasi Penyelenggara Jasa Internet Indonesia (APJII) mendesak penyelenggara jaringan untuk menurunkan tarif sewa jaringan (*leased line*) agar dapat berkompetisi secara sehat dalam menyediakan jasa Internet ke pelanggan ritel.

Ketua Umum APJII Sylvia W. Sumarlin net.

Yang dimaksud penyelenggara jaringan adalah perusahaan yang menyelenggarakan jaringan telekomunikasi lokal, jaringan tertutup, jaringan seluler, dan jaringan satelit yang juga mengambil jasa multimedia seperti PJI.

Teddy menegaskan sebaiknya penyelenggara jaringan telekomunikasi tidak ikut meniplankan bisnis penyediaan jasa

Bangladesh broadband QoSE

- LIRNE*asia* tested Quality of Service Experience (QoSE) of broadband connections in BD, IN, LK and published results

- Responded to consultation paper on "Broadband Wireless Access Services" in August 2009
  - Operators should guarantee QoSE not within ISP only, but till first entry point to US ✓
  - Operators should publish contention ratios ✓
  - Assurance at launch is inadequate; QoSE should be regularly monitored ✓
  - "Broadband = 128 kbps +" definition should change

Bangladesh mobile license renewal

- LIRNE*asia* responded to draft guidelines on mobile license renewal by BTRC in Feb 2011
  - Challenged most elements including differential fees for CDMA and GSM and license renewal terms as being not based on evidence
- Op-ed questioned the role of think tanks in policy
- LIRNE*asia* responded with op-ed in leading daily in June 2011
- Another op-ed by LIRNEasia in August 2011 focused on opaque "utilization factor" later renamed "market competition factor"

Comments on Draft Regulatory and Licensing Guidelines for Issuing Renewal License to Existing Mobile Licensees for Establishing, Operating and Maintaining GSM/CDMA Cellular Mobile Telecommunication Services in Bangladesh

Submission by LIRNEasia; www.lirneasia.net. LIRNEasia is a regional ICT policy and regulation think tank active across the Asia Pacific based in Colombo, Sri Lanka. Please contact Harsha de Silva, Ph.D., Consultant Lead Economist (harsha [at] lirneasia.net) for any clarifications.

The current licenses of Grameenphone, Banglalink, Axiata and Citycell are to expire in 2011. It is in this background that BTRC has developed draft license renewal guidelines. The process is already delayed and is likely to have depressed investment because of the uncertainty. Thus it is best that any and all submissions on the said draft are considered and the guidelines finalized at the earliest to reflect economic efficiency and transparency. It is equally important to send out a clear signal to the world that principles of good governance have been and will be applied in the sector as large foreign investments are required to achieve the stated objectives of Digital Bangladesh. In other words investor confidence is vital. Our views, highlighting efficiency, transparency and good governance, on selected important sections of the draft guidelines are as below.

1. **Duration of License**: While the initial renewal for 15 years is good and is corresponds to generally accepted practice the reason to restrict the subsequent renewal for just 5 years is not clear. Given investments in telecoms are long-term in nature the 5 year period is too short. Short license periods negatively distort investment behavior. It would be ideal if license renewal procedures are stated upfront so that

Sunday, August 14, 2011 Business

Spectrum: High price for big players

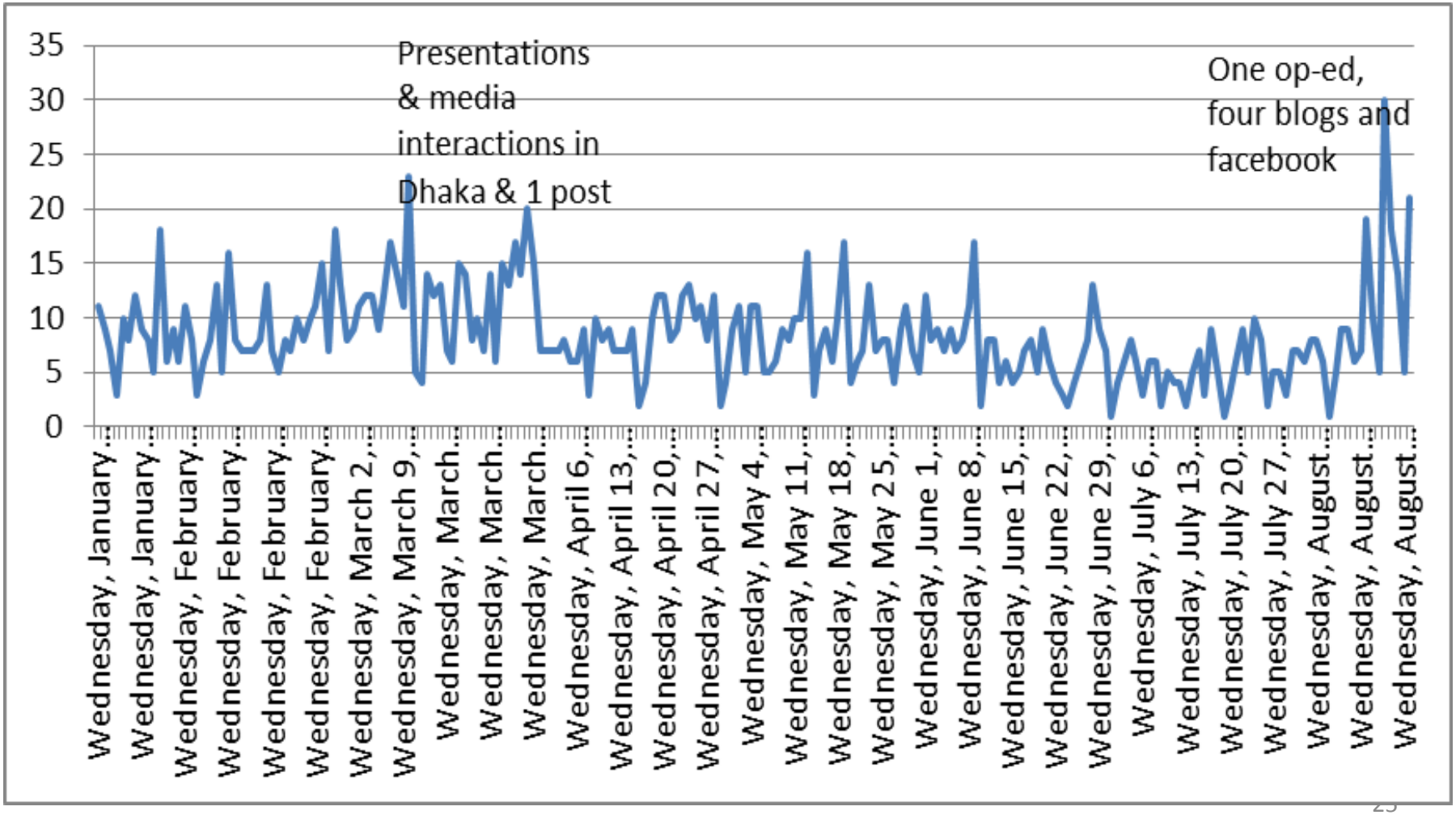
Eliminate the "market competition factor" and consumers will be best served

Rohan Samarajiva

The mobile licence renewal drama has moved closer to denouement with the announcement that Grameenphone, Banglalink, Robi and Citycell will be charged Tk 150 crore (roughly $20 million) per MegaHertz (or unit) of spectrum. Based on the per-MHz charge only and assuming coupled spectrum, a larger operator using 20 MHz will pay Tk 3,000 crore ($400 million), while another using only 15 MHz will pay Tk 2,250 crore ($300 million).

Relevant blog posts, including links to op-ed articles and responses to consultations, to accommodate media/stakeholder pull	
Beware market share greater than 20 percent (on a particular day in a particular year!)	18 August 2011
Same spectrum; different prices	15 August 2011
“Market competition factor” is anti-consumer	14 August 2011
Peculiar pricing of spectrum	10 August 2011
License renewal and Digital Bangladesh	1 June 2011
Positive signals on license renewal	13 April 2011
Peculiar economics of Bangladesh license renewal	24 March 2011
LIRNEasia responds to BTRC’s call for comments on renewal of mobile services	9 February 2011

Google Analytics on visits from Dhaka (95% of BD visitors) to LIRNE*asia* website



At the end of the process . . .

- Total amount extracted from operators declined to 54% of what was expected at the start
  - When draft guidelines were published it was BDT 140 billion (USD 2 billion)
  - End number was BDT 75.6 billion (USD 1 billion, roughly), inclusive of Market Competition Factor
  - More or less in line with Pakistan's 2004 license+spectrum auction
- Ratio between payments from largest operator and the smallest of the four up for renewal was 7:1 in December 2010; at end point it was roughly 5:1 (same license; more or less same amount of spectrum)
  - Attempts to remove bias against GSM and size only partially successful

What can be learned?

- Matching supply and demand for policy research
  - Do the reward systems of the academy mesh with what policymakers & regulators want?
- Policy-relevant research may not be the most valued in academic settings
- Having research ready for when policy windows open
  - Is the academic production cycle conducive to this?
- How can new media be used in both push and pull modes to increase access to research?
- Is the research→ policy nexus fundamentally different in developed & developing countries?

Exercise

Case studies	Resources (research/dissemination)	Replicability
India USO		
Sri Lanka regressive tax		
Indonesia leased line prices		
Bangladesh BB QoS		
Bangladesh license renewal		

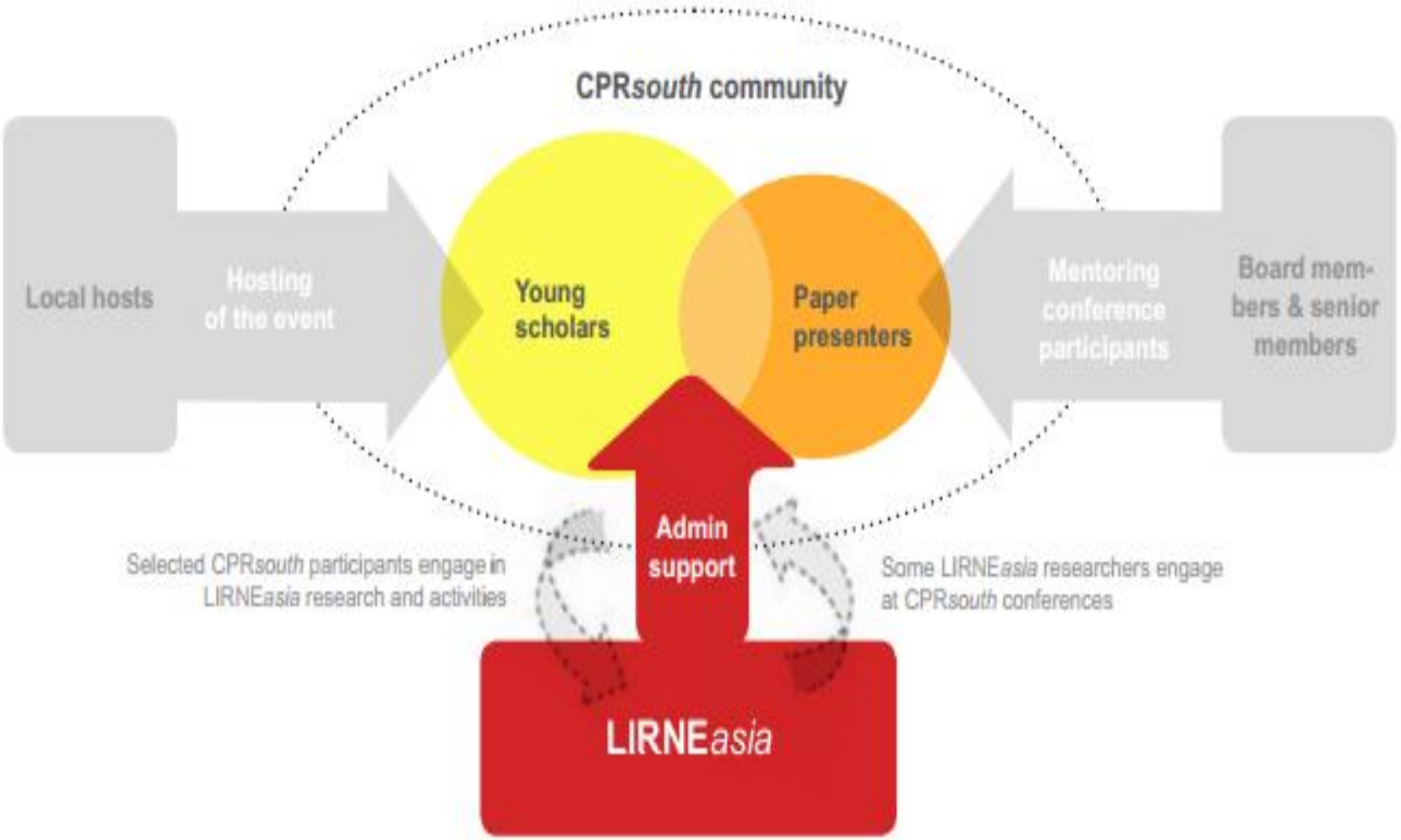
CPR*SOUTH*, LIRNE*ASIA'S* PRIMARY CAPACITY-BUILDING INITIATIVE

Objectives of CPR*south*

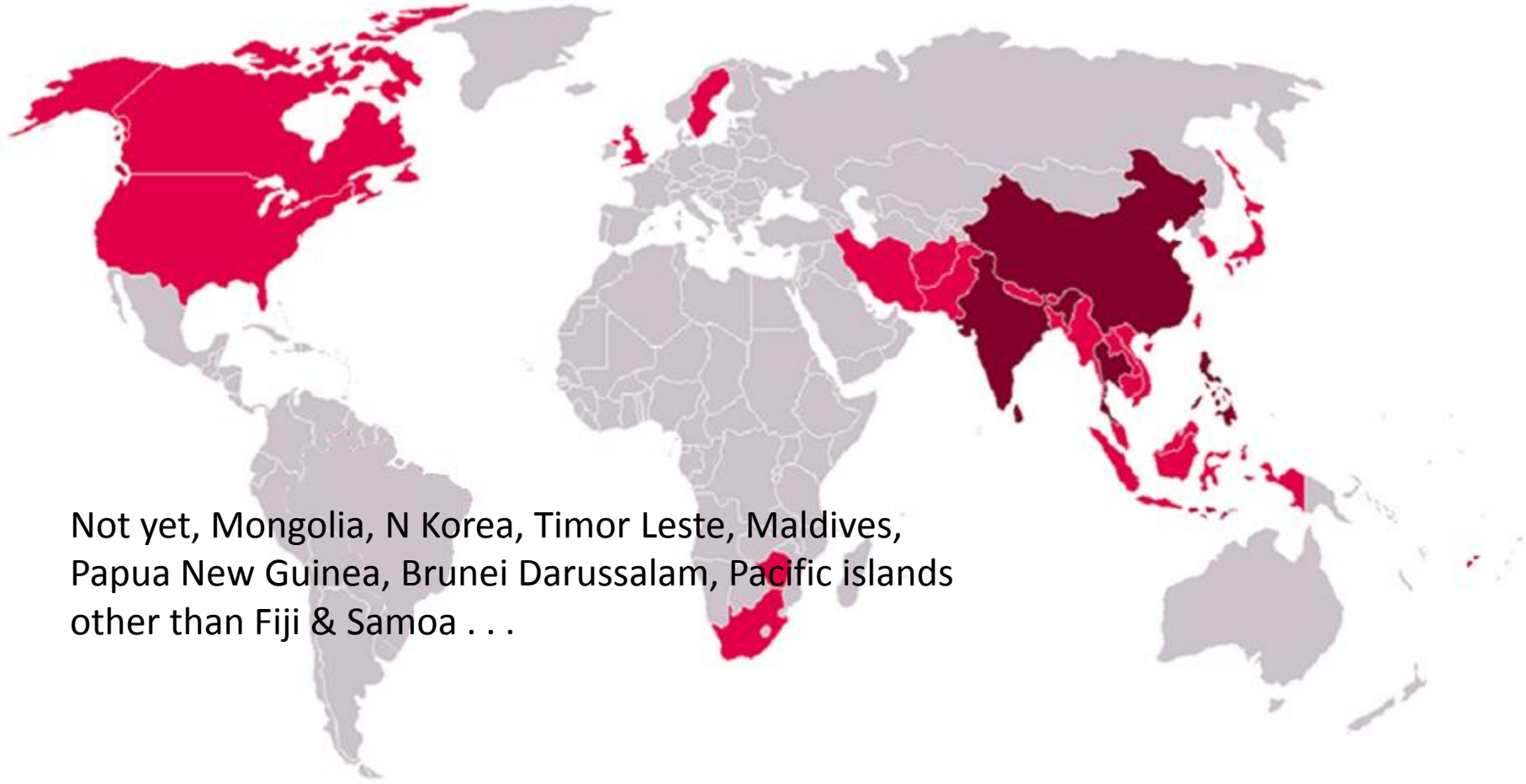
- To facilitate the creation, sustenance and continuous advancement of policy intellectuals capable of informed and effective intervention in ICT policy and regulation processes in specific country and regional contexts in the south, broadly constituted by the Asia-Pacific (AP), Africa (AF), Latin America and the Caribbean (LAC), the Middle East and North Africa (MENA) and Central Asian regions (CIS).

- To develop capacity, stimulate interest, and promote research and systematic study in information and communication technology (ICT) policy and regulatory issues in the south

Organizational structure of CPR*south*



Young scholars: Darker shades = higher participation

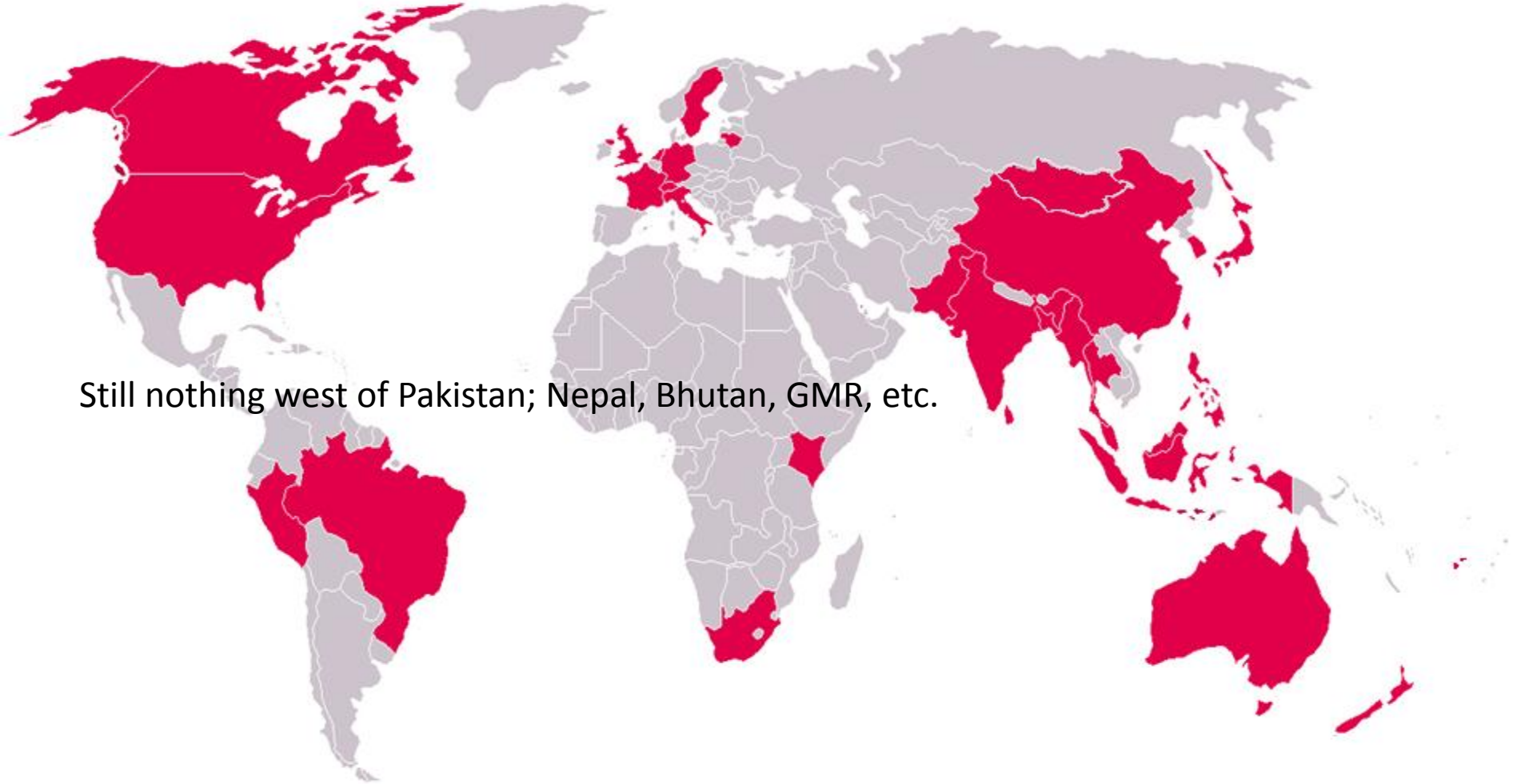


Not yet, Mongolia, N Korea, Timor Leste, Maldives, Papua New Guinea, Brunei Darussalam, Pacific islands other than Fiji & Samoa . . .

Only young scholars from within Asia-Pacific are funded now; African young scholars were funded by Research ICT Africa

Young scholars
CPRsouth1-7

Paper givers now include those from Myanmar & Mongolia



Still nothing west of Pakistan; Nepal, Bhutan, GMR, etc.

Very few papers dealing with Asia Pacific topics from those outside the region accepted

Paper presenters
CPRsouth1-7

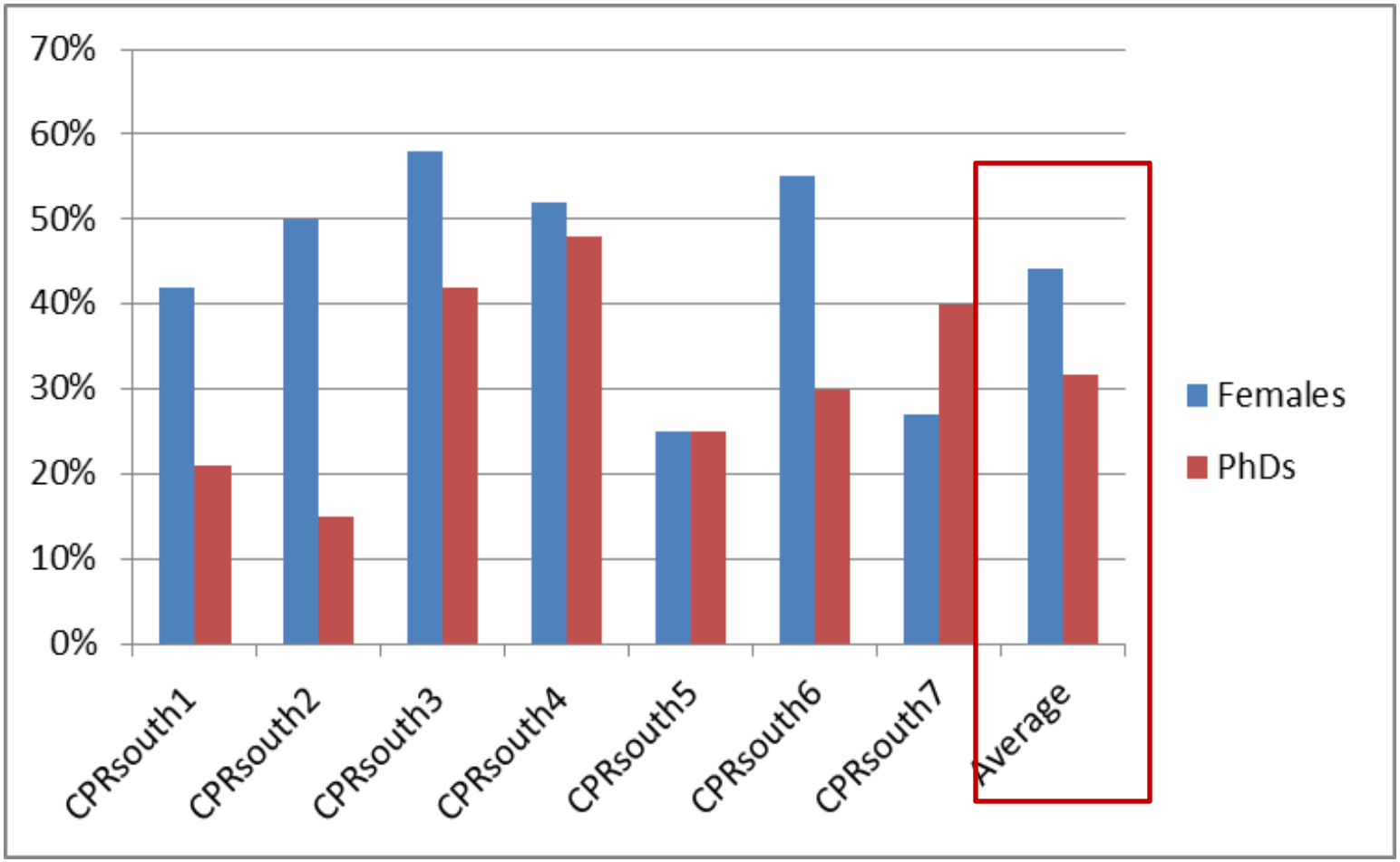
Research areas, CPR*south* 1-7

Research at CPR*south*7, Mauritius

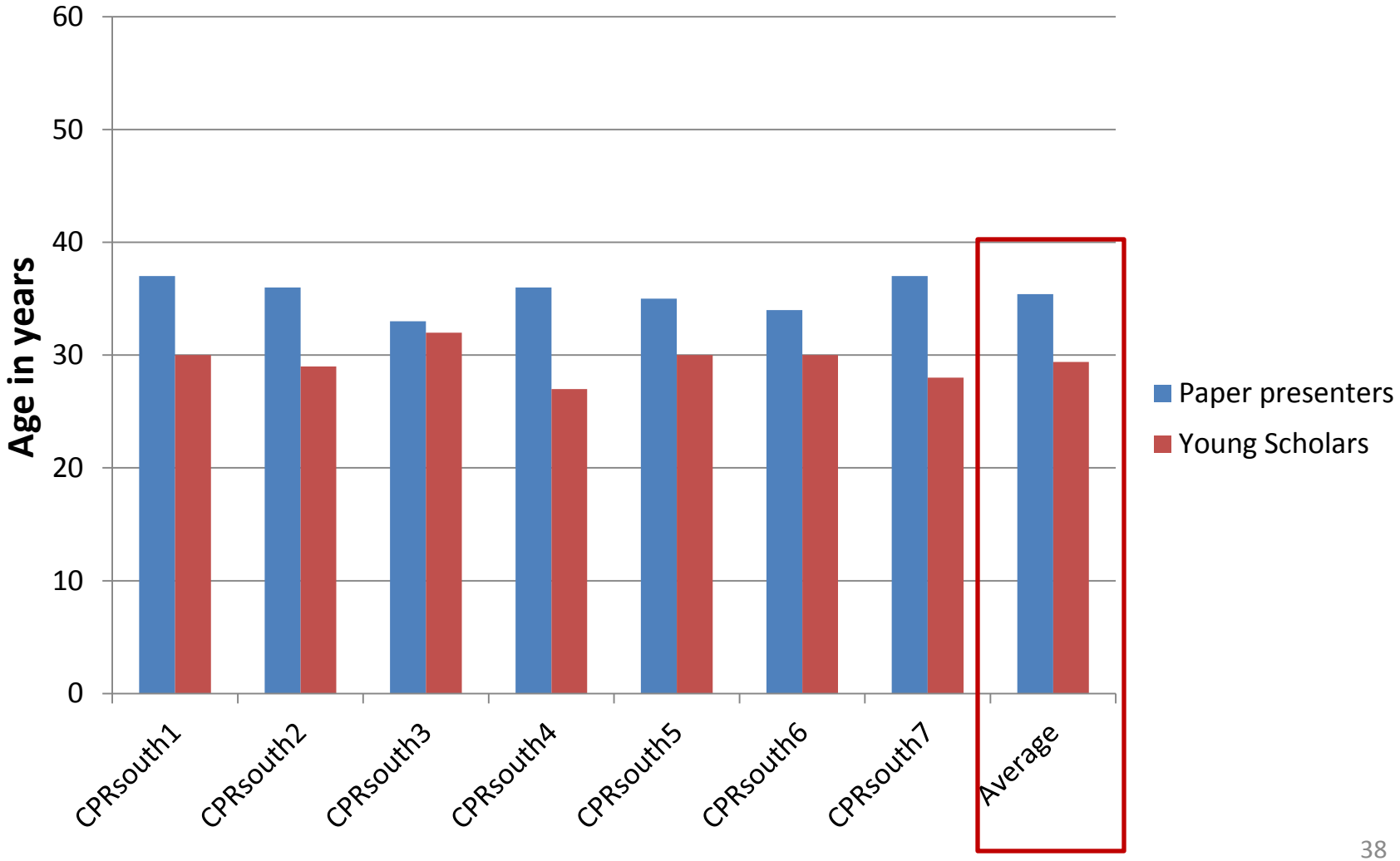
Approximate disciplinary composition

Discipline	Percentage
Social science	30
Computer science/ engineering	30
Business	25
Communication	15

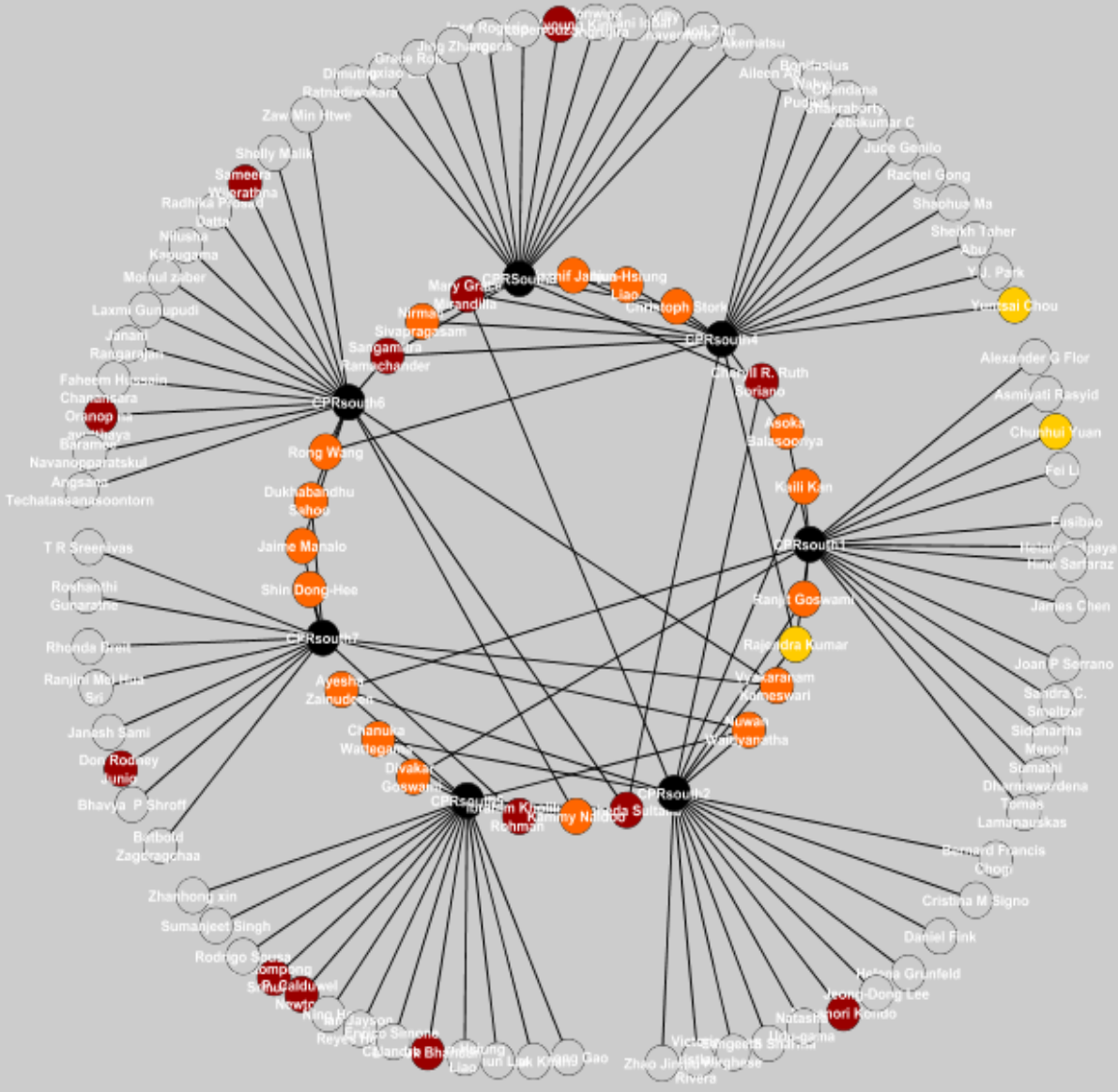
Paper-givers: Females & PhDs



A youthful community



Is pipeline working? Young scholars ➔ paper presenters



Connectedness higher than expected for inter-disciplinary network

INDICATORS OF CONNECTEDNESS	#	%
CITING ONLY (Authors citing others)	18	23%
CITED ONLY (Authors cited by others)	23	29%
CITED & CITING (Authors citing and cited)	5	5%
NO CITED OR CITING (Authors with no citations in or out)	34	43%

Based on 60 papers from CPR*south* 4, 5 & 6

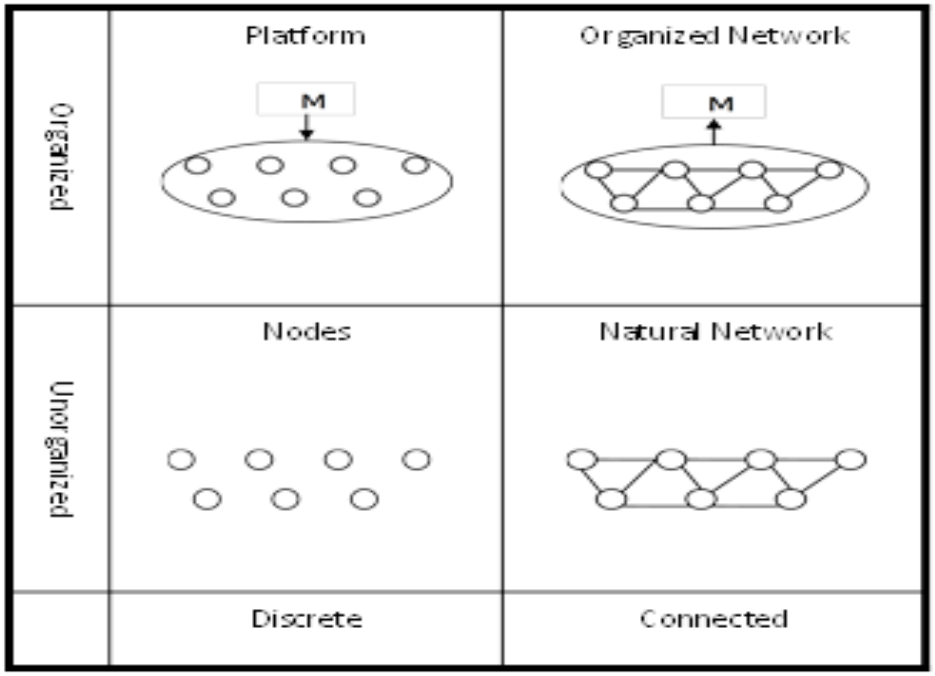
Inter-disciplinary conferences take longer to connect

- Pham, Derntl and Klamma (2012), based on 20 years of data analysis
  - We found that TEL conferences exhibit a mixed development of pattern of young emerging conferences that are still in the process of developing their communities. We also found that the more interdisciplinary conferences in our data set exhibited a slower rate of community development compared to those conferences with more focused topics

But connectedness is still thin

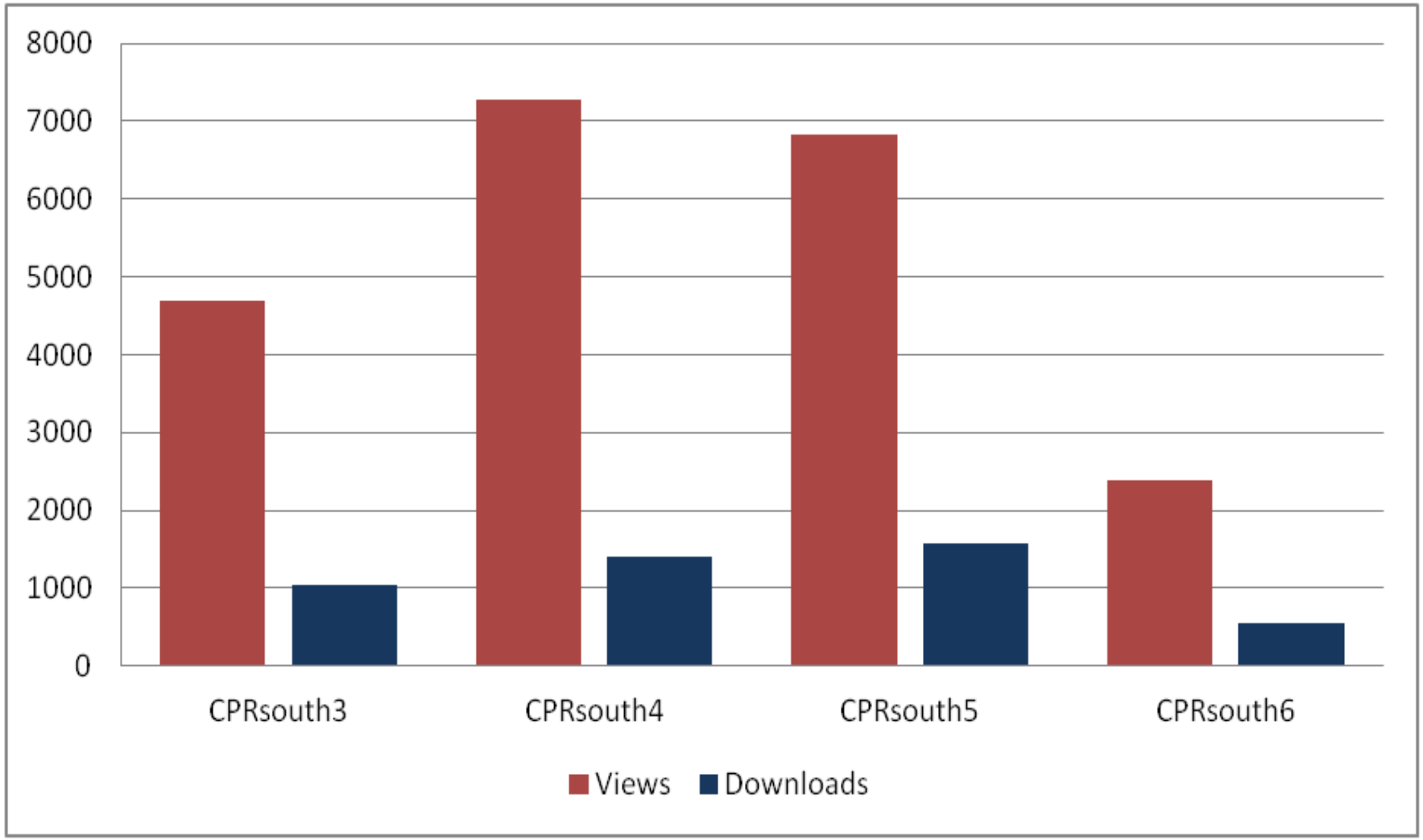
- All co-authorships until CPR*south*7 are from within organizations
- All five in “Cited-and-Citing” category are co-workers from within two organizations
  - Three from LIRNE*asia*
  - Two from RIA

CPR*south*: From platform to organized network?

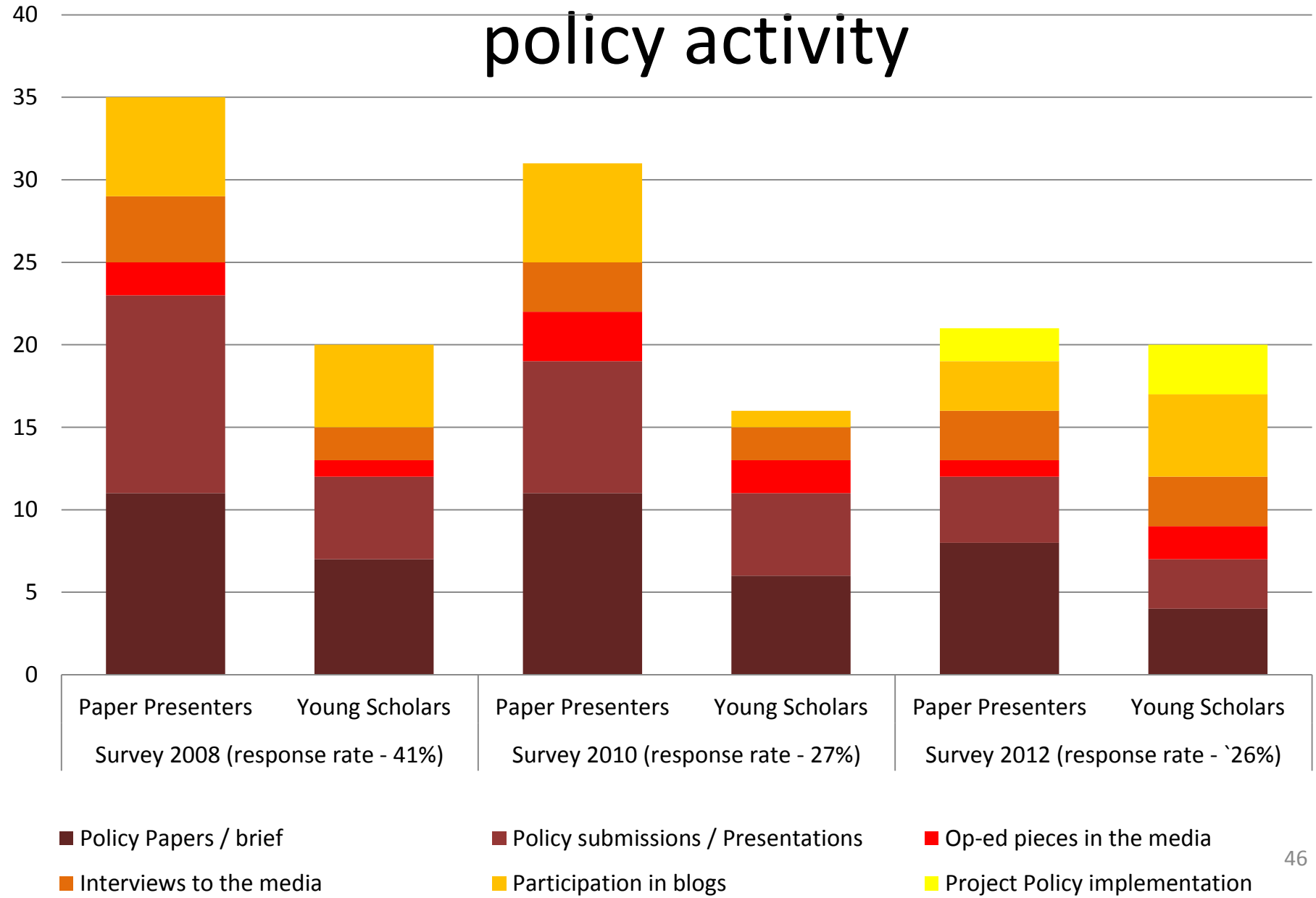


OUTPUT

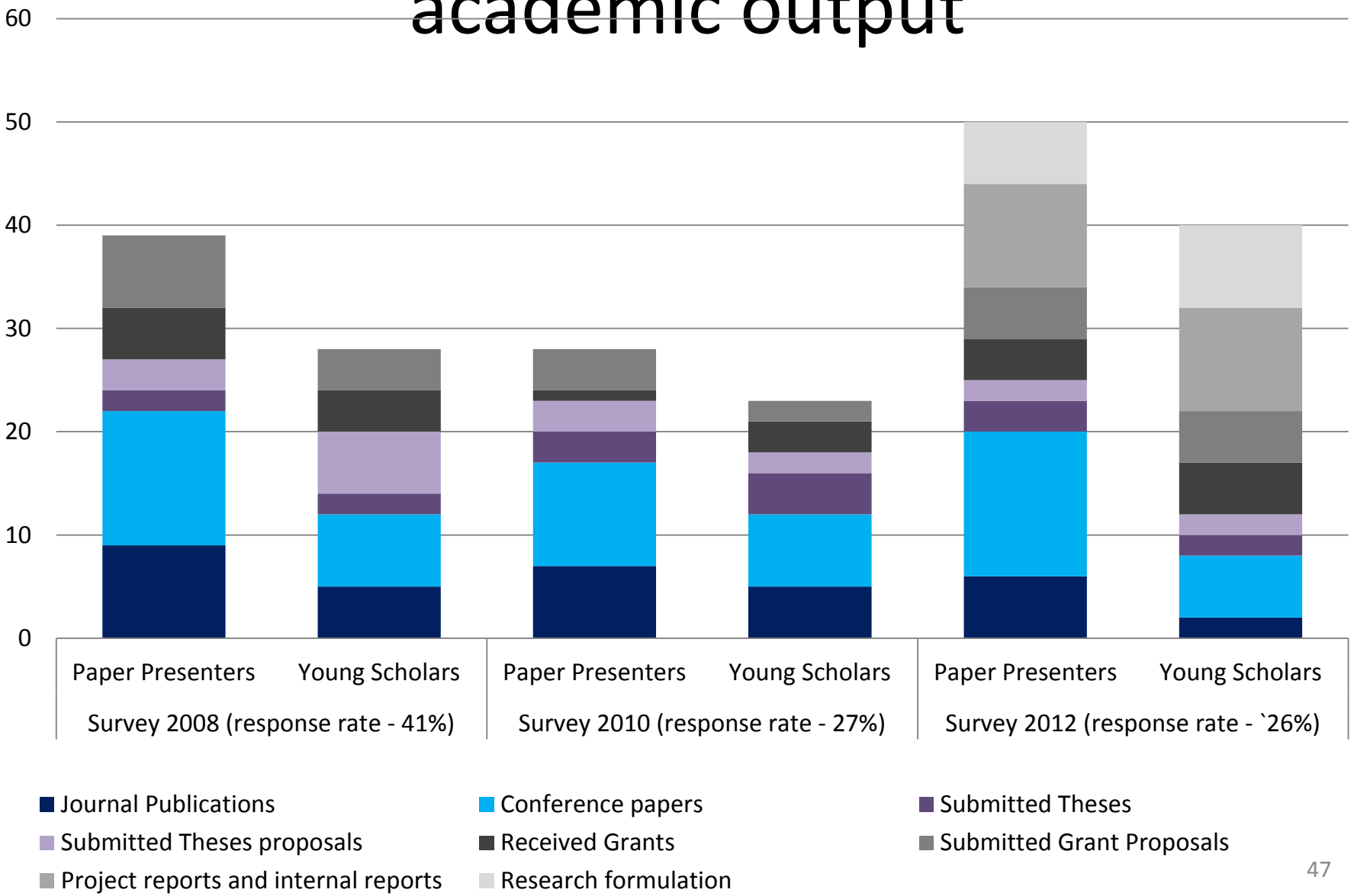
SSRN abstract views and downloads



CPR*south* community previous-year policy activity



CPR*south* community: Previous-year academic output



How are we doing?

- Very difficult to provide definitive evidence of positive outcomes from capacity building work
  - Both paper-givers & young scholars are active between conferences, but can we identify resulting influences?
  - Making progress on connectedness, but is this output or intermediate step?
  - Especially given age of members, how realistic is expectation they will break through into circles of policy influence?
- Anecdotes:
  - Inside the system: A three-time paper presenter is now Joint Secretary (e Gov) at Department of IT, India; joining the CPR*south* Board next year
  - Outside the system: Researchers from Indonesia & Namibia who met at CPR*south* published an op-ed in leading Indonesian daily AND have a paper at CPR*south*7
    - Co-authors from across the continents

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Mobile phone — making a choice in uphill struggle

Ibrahim Kholilul Rohman and Christophe Stork, Gothenburg, Sweden | Opinion | Sat, December 03 2011, 12:43 PM

A- A A+

The significant growth of Indonesian mobile telephony to over 211 million active SIM cards in 2010 (Directorate General of Post and Telecommunications, 2011), three and half times larger than the number in 2006, has been accompanied by an overwhelming number of products and prices, thereby making an informed choice by customers nearly impossible.

Eight mobile operators compete fiercely, whereas products and prices change frequently and the choice of discounts and specials are offered in the market.

The pricing structure of cellular services in Indonesia is unique. Besides conventional price discrimination between on-net (calling on the same network) and off-net (calling from one network to another) and peak and off-peak rates, accumulative discounts, friends and family discounts and cash (airtime) backs are being used. Prices differ also by region and distance. Billing is either in minutes or seconds. Flat rates for voice, SMS and data in any permutation

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