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ICT INDICATORS FOR COMMUNITY ACCESS

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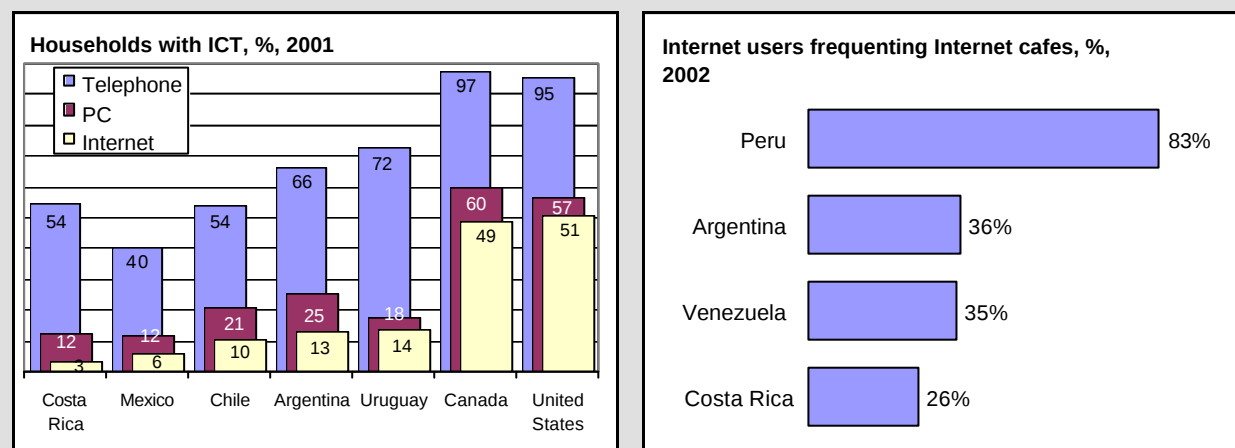
International Telecommunication Union (2003)

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The vast majority of households in developing nations do not have modern ICT such as computers and the Internet. For example, take the Latin America region where even those most advanced countries are still far behind their North American neighbours in terms of household ICT availability (Figure 1 left). The situation is even worse for other developing countries in the region and around the world. For the immediate future, if citizens in most developing nations are to have access to ICT, it will have to come from elsewhere such as at relatives or friends, work, school or public places such as Internet cafes. This assumption is borne out by surveys in developing countries that show that in many, a primary location of Internet access is an Internet café. In Peru, four out of five Internet users can be found in Internet cafes. In other Latin American countries for which data is available, the corresponding figure is one in three (Figure 1 right).

Figure 1: Not enough ICT at home

Households with different ICT, % 2001, selected America region countries and percentage of Internet users that use Internet cafes, selected Latin American countries, 2002



Source : ITU adapted from national surveys.

Therefore measuring access to community ICT facilities is important. In January 2003, the ITU World Telecommunication/ICT Indicator meeting recommended that statistics on *Public Internet access facilities* be collected.¹ This was defined as “the number of facilities providing Internet access to the public. These can be Internet cafes and public facilities such as telecentres or libraries. Schools should not be included unless the general public can also use the facilities.”² The key word is *public* meaning that the facility is available to all during the hours of operation, whether privately or government run. Included in this indicator would be so-called *hotspots* or zones where public wireless Internet access is available for users with their own portable computers.

The European Union (EU) included a public access indicator as part of its eEurope benchmarks, the number of *Public Internet Access Points* (PIAPs). This is defined as “publicly provided centres providing access to the Internet regardless of their public and/or private provider and whether access is free

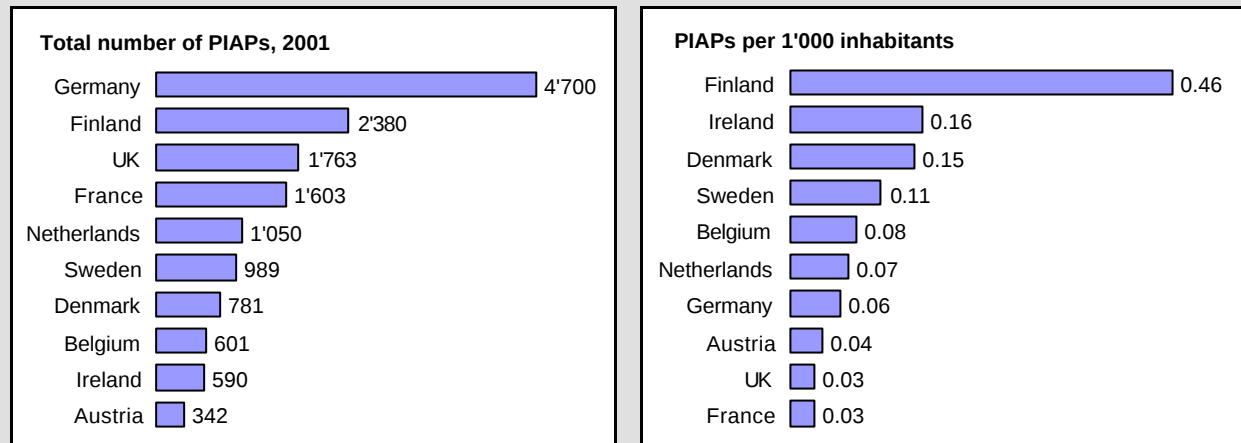
¹ The Final Report of the meeting notes: “Special emphasis was placed on the development of community access indicators...” *Final Report*. World Telecommunication/ICT Indicators Meeting. Geneva, Switzerland. 15-17 January 2003. <http://www.itu.int/ITU-D/ict/WICT02/conclusions/index.html>

² ITU. *Key indicators of the telecommunication/ICT sector*. Draft. http://www.itu.int/ITU-D/ict/material/Top50_e.doc

or not though excluding fully private Internet cafés.”³ The EU also listed three supplementary indicators that members may want to collect: *number of public access points (excluding private initiatives) per 1'000 inhabitants*; *number of free public access points per 1'000 inhabitants* and *percentage of libraries offering Internet access to the public*. Member states are supposed to collect this data on an annual basis (Figure 2).

Figure 2: PIAP in the EU

Public Internet Access Points (PIAP), total and per 1'000 inhabitants, 2001



Source: ITU adapted from EU.

Some developing nations publish similar statistics. The telecommunication regulator in Venezuela provides data since 2000 on the number public Internet centres broken down by the type of facility (Figure 3 right).⁴ In Tunisia, the government Internet agency has statistics on the number of *Publinets* or government sponsored Internet centres (Figure 3 left).⁵ In July 2003 ten per cent of all users were accessing the Internet from Publinets.

³ EU. List of eEurope Benchmarking indicators. 20 November 2000.

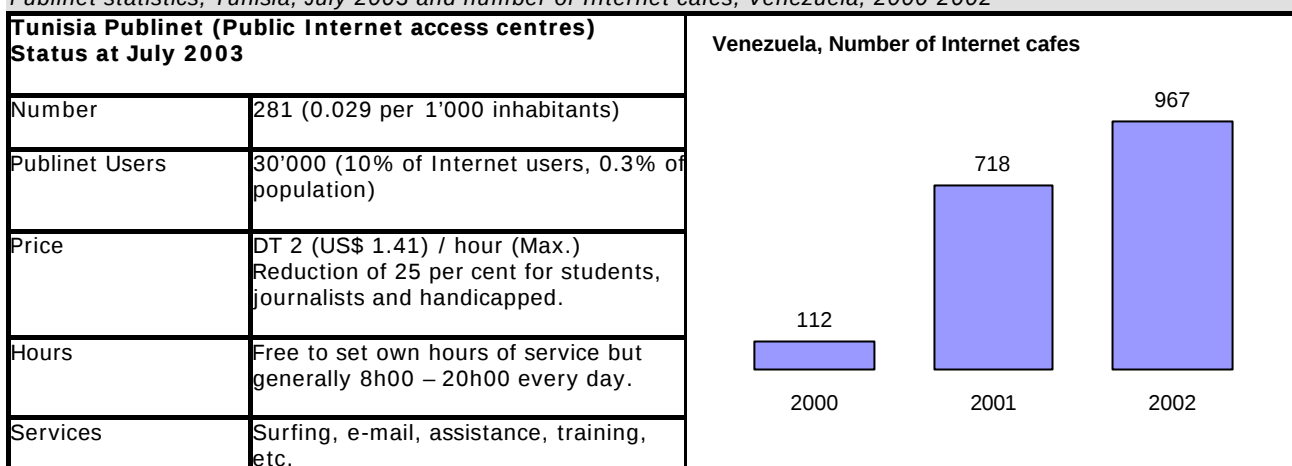
http://europa.eu.int/information_society/eeurope/benchmarking/indicator_list.pdf

⁴ See “CENTROS DE ACCESO DE TELECOMUNICACIONES, CENTROS DE NAVEGACIÓN Y CIBERCAFÉ” on the CONATEL web site at:

<http://www.conatel.gov.ve/ns/indicadores/Indicadoresnuevos/CENTROS%20DE%20ACCESO%20DE%20TELECOMUNICACIONES.htm>

⁵ See “Les centres d'accès publics (Publinets)” on the Agence Tunisienne d'Internet (ATI) web site at:

<http://www.ati.nat.tn/publinets/index.htm>

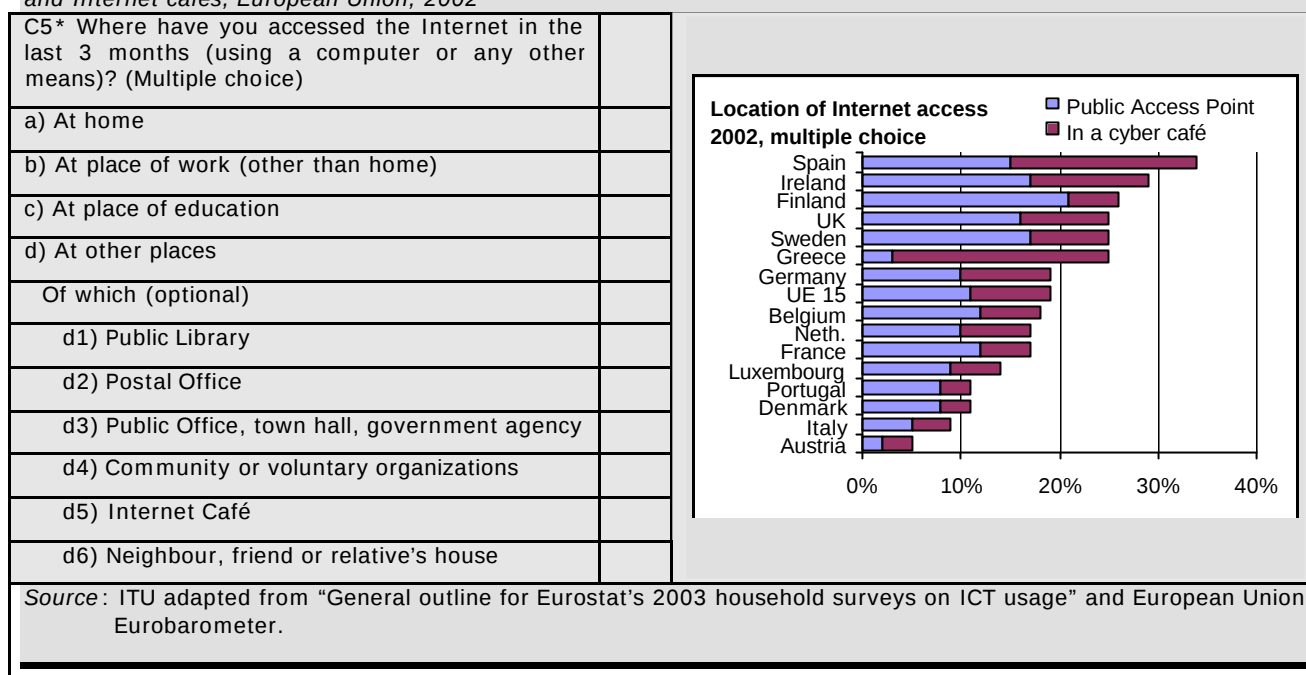
Figure 3: Public Internet facilities in Tunisia and Venezuela*Publinet statistics, Tunisia, July 2003 and number of Internet cafes, Venezuela, 2000-2002*

Source: ITU adapted from ATI and CONATEL.

One limitation with the number of public Internet facilities per 1'000 inhabitants is that it does not give an indication of how the facilities are distributed. Nor is there a basis for a recommended value since this would be a function of how necessary they are. In other words the less available Internet access is from home or work, the more need for public facilities. Thus the number of public Internet facilities indicator should be analyzed in connection with household Internet availability. Another supplementary indicator would be *how many people frequent Internet cafes and other public Internet access facilities*. The common way of capturing this information is as a specific question in an Internet user survey (Figure 4). The typical way this indicator is expressed is the *per cent of users that access the Internet from Internet cafes*. It may be useful to disaggregate the indicator by the percentage that only uses Internet cafes or alternatively, where the Internet café is their main location of access. It may also be useful to split between privately operated and government run facilities.

Figure 4: Location of access

Excerpt from Eurostat household survey on ICT usage and percentages of Internet users utilizing public access points and Internet cafes, European Union, 2002



Another way of looking at community accessibility is measuring the *number of localities* with public ICT service. Here the availability of at least one facility in a locality is what is important rather than the total number of facilities. This could be broken down by telephone service or Internet café. The ITU carried out research for the South Asia region trying to determine how many localities had a telephone.⁶ The localities were then mapped back to population to make an estimate of the per cent of the population covered by telephone service. India has regularly tracked the number of villages with a telephone and publishes on-going statistics on the status.⁷ The national statistical office in Thailand also publishes data on the number of villages with telephone service as well as the number of rural households with radios, telephones and television.⁸

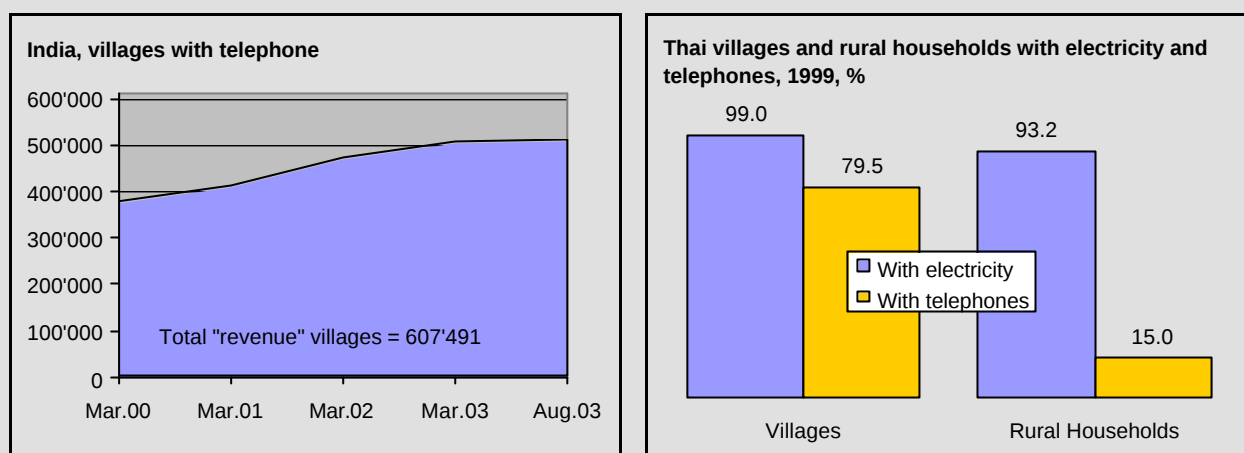
⁶ Michael Minges and Pratikshya Simkhada. "A closer look at South Asia." *ITU News Magazine*. December 2002. <http://www.itu.int/itunews/issue/2002/10/southasia.html>

⁷ See the "Village Panchayat Telephones(VPT) Monthly Progress Report" on the BSNL web site at: [http://www.bsnl.co.in/vptstatus\(monthly\).htm](http://www.bsnl.co.in/vptstatus(monthly).htm)

⁸ National Statistics Office of Thailand. *Statistical Yearbook 1999*.

Figure 5: Localities with access

Number of villages with a telephone, India, 2000-2003 and Number of villages and rural households with electricity and a telephone, Thailand, 1999



Source: ITU adapted from BSNL and National Statistics Office of Thailand.

National authorities may desire to go further in compiling a more detailed set of community access indicators. For example, Mexico has proposed indicators such as the total number of terminals available, minutes of use and population covered by community access centres.⁹ However at least the minimum indicators described above should be maintained for purposes of international comparability.

⁹ SCT. *Propuestas sobre indicadores para medir y cuantificar el acceso comunitario a las TIC*. Available at http://www.itu.int/ITU-D/ict/mexico03/doc/pdf/Doc07_S.pdf