

Indicators on Community Access to ICT: Critical Policy and Planning Tools in the Implementation of the Philippine Community E-Center Program

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I. INTRODUCTION

The Philippines is an interesting case study as far as telecommunications development is concerned. The country has one of the largest number of service providers in terms of fixed and mobile telephone lines, international gateway facilities, cable TV and value added services, including internet services. The Philippines has been dubbed as the “text or SMS capital of the world”.

The Philippine telecommunications sector is also unique in a number of ways. First, it is one of the first countries in the world (1) to set up an independent telecommunications regulator, (2) where mobile telephone subscription has far exceeded fixed line penetration, (3) where telecommunications operators have historically been private-sector led, and (4) to implement a universal service program through a strategy called the Service Area Scheme (SAS).

Foreign investment is steadily increasing in the sector, particularly in the following e-services industries: contact centers, software development, animation, medical and legal transcription, and business process outsourcing.

There are at least fourteen IT parks with world-class communications systems. However, they are located in major cities in the country.

Despite these developments, the Philippine ICT infrastructure and its coverage are still relatively limited, with areas remaining either unserved or underserved. By the end of 2002, close to half of the cities and municipalities in the Philippines are still without fixed line connections. Distribution of telecommunications facilities in the country is also uneven. It is concentrated in Metro Manila and other metropolitan areas that enjoy teledensity figures more than three times that of the next highest region.

Table 1. The Philippine Key Telecommunications Indicators

INDICATOR	The Philippines	ASEAN Average	World Average
Population (2002 projection)	79.5 M	n.a.	n.a.
Main Telephone Line per 100 inhabitants (A)	4.17 (2002)	11.60	17.95
Mobile Phone Lines per 100 inhabitants (B)*	19.36 (2002)	21.40	18.98
Total Teledensity per 100 inhabitants (A+B)	23.53	33.03	36.93
Internet Users per 10,000 inhabitants	427.60	1144.37	994.01
Broadband Internet Users	21,000	n.a.	n.a.
Internet Hosts per 10,000 inhabitants	2.54	n.a.	n.a.
Number of Websites in the national language	1,814		
Number of Websites in English and other languages	181,403		

*National average for nationwide GSM system including prepaid and postpaid subscribers.

Sources:

- (1) ITU World Telecom Indicators 2002
- (2) Digital Review of Asia Pacific 2003/2004

Table 2. Coverage of Telecommunications Services in the Philippines as of 31 December 2002

	No. of Municipalities and Cities	% of Total
Total No. of municipalities and Cities	1610	
With fixed lines	891	55.3
With Payphones or Public Calling Offices	1,426	88.6
With Cellular Mobile Telephone Service (CMTS)	665	40.7
With Fixed lines or Payphones or PCO	1,492	92.7
With Fixed lines or Payphones or CMTS	1,502	93.3

Source: Liberalization and Harmonization of ASEAN Telecommunications, Vol 2, April 2004

II. THE PHILIPPINE COMMUNITY E-CENTER PROGRAM and the IMPORTANCE OF COMMUNITY ACCESS INDICATORS

The Community E-Center Program (CECP) is a priority program of HE President Gloria Macapagal Arroyo's Administration. It is one strategy being implemented to achieve the goal of universal access. The objective of the CECP is to bridge the digital divide between the "information-have-communities" and the "information-have-not-communities" by providing access to information and communications services particularly to the unserved rural areas, thereby: 1) linking communities together; 2) facilitating trade and commerce and 3) empowering rural communities socially, economically and politically. Capable of servicing most of the information and

communications requirements of the local population, Community E-Centers (CECs) can be seen as a point of delivery of government information and services, the community library of the future, a point of access to distance education, a local or regional news service or as a business services center, depending on the unique needs of the communities.

Our Medium Term Philippine Development Plan states that **“Access of regions to basic information and communications services shall be expanded through community e-centers, with internet-linked computer providing a multifunction resource. Hence, through ICT, Filipinos living anywhere shall at any time have faster and wider access to information necessary for learning and for knowledge education.”**

In this regard, the following basic principles have guided the implementation of the CECP:

- The provision of access to information and communications services in rural, remote and underserved areas is a key to accelerating development.
- The success of the program depends on the efficient and effective partnership of the public and private sectors. Government must provide leadership, direction and the legal, policy and regulatory framework. The private sector shall remain as the engine for the sector development through service provisioning.
- Content is an essential component of the CECP and its sustainability. Content and applications must be adopted or developed to suit the particular needs and conditions of the local community.
- The government, as a model user of ICT, should accelerate its efforts in developing content, particularly those that are used in the delivery of public services.
- The provision of telecommunications and IT facilities is not a goal in itself. To have a real impact on development, the introduction of such facilities and services must be done as an integral part of a cross-sectoral, multi-disciplinary effort of community development.

The Status of CECP

- (1) The CECP also intends to coordinate similar and related initiatives implemented or planned by other government agencies and the private sector to align with a single blueprint of CECP implementation strategies. An inventory of related projects or undertakings is being undertaken, i.e., PCs for Public High Schools Project (Dept of Trade and Industry and the Department of Education), Pilot Multipurpose Community Telecenters (Dept of Science and Technology), Establishment and Computerization of Barangay Reading Centers and E-LGU Projects (Dept. of Interior and Local Government), Philpost's E-Post Shop, Text 2 Teach (private sector), Telepono sa Barangay Project (Dept of Transportation and Communications), etc.
- (2) There is difficulty as to the exact number of community e-centers that have been established. There is no requirement yet to register a community e-center with

- any government agency. What the Commission on Information and Communications Technology (CICT) can keep track is the number of CECs being implemented by its attached agency, the Telecommunications Office. Considering that most of the telecommunications service providers are private sector entities, the current number of CECs is not very accurate.
- (3) Telecommunications Office (TELOF), an attached agency of the Department of Transportation and Communications, with support coming from the E-government Fund, will establish 111 CECs in 39 provinces nationwide.
 - (4) Several government agencies are aggressively undertaking e-frontline government services. The latest figures state that: a) 99% of the 377 national government agencies have websites, b) 100% of the 106 State Universities and Colleges are now online, c) 100% of the 79 provinces and 115 cities have web presence and d) 95% of the 1, 610 cities and municipalities are online. These support the need for content and applications for the sustainability of CECs.
 - (5) Some targets on coverage have been set in the update of the Medium Term Philippine Development Plan.
 - (6) An update and verification on some ICT indicators in the regional, provincial and municipal level is also being undertaken. **Attachment A** (for sample regions) shows the base data gathered last year that are being verified. A separate table (sample in **Attachment B**) identifying service provider (G: government, P: private) is also available. However, data in this table still needs verification.
 - (7) An aggressive information drive is also planned in order that all stakeholders will have an appreciation of the objectives, benefits and overview of the CECP. Hopefully, this drive will get the support of the legislature in terms of enabling legislation, if necessary, and budget and will encourage cooperation with other government agencies, the private sector and civil society to become partners of the government in the implementation of the CECP.

The Importance of Indicators

Indicators on Community Access to ICT are very important policy and planning tools in the implementation of the CECP. Firstly, it will give policy makers and planners a good overview on the current situation. Given the targets that have been committed in our Medium Term Philippine Development Plan, gaps and subsequently strategies (policy, technical financial and HR-related) will be identified to meet the targets from the current status. Secondly, indicators will give a clear picture as to where one stands as compared to some benchmarks of similar or more advanced economies.

However, getting the figures for each indicator is one thing. Getting them accurately is another thing. In most cases, obtaining these data has cost implications. For developing countries with very limited financial resources, this constraint poses a serious problem.

Reliable and timely information on ICT is lacking in the Philippines. Statistics are misleading and even conflicting. The use of unreliable and improper statistics is causing serious concerns in terms of proper policy analysis. Examples include demand forecast figures that were used as bases for the local exchange lines obligations of cellular and international gateway operators as mandated by Executive Order 109. Another example

is the prevalent use of telephone capacity rather than telephone lines in service level of telephone access in the country. In many cases, data are also incomplete or lacking in key areas. For example, a 1999 survey of the level of computerization in government only had results from less than half of government agencies.

ON GLOBAL INDICATORS AS PRESENTED IN ANNEX VI OF THE ITU DOCUMENT

The indicators included in the matrix of Annex VI should ideally serve as the minimum set of indicators in order that effective national and agency planning can be made. The set of indicators may serve as a blueprint or a framework to plan and monitor the country's response to the WSIS Plan of Action.

It may also be worthwhile to refer to other indicators that have been forwarded by other regional or international organizations. For example, the APEC Telecommunications Working Group, in one of its studies, has forwarded the additional access indicators such as % Female online, rural networks/applications and even went further to classifying internet access as wireless or fixed.

For developing countries, some indicators to reflect affordability, usage by age, most acceptable or common applications, quality of service indicators and other similar figures may be of importance. But again, as earlier mentioned, the larger set of indicators, the more the cost implication is.

Other concerns on getting the reliable data for indicators are:

- Capability to gather data
- Common understanding of the definition of terms used in the indicators
- Frequency of Update
- Resolution of Conflicting data
- Converting raw data into usable and realistic policies, plans and programs
- Cost
- Clear Assignment of Agencies to Set of Indicators

CONCLUSION

Indicators are very important policy and planning tools. As one goes more into deeper details, the more comprehensive one's analysis will result. It is observed that developing countries lack information on various indicators based on a number of regional and global matrices of indicators. The author believes that this is not due to the indifference of said countries to surveys undertaken by organizations such as the ITU and other entities. The author would like to think that several or combination of factors contributes to this lack of information gathered or submitted to such survey. Some of these factors such as cost implications, lack of manpower resources, etc. have been earlier discussed. Other factors

may also include the difficulty understanding the terms and the procedures being used, availability of data that may be outdated, conflicting coming from various sources, etc.

The author would like to express her appreciation to the ITU for organizing this very important workshop. Her organization places very high importance on this kind of activity.

Attachment A

Summary							
Telecommunications Services Penetration by Municipalities							
	Percentage Served			Percentage with Zero service (Unserviced)	Percentage with Any Type of Service (LEC/ CMTS/ PCO/ PP)	% Served by Govt (LEC Only)	% Served by Private
	Fixed Lines	Public Phones (Payphones / PCO)	Cell Sites				
REGION I (ILOCOS REGION)							
ILOCOS NORTE (22 Mun. 1 City)	74.40%	82.40%	67.20%	11.20%	88.80%	12.80%	88.00%
ILOCOS SUR (34 Mun.)	82.61%	73.91%	47.83%	17.39%	82.61%	43.48%	82.61%
LA UNION (19 Mun. 1 City)	41.18%	67.65%	58.82%	23.53%	76.47%	2.94%	76.47%
PANGASINAN (45 Mun. 3 Cities)	85.00%	80.00%	85.00%	10.00%	90.00%	25.00%	85.00%
	97.92%	97.92%	75.00%	0.00%	100.00%	0.00%	100.00%
REGION II (CAGAYAN VALLEY)							
BATANES (8 Mun.)	52.89%	89.25%	48.39%	8.60%	91.40%	21.51%	92.47%
CAGAYAN (29 Mun.)	16.67%	100.00%	0.00%	16.67%	83.33%	0.00%	100.00%
ISABELA (36 Mun. 1 City)	88.97%	79.31%	51.72%	13.79%	86.21%	27.59%	86.21%
NUEVA VIZCAYA (15 Mun.)	56.76%	89.19%	59.46%	8.11%	91.89%	21.62%	91.89%
QUIRINO (6 Mun.)	33.33%	100.00%	53.33%	0.00%	100.00%	6.67%	100.00%
	33.33%	100.00%	0.00%	0.00%	100.00%	50.00%	100.00%
REGION III (CENTRAL LUZON)							
BATAAN (12 Mun.)	77.05%	95.90%	87.70%	0.00%	100.00%	1.64%	100.00%
BULACAN (24 Mun.)	83.33%	100.00%	100.00%	0.00%	100.00%	0.00%	100.00%
NUEVA ECUA (29 Mun. 3 Cities)	95.83%	100.00%	95.83%	0.00%	100.00%	8.33%	100.00%
PAMPANGA (21 Mun. 1 City)	56.25%	90.63%	75.00%	0.00%	100.00%	0.00%	100.00%
TARLAC (17 Mun. 1 City)	86.36%	95.45%	86.36%	0.00%	100.00%	0.00%	100.00%
ZAMBALES (13 Mun. 1 City)	77.78%	100.00%	94.44%	0.00%	100.00%	0.00%	100.00%
	71.43%	92.86%	85.71%	0.00%	100.00%	0.00%	100.00%
REGION IV (SOUTHERN TAGALOG)							
BATANGAS (32 Mun. 2 Cities)	64.57%	94.62%	51.57%	2.68%	97.31%	1.35%	97.31%
CAVITE (20 Mun. 3 Cities)	88.24%	100.00%	91.18%	0.00%	100.00%	0.00%	100.00%
LAGUNA (29 Mun. 1 City)	91.30%	91.30%	91.30%	0.00%	100.00%	0.00%	100.00%
MARINDUQUE (6 Mun.)	90.00%	100.00%	83.33%	0.00%	100.00%	0.00%	100.00%
OCCIDENTAL MINDORO (11 Mun.)	66.67%	100.00%	33.33%	0.00%	100.00%	0.00%	100.00%
ORIENTAL MINDORO (14 Mun. 1 City)	45.45%	100.00%	18.18%	0.00%	100.00%	0.00%	100.00%
PALAWAN (23 Mun. 1 City)	60.00%	100.00%	40.00%	0.00%	100.00%	13.33%	100.00%
QUEZON (40 Mun. 1 City)	25.00%	79.17%	16.67%	16.67%	83.33%	0.00%	83.33%
RIZAL (13 Mun. 1 City)	85.85%	95.12%	24.39%	2.44%	97.56%	0.00%	97.56%
ROMBLON (17 Mun.)	82.86%	92.86%	100.00%	0.00%	100.00%	0.00%	100.00%
AURORA (8 Mun.)	5.88%	94.12%	0.00%	0.00%	100.00%	0.00%	100.00%
	12.50%	87.50%	0.00%	12.50%	87.50%	12.50%	87.50%
REGION V (BICOL REGION)							
ALBAY (17 Mun. 1 City)	88.70%	100.00%	25.22%	0.00%	100.00%	5.22%	100.00%
CAMARINES NORTE (12 Mun.)	100.00%	100.00%	33.33%	0.00%	100.00%	16.67%	100.00%
CAMARINES SUR (35 Mun. 2 Cities)	100.00%	100.00%	33.33%	0.00%	100.00%	0.00%	100.00%
CATANDUANES (11 Mun.)	100.00%	100.00%	35.14%	0.00%	100.00%	8.11%	100.00%
MASBATE (21 Mun.)	9.09%	100.00%	9.09%	0.00%	100.00%	0.00%	100.00%
SORSOGON (18 Mun.)	4.76%	100.00%	14.29%	0.00%	100.00%	0.00%	100.00%
	62.50%	100.00%	12.50%	0.00%	100.00%	0.00%	100.00%

Attachment B

APPENDIX B						
PROVINCE / CITY / MUNICIPALITY	COVERAGE FIXED LINES	COVERAGE PAYPHONES / PCOs	COVERAGE CELLULAR	COVERAGE FL / PP / PCO	COVERAGE FL / PP / PCO / CMTS	SERVICE PROVIDER
note: 1- with service; 0-without service						
REGION I (ILOCOS REGION)	93	94	77	106	109	
ILOCOS NORTE (22 Mun. 1 City)	19	12	10	19	19	
ADAMS	0	0	0	0	0	
BACARRA	1	1	1	1	1	G, P
BADOC	1	1	1	1	1	G, P
BANGUI	1	1	0	1	1	G, P
BATAC	1	1	1	1	1	P
BURGOS	1	1	1	1	1	G, P
CARASI	0	0	0	0	0	
CURRIMAO	1	0	1	1	1	P
DINGRAS	1	1	0	1	1	P
DUMALNEG	0	0	0	0	0	
BANNA (ESPIRITU)	1	1	0	1	1	P
LAOAG CITY (Capital)	1	1	1	1	1	P
MARCOS	1	1	0	1	1	P
NUEVA ERA	0	0	0	0	0	
PAGUDPUD	1	1	0	1	1	G, P
PAOAY	1	1	1	1	1	P
PASUQUIN	1	1	1	1	1	G, P
PIDDIG	1	1	0	1	1	G, P
PINILI	1	1	0	1	1	G, P
SAN NICOLAS	1	1	1	1	1	P
SARRAT	1	1	1	1	1	P
SOLSONA	1	0	0	1	1	G, P
VINTAR	1	1	1	1	1	G, P