

# **Residents' associations and information communication technologies: a suggested approach to international action-research**

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## **How can we measure an elephant?**

'Suppose I hire you to measure an elephant. That may sound like a pretty straightforward job description, but think about it for a minute. Do you measure its weight? Height? Length? Volume? Intensity of its grey colour? ... In order to measure this creature, you need to select one or a few characteristics from many possibilities. That choice will be determined by your purpose of measuring.' (Stone 1998) The problem becomes more complex if the elephant moves, changes position, and grows. It becomes almost impossible if the elephant evolves into another species. How can I measure something that is no longer there, or that has even become something else?

Metaphors aside, if we consider the issue of indicators, we can't avoid considering their great variety, the differences in where they come from, and the different reasons for the collection and elaboration of data. From the Organisation for Security and Co-operation in Europe (OSCE) to the IMF, from the World Bank to UNESCO, from the various other UN agencies to government databases, not forgetting the indicators adopted to measure the implementation of Agenda 21 and the Habitat Agenda, a growing number of institutions, especially transnational bodies, are weaving a web of numerical output that cannot be interpreted easily or put to any use. This issue is further complicated if we consider the role of information communication technologies (ICTs). Technological innovation in this field is bringing about a real revolution in the relationships between production and exchange, and is thereby accelerating the processes of globalisation. We are dealing with an unprecedented revolution whose influence permeates right down to the family and the local neighbourhood. But despite this influence, the use of ICTs is not regarded as an

indicator of urban development, even though precise and up-to-date statistics are available.

## **The unequal distribution of ICTs**

What can we understand from data concerning that 'tool-cum-symbol' of ICTs, the distribution of the Internet hosts and users throughout the world? In July 1997, there were about 19.5 million hosts on the Internet. For several years, this number doubled every year, yet the distribution by countries and regions didn't change much in this period. The Third World is still participating with a mere 3 per cent, while the USA accounts for about 60 per cent of all the Internet hosts. About 81.5 per cent of Internet hosts worldwide are in the G7 countries, where only about 10 per cent of the world's population lives. On the other hand, some of the most populous countries of the Third World – China, India, Brazil, and Nigeria – together make up a combined total of only 0.6 per cent of all hosts, even though they account for about one third of the world's population. Many countries have only a few Internet connections and there are still some blank areas in Africa and Asia on the Internet map. In January 1997, for example, only four Internet hosts were to be found in Nigeria, a country with a population of 100 million. In developing countries, full Internet connections, with all services, are available only in the capital cities, and beyond their boundaries, sometimes only e-mail is available. In Africa, with the exception of South Africa and Senegal, there are no direct Internet connections in rural areas.

This gap can be explained if we examine the three prerequisites for using the Internet: a telephone connection, a computer and modem, and electricity. Such prerequisites are the exception rather than the norm in the Third World. Lack of access to electricity is in many cases a basic and insurmountable obstacle. Many developing countries experience frequent power failures in their cities while the rural areas lack any power supply at all – which is the case for 70 per cent of all Africans living in rural areas and for over half of their counterparts in the Indian subcontinent.

As for telephone lines, 80 per cent of the world's population doesn't have one. In 49 countries there is not even one telephone mainline for every 100 inhabitants, and 35 of these countries are in Africa. In the USA and in Germany there is a telephone line for every two inhabitants, and the ten richest countries, which represent only 20 per cent of the world's population, have 75 per cent of all telephone mainlines.

On average, developing countries have 5.2 telephone lines per 100 persons while in industrialised countries the corresponding figure is 52.3. In Third World regions most telephone lines are in city areas. In rural Africa, there are only 228,000 lines – one for every 1700 people (CIA 1995).

Last, but not least, is cost. For countries without direct access to the Internet the costs of being connected are especially prohibitive since they are based on international call rates. Monthly fees for an Internet account are often beyond the reach of ordinary people. The average monthly cost of a low-volume Internet account in Africa is about US\$65, roughly equivalent to the monthly per capita income of Mozambique. And besides all that, acquiring a computer and a modem is much more expensive in the Third World than in the First World. The average cost of a PC and a modem – let's say, US\$2000 – is clearly an astronomical amount of money to most people in developing countries which have an average GNP per capita of US\$970, compared with US\$16,394 in the industrialised world (UNDP 1996).

These figures tell us something about the North–South divide. The situation is constantly evolving, as reflected in the fact that up to today 78,792 million Internet hosts have been certified worldwide.<sup>1</sup> But this gap will only increase if we consider the costs of cabling, which are prohibitive for countries at risk of bankruptcy because of their foreign debt (Hamelink 1998). In other words, rather than laying out the foundation for a new civilisation, the information revolution seems to be introducing a new and more dangerous form of exclusion (Castells 1998). And it would be difficult to argue that Internet connectivity is a top priority for developing countries that are facing war, famine, unemployment, and pollution.

## **A possible interpretation of the social use of ICTs**

Data alone do not tell us whether and how the ICTs are being used by the various interested parties – public authorities, private sectors, NGOs, and residents' associations – to promote the sustainable development of the city. But let us try to see whether the information revolution has played a prominent role in consolidating democracy and citizens' rights, and in rethinking how the city should function (Afemann 1997). We know that certain transnational institutions have specific programmes for developing ICT use. For example, the World Bank has its Regional Environment Information Management Project (REIMP), which seeks to offer full Internet services to membership

countries. It also has its programme for information and development or INFODEV. Likewise, UNESCO has created the Intergovernmental Informatics Programme (IIP), which revolves around the principle of developing human resources to promote comprehensive, sustainable development in developing countries.

The use of ICTs received a strong push, starting from the various UN summits of the 1990s, especially after the 1992 UNCED conference in Rio de Janeiro, whose Agenda 21 mentions the need to collect and use information for sustainable development and for monitoring the Agenda's implementation. This document also calls on UN agencies to make all their information accessible by means of computer networks.

We also know that NGOs are increasingly making use of ICTs. The Association for Progressive Communication (APC) has been a real pioneer in this sector since 1984. This global federation is comprised of 24 non-profit providers covering over 50,000 members in 133 countries. The APC fosters the exchange of experience and the design and implementation of development programmes, while also managing hundreds of e-conferences on topics ranging from AIDS to Zimbabwe. The first experience of globally orchestrated participation by means of computer networks was at Rio, something that has continued at subsequent summits, including the WTO meeting at Seattle.

Throughout such events, NGOs and grassroots associations have woven a network of relations and exchanges, though they are also aware of the risks and limitations of ICTs. The 1994 Declaration of New Delhi refers to the UN Declaration on the Right to Development, the UN Covenant on Civil and Political Rights, the Universal Declaration of Human Rights, the declarations of the MacBride Round Table, and the Quito Declaration.<sup>2</sup> All these declarations emphasise the ever-increasing monopolisation and commercialisation of information and the expansion of a global economy, which have in turn tended to subvert democratic processes and reduce popular participation. The signatories thus call for global democratisation rather than a global supermarket. Everyone has the right to be informed and to inform others, something that modern media could make a real possibility. How? By taxing the use of the Internet for commercial purposes, it would be possible to underwrite the democratic use of ICTs, and to support decentralised forms of organisation while at the same time fostering cultural diversity.

## ICTs and urban development: some paths

Such dynamics suggest some paths to follow in looking at how ICTs might help organisations concerned with promoting sustainable urban development. Things have started to become clearer since Habitat II, when Habitat International Coalition (HIC) took on the role of preparing and co-ordinating the participation of popular organisations and NGOs. On that occasion, HIC carried out international action-research, and for the first time used the Internet as a principal tool for acquiring knowledge and exchanging and evaluating the new experiences developed by urban residents themselves in building their cities (HIC 1997). This was around the time that the Dialogues and Documents for Human Progress evolved (DPH 1997), a network to foster the exchange of experience by means of thousands of computerised digests on urban, social, and environmental issues.

Along similar lines, we find some interesting examples that emphasise the disparity between North and South. In the USA, there are now hundreds of local, national, federal, and international associations using the Internet, ranging from the National Coalition for the Homeless to the National Alliance to End Homelessness, from the National Low Income Housing Coalition to Habitat for Humanity. One such example is Neighbourhoods Online, a virtual centre created in 1995 in Philadelphia, serving people involved in the construction and development of neighbourhoods across the USA. This server seeks to provide rapid access to information regarding the various aspects of life in the neighbourhoods, as well as to create a national network of activists and a mechanism through which to link up individual citizens. Another example is the Homeless People Network, a website reserved for the homeless: homeless, maybe, but connected to the Internet and so able to use the services of the member associations or the Internet points.

In the South the situation is much more difficult, even if interesting practical experiences aren't at all lacking. Among these is ENDA-Tiers Monde, an international NGO based in Dakar that focuses on sustainable development in Africa and the developing world. Members of APC are registered with its networking department which has, since the early 1990s, provided connectivity to the larger organisations for its NGO partners in Senegal and francophone West Africa. Between 1992 and 1996, ENDA acted as a local hub for e-mail, which was networked over telephone lines and Fidonet to GreenNet in the UK.

By 1996 ENDA began to provide full Internet services including e-mail, mailing lists, and access to the Web. Its activity derives from the view that South–South exchanges promote development, which is why it seeks to expand the use of ICTs in neighbourhood associations through action-research training projects.

Another example is Fedevivienda (the Federación Nacional de Organizaciones de Vivienda Popular), established in 1982 by five organisations involved in welfare housing projects in Colombia. One of the first to use the Internet, Fedevivienda helped to form Colnodo, a Colombian communications network serving NGOs dedicated to community development. In 1999 Colnodo received the first Internet Columbia Award from the Columbian Chamber of Information and Telecommunications. Colnodo is also involved in a transnational project called Telecentro, which is funded by the International Development Research Centre (IDRC), and aims to provide four Bogotá neighbourhoods with access to the Internet and ICT training courses.

## A knowledge and analysis deficit

The Declaration of New Delhi drew a firm line between the diametrically opposed views of the ICT zealots, who suggest that information technology has the capacity to transform society and to eradicate social ills, and of the ICT Luddites, who argue that the new technology has the capacity to enslave society. Popular organisations have tended to be pragmatic in their use of ICTs. However, there is still widespread ignorance of the impact that ICTs can have on their activities, the nature of the relationship with groups who lack telecommunication connections, and ICTs' effectiveness in facing the challenge posed by globalisation and in promoting sustainable development.

Among the few existing analyses, there is the research on 'Gender and technology of information' developed by an *ad hoc* APC programme which singles out some of the general tendencies ([www.gn.apc.org/gn/women](http://www.gn.apc.org/gn/women)). It has revealed, for instance, that in Europe and in the South there is predominant use of e-mail and of e-group forums, with more attention paid to disseminating the information gathered in this way via other media (photocopies, fax, telephone, radio, etc.). In some countries of Latin America, as well as in the North, there is far greater use of the Web and of search engines.

This lack of real knowledge might well lead not just to a corresponding academic and scientific deficit, but also to a mistaken

approach to the whole question. Paradoxically, even if ICTs took off massively in developing countries, this might simply lead to more consumerist or virtual use of ICTs, with no positive implications for sustainable development. The spread of television as the new opium of the people, to take an example of a medium which could well have had a more positive role to play, should serve as something of a warning.

## **Towards a bottom-up and participatory approach**

It would seem particularly important to develop research on ICTs that goes beyond measuring the North–South gap in order to give voice to those who have a direct interest in how ICTs are used. In other words, the aim should be to undertake action-research that actively incorporates the people who are themselves involved in promoting changes in the urban sector, in order to facilitate the use of ICTs in the exchange of experiences, help in changing certain ways of thinking and working, and strengthen their capacity. This type of research should determine specific needs in terms of tools and training in how to use them and will probably call for new kinds of indicators. However, the most important thing for these studies to accomplish is an analysis of the economic, political, and cultural obstacles, and the identification of emerging trends in community-based initiatives and alternative uses of ICTs.

This bottom-up approach might also offer more likelihood of moving from the simple awareness of the problems to their possible solutions as it would probably favour the popular strategies we need in order to bring about the ecologically and socially sustainable urban policies that have, until now, been virtually denied at the local level (Ottolini 1998).

In the final analysis, we are dealing with new and unexplored areas of research – and not only Web based – that could offer to governments, to the transnational institutions, and to other interested bodies, new ideas for how to improve the conventional approach of international aid agencies towards urban development.

## Notes

- 1 Internet Software Consortium, updated on 28 April 2000.
- 2 The Round Table, a communications rights advocacy group, was created in 1989 to stimulate discussion of issues embodied in the 1980 UNESCO MacBride Report. The MacBride Round Table is an international group of scholars, journalists, NGO representatives, activists, and other communication experts devoted to the examination and monitoring of world communication rights and balances, and reporting findings to community groups, UN agencies, NGOs, and the news media.

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