

**Prometheus riding a Cadillac?
Telecentres as the promised flame of knowledge
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It has become common place to talk about the infamous “digital divide”, the gap between those who have access to new information and communication technologies and those who are excluded. The digital gap is clear between countries in the North and in the South, but even more dramatically explicit within Third World countries (the politically correct name is “developing countries”, though some are actually going backwards). The gap between urban areas and rural areas and the divide between rich and poor are the main causes for the imbalance between those who have access to new ICTs and those who haven’t. However, it would be tricky to isolate the question and reduce the imbalance to only a matter of technology. Unfortunately, this is what is happening most of the time, especially when ICTs are perceived as the “solution” for poverty and underdevelopment, as if social injustice, discrimination, corruption, unfair trade agreements, lack of services, poor education and health systems, etc., were only mere marginal factors.

ICTs entered the development world with enormous strength; suddenly during the eighties and early nineties there was a big push to “provide access” to new information technologies in poverty areas of the world. This push was obviously supported by the emerging computer and Internet industry in need of rapidly expanding its markets.

Development agencies, who seldom in the past supported community radio or other people-centred communication initiatives, suddenly came up with a whole new theory about how ICTs could bring poor rural communities out of their marginalisation. In their report from the field in India in this issue of the, Thamizoli and Balasubramanian remind us all that, according to the IDRC, “such a perspective has categorized the rural community as *a user of telecentres* rather than *a manager of knowledge*.”

Suddenly, some governments in developing countries placed at the top of their agenda to provide “universal access to telecommunication services”, often forgetting their own incapability to provide national access to basic services (let alone “universal”). At least, on the sunny side of this trend, telephone lines are expanding to remote areas.

The word “access” became the synonym of bringing the light of knowledge to those who are desperately poor and excluded because they are ignorant. That is what was and still is in the minds of many of those who push ICTs over developing countries: “if poor people could know more of what we already know, their lives could get better.” It is a paternalistic assumption that has led to a massive parachuting of computers over rural and poor urban areas in the Third World, with little results on social change.

Prometheus takes the fire of knowledge to the people. What knowledge? Whose knowledge? Communities don’t have their own knowledge? It has become a hideous common place to say that knowledge is the answer for development. Having more knowledge will allow communities and individuals to better develop themselves.

Nobody will deny the place of knowledge, but why is the assumption that knowledge comes from outside, graciously donated by the “intelligent” and “cultivated” people in the North, to the primitive and disoriented people in the South? Also, knowledge is just one aspect of development. To say that the lack of knowledge is the main reason for poverty and underdevelopment is an easy way to

evacuate from the discussion the social, political and economic causes of poverty. Let's spell it once more: people are not poor because they are "ignorant" as many would like to pretend, but because they are the victims of a very unfair social and economic system where very few get all the wealth, and the majority just works for the very few that get all the wealth. This is to put it simple, but we could go into numerous examples. However, the purpose of this reflection is to analyse the usefulness of telecentres as we know them today.

Here goes my bottom line statement: only one out of every one hundred telecentres are really useful for the local community where they have been set-up, in terms of supporting development and social change. This may shock many of those who see ICTs as the ultimate magic solution for poverty, but I challenge anyone to show me that I am wrong. Thousands of telecentres have been planted during the past five years and millions of dollars have been invested in buying computers and ensuring Internet connectivity; however, every time we are to mention the successful experiences, the same five or six places come to mind. In other words: something smells very bad in cyberland.

Many of the Promethean ICT enlighteners found on their way to the poor communities that these had no electricity, let alone telephone. Oops! Houston, we have a problem. That was kind of easy to see: there was no socket to plug in the computers or connect a phone line to the Internet. Other things even more important, were not as easy to identify by the avant-garde of ICT marketers: many of the rural and even urban communities had no water, no school, no health post and no political representation in the local government. If they were going to promote "access", these items could not be left aside; they were core to the problem of poverty and underdevelopment.

In many cases, with some level of stubbornness to prove their point, electricity and telephone cables were pulled several kilometres to the places where a new telecentre experience was being created from the vacuum. (Forget safe water or education). Flashy computers were installed, along with fax and photocopiers, and Internet connections were provided through a complex array of agreements with local Internet providers. Most of this trend focused exclusively on technology, with very little discussion on community participation or the ultimate goal of development and social change. Sometimes the development goal was spelled out in the initial project documents to justify the operation, but very seldom were communities part of the planning process or even consulted about the project.

We know a handful of case studies with successful experiences and several essays on critical issues. Some of the reports of "success" are actually descriptions of good intentions taken from the original project documents, rather than independent evaluations or observations of the project sites. It is true that it may be too soon to evaluate projects that have been on the ground for only one or two years. However, if no one could expect development and social change results in such a short time, at least it is important to monitor participation and community involvement, generation of local contents and general patterns of utilization of telecentres.

We should also look more at numbers: numbers of telecentres that have been installed by the various cooperation and development agencies, costs of these projects, number of telecentres that are actually serving the poor people within the community and promoting social change. In his report from the field in this issue, Peter Benjamin reports on the network of telecentres established in South Africa by the Universal Service Agency (USA). Out of 65, 32% were not operating, 18% were operating without a phone and 3% were operating without computers. He also mentions technical and financial problems, managerial weakness and community conflicts as the main constraints. Gail Short reports that "of the 128 centres

established throughout Australia with federal funding, predominantly on the east coast, only 28 remain today.”

The result of this kind of inquiry may confirm the statement above: one in one hundred telecentres are having some positive impact on communities in terms of promoting development, social change, cultural values, solidarity, political awareness, community organization and participation. I bet the other 99 (if still open) either have become commercial ventures or are mostly serving the well-off social layers of the community, the intellectual categories, and the rich. I am not implying that students, teachers and liberal professionals -- if any at the community level -- should not have access to the local telecentres; I'm saying that if the telecentres mainly serve the upper layer of society, then the claim of serving the poor and the most needed is simply not true.

Why is it that after the large investments and the efforts of ICT Prometheans to bring the light of knowledge to the poor of the world, the poor of the world still do not take full advantage of it? We don't need to call a council of sage people to answer. It has been said in many reports and informal discussions on the web: the manner most of these projects have been established and run excludes the possibility of prompting more “access”, let alone participation from the community. The bottom line is that the availability of computers and connectivity is no panacea for development and social change, because the web, as it is shaped today, is not the ideal tool for the large majority of the world.

Language as an obstacle

A key issue is language. The most conservative figures show as high as 50% of World Wide Web pages are in English (against 5% for Spanish), while the large majority of our “deprived wide world” does not speak English. Other figures put English over 70% of the total. Some still insist that English should be *the* international language of Internet.

It is amazing how some tend to generalize about the extent of which English is spoken in the World. For example, it is often said that India and Nigeria, the most populated countries of Asia and Africa, are “English speaking countries.” However, anyone who is willing to look seriously at this assertion will find that only a minority in both India and Nigeria speaks English, while most of the population speaks *only* Hindi, Hausa, Ibo, Yoruba or hundreds of dialects. The same for the most populated country in the Arab world. In Egypt, as pointed by Sherif Hashem in his report from the field, the majority of the population only speaks and understands Arabic, the national language.

And what about reading and writing? If speaking English is already a limitation, moreover reading and writing are essential to the current computer technology. In their report in this issue, Thamizoli and Balasubramanian report that in the Samiarpatty region of India (a typical rural setting) the majority of *the women cannot read or write*. Most of them have not used telephones. They do not read newspapers and very few of them write or receive letters. Substantial numbers of them are members in women's associations that have formed during the last decade. Among men, substantial numbers of males also are not in a position to read or write. Many of them have not written or received postal letters.

A very tiny percentage of the existing ICT settings are making any effort to translate the contents of the web to local languages. However, a good example is Kothmale Radio in Sri Lanka, an encouraging model that combines a community radio with Internet connectivity, responding to the requests of information from the community in their own language. (See Dagon 2001a.) The additional advantage of this model is that the information is not benefiting a few individuals lucky enough to

sit in front of a computer screen, but the whole community listening to the radio station. This is a collective effort, as any communication project in the Third World should be.

An additional issue to be considered along with the language issue is computer literacy, which is more than learning to hit a keyboard or to move the mouse. There is a whole cultural background necessary to understand the logic of digital technologies, and the usually short skills training courses that are offered in telecentres may not be enough for a factory worker in Pakistan or a peasant in Ecuador to fully take advantage of the possibilities of a computer and of Internet. In plain words: even we who sit in front of our computers for several hours every day use only 10% of the capacity of our hardware and software. In spite of this we have seen many telecentres equipped with state-of-the-art expensive computers that will need to be replaced in four or five years.

Local content

Next to language, the most important issue is the generation of local content. It may not be enough to translate what is already in the World Wide Web, because the content of the web is, once more, 90% irrelevant to the needs of 90% of the people in poor communities of the world. If a rural woman in Brazil or a shepherd in Mali has the opportunity (and the ability) to navigate the World Wide Web, how much could they get from it that is useful for their daily lives?

“Who is telling the stories? The question that Gerbner (2001) raised to analyse the contents in television programmes in the US could be extended to the contents of the World Wide Web. “Who is telling the stories in the web”? Whose voice are we all subject to? It is amazing that while we have been during decades so critical about the polarization of information generated mainly in the US and some European countries, we are fascinated by the same trend now happening within the World Wide Web. When, during the seventies, UNESCO proposed a New Information Order in the world that would allow developing countries to contribute with their own perspective in the international flow of information, the United States boycotted the international organization and suspended its contributions. Shouldn't we all in the Third World be worried about the fact that we haven't been able until now to contribute in terms of contents to the growth of the web? Actually, this question goes also for powerful countries in Europe, which -- in terms of contents and language -- are very marginal in the web.

The generation of local contents should be essential in any ICT project that aims to benefit rural or marginalized urban communities, and it should be built in during the inception of the project, not as a complement that may (or, more likely, may not) be implemented as the telecentre develops. A good example of telecentres that really care about providing appropriate information to their constituency is the network known as Village Knowledge Centres, set up by the Swaminathan Research Foundation in Chennai (India), and described in this issue by Thamizoli and Balasubramanian. The concept is articulated around community needs, not the opposite. “Information shops” have been placed in various villages, and a “value addition centre” is in charge of building web pages with information that is relevant to local needs, such as market prices or local weather reports. The core concept is to build a “local web” that specifically caters the needs of local communities, in terms of contents, culture and language (Balaji et al, 2001; Dagrón 2001b).

Appropriate technology

The issue of technology, which has actually been the focus for most of the institutional projects, should be also taken into consideration. Critics have said that often telecentres are like Cadillacs in rural areas. The image is meant to symbolize

the fact that sophisticated hardware and software are planted in places where no other basic services are available. Is Prometheus riding a Cadillac instead of a bicycle? Haven't we learn anything from the barefoot doctors or the Green Revolution? It seems that appropriate technology is only in the jargon of those involved in rural development, and not well acknowledged by the ICT newcomers.

The world of development has known too many failures during the past 50 years and we should learn from them at least in relation to appropriate technologies. Sometimes technology that is not appropriate can do more harm than good to development and social change. What kind of technology is necessary and justifiable in rural telecentres? Should rural telecentres be equipped with the same technology as urban telecentres? Should telecentres oriented towards community participation, development and social change be equipped with technology similar to commercial telecentre initiatives? Why is it that while there are efforts to develop the Simputer (a computer that will cost less than US\$200), the investments in new rural telecentres are so high? What kind of technology can be locally maintained and sustainable over the years?

The issue of community participation adds to the above as a key component of telecentres for development and social change. As it happens with any development project that is originated with external inputs, sustainability can only be assured through the commitment and participation of the community of beneficiaries. This is not related only with the issue of funding. Many development projects have failed in spite of having external support during many years, because the community never developed a sense of ownership over the project or programme, and remained alien to it. Community participation is not something you can build *after* a telecentre has been already planted: it should be an essential condition to start a telecentre.

A good example of this are the telecottages that CREST has supported in rural areas of North-western Romania. CREST won't start a telecottage if the community has not proved full commitment, which often translates into providing the land, constructing the building to house the telecottage and organizing groups of volunteers to run the activities. It is interesting to note that several countries of Eastern Europe are using the term *telecottage* to establish the distinction between telecentres as commercial ventures and those that have development and social change objectives.

The experience of Telecentros Brasil shows how much the whole concept had to evolve to meet community needs. Kyle's report from the field in this issue acknowledges it: "We did not understand about the rhythm and pace of the community." While reporting on the Western Australian Telecentre Network, Gail Short underlines the importance of community ownership: "Telecentre members were running working bees, doing up buildings, raising money for their centre. There was a pride, which came with ownership."

Sustainability

Last but not least, the issue of sustainability is frequently raised when referring to community based experiences in general and telecentres in particular. This issue of the *Journal* includes two articles that focus on sustainability: Proenza's and Brett's, and other contributors have also touched on this important aspect of telecentres. The same international agencies that have supported development projects (too often development failures) during five or ten years, now seem very eager to see their investment in telecentres (and other community media projects) becoming "sustainable" in only one or two years. The "certificate" of financial sustainability seems more important than the accomplishment of the objectives of community development and social change. Moreover, it looks like if a telecentre is financially sustainable, it is then considered a "success" regardless of its social

impact. This wave of making telecentres profitable in the short term is pushing many of them to becoming commercial ventures, and it subscribes to the same neo-liberal thinking that aims to privatise the health and the education systems, liberating the State of its main responsibilities towards the well-being of the population. Soon we will be evaluating public libraries in terms of “sustainability”, not in terms of the cultural and educational service that public libraries are set to provide. The perspective of financial sustainability above all is mainly promoted by US-based co-operation agencies and organizations, and it is in the bloodstream of the philosophy and culture of any human activity in that country. In my view, however, it is a very narrow perspective of sustainability because of its influence through funding, it is imposing itself worldwide.

The above analogy with public libraries is not a mere coincidence. I believe telecentres should be a modern version of public libraries, with an additional outreach communication component that transforms the former individual relationship between the library and the user, into a collective process involving the community. One of the main thrusts of libraries and telecentres is to open the world of information and knowledge to the communities, with the advantage that telecentres can tailor the information to community needs. From the point of view of sustainability, community telecentres should be treated as public libraries. The InfoDes project in Peru, precisely, was built on the idea of enhancing with ICTs the capacity of public libraries in rural areas, which had been created 20 or 30 years before (Dagron 2001c).

There is no challenge at all in making a telecentre in urban areas “sustainable”. As long as there are students, teachers, or professionals the telecentre will make good business. The thousands of “cyber-café”s that have popped-up in urban areas, even in the poorest countries, without any institutional support show that commercial ventures are easily sustainable. Even in small towns “cyber-Cafés” are mushrooming at an impressive rate. For less than the equivalent of one US\$ dollar urban customers can use Internet during one hour for information, for chat, for e-mail, for games or for porn sites, whatever. Sustainability of this type of telecentres or cyber-café”s is far from being a relevant proof of ICTs serving the most needed in the community. Certainly, it is good to have students doing their homework or teachers preparing their classes (if fluent in English); profit-making cyber-café”s have been catering for them with very convenient prices and guidance (and often training), without the need of any international project to subsidize the operation.

But then, the question remains: should we exact certificates of “sustainability” from the other telecentres or telecottages that really aim to contribute to community development and social change? Should we treat them as commercial ventures? Can a factory worker or a rural woman afford to pay one US dollar for an hour of Internet? How about defining sustainability in terms that are more coherent to the social and cultural functions of community telecentres? I suggest the concept of sustainability should be reviewed in terms of community ownership and in terms of concrete benefits to community organisation and development, particularly in rural areas. The now logic of profit that comes along with globalisation is not going to contribute to solving the problems of underdevelopment, but is going to contribute to a wider gap between rich and poor, those that can afford access to ICTs and those than cannot.

The above are some of the issues and questions concerning the rapid expansion and development of telecentres. As a relatively new knowledge and communication tool for development and social change, we need to pass the stage of fascination for the technology and reach the point where we can look at it with critical eyes, applying what we have learned during the past 50 years from development in general, and in particular from community participation and participatory communication. The long experience of community radio, in special, can teach us

much about the challenges ahead. Or at least, may allow us to establish the difference between a commercial venture and a public service for development and social change.

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