

MEMO TO TELECENTER PLANNERS¹

Royal D. Colle
Cornell University

In the village of Wu'an in Herbei Province on the China mainland, a farmer named Li Suotian continually received agricultural market information via the Internet. He discovered that an Israeli variety of tomatoes sold well in the Province. Based on this information from the Internet, he decided to grow this variety of tomatoes in place of grains, and his income grew eight times larger. A changing agriculture and rural life means more decisions that need more information and more communication.

Information and communication technologies are helping farmers in many countries.

For example, there is a story that appeared on the front page of *The New York Times* earlier this year (2004). It was about an eChoupal — which is a local term for a digital village or gathering place.. The story tells of a villager in India who every day turns on a computer in his house to obtain soy bean prices on the web site of the Chicago Board of Trade in America. His home is called an "eChoupal" The farmer then reports his findings about prices to other farmers in the community. Those prices influence the decisions of the farmers — whether to sell their soy beans in the local market, or to hold them until the prices on the Chicago Board change.

These and other rural people are confronted by a digital world and a world market. An agricultural entrepreneur — ITC Limited — has set up more than 3,000 similar village information kiosks in India that bring farm families into the global village. The agricultural kiosks are bringing more profits to farmers, eliminating profiteering middlemen, and improving market operations, as well as providing information on health, nutrition, bus schedules and entertainment to rural families.

We can see a similar information technology market system in Mainland China. In Tongnan we discovered a farm woman there who came to the telecenter and to the Internet to learn the latest technology related to silk worm production. Another was a peanut farmer visiting the telecenter to get information on the market prices for peanuts. In all of these cases we see a place where people can go to gain access to information technologies, to the digital world. To computers and networks. But especially to information and communication.

This APEC Telecenter workshop is an important event for all those associated with the development of telecenters — telecenters in Chinese Taipei, and for telecenters beyond those borders. Chinese Taipei is demonstrating a passion for translating policy and rhetoric into concrete programs that could bring new opportunities to people who are yet to experience the benefits that come with computers, networks and other information and communication technologies. But my comments are less about information and communication technologies, and more about *information and communication* — and about issues that relate to the sustainability of telecenters — and especially about demand-driver telecenters. I base my Memo to Telecenter Planners on fairly close observation by my team and me of telecenters in Africa, Canada, Australia, Hungary, Mexico, India and mainland China. You will get an even broader perspective from the fine experts at this workshop from Latin America, Africa and other Asian countries. Except in one case, I don't intend to advise Chinese Taipei on its telecenter planning,

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but instead invite you to judge the relevance of these comments to Chinese Taipei and elsewhere.

The MDG Force

Politically, in 2004 and perhaps for the next decade, among the most prominent driving forces behind the spread of information and communication technologies and telecenters are the Millennium Development Goals. The MDGs are an important political and moral force because they were adopted by 189 states convened in New York at a Millennium Summit in September 2000. The Millennium Declaration listed specific development targets to be met by the year 2015. They included cutting world poverty in half, universal primary education, reducing child mortality by two-thirds, reducing the proportion of the population without clean drinking water by two-thirds, combat the incidence of malaria and HIV/AIDS, and other development goals. Parallel to and intersecting with this great attention to the Millennium Development Goals is the two part World Summit on the Information Society.

The World Summit

In December 2003, Part 1 of the World Summit laid out challenges about using information and communication technologies for reaching the Millennium Development Goals. While there are people who question the investment in information technologies rather than clinics and medicines, there are enough dramatic examples of the value of rapid communication over challenging distances and geography, that there are many champions in what you may call ICT4D, or information and communication technology for development. For example, in West Africa, computers and satellite radio help to control river blindness. Local inhabitants send information from sensors along 50,000 kilometers of rivers to entomologists who use the data to make decisions on when to spray against the blackfly.

During the lifespan of the Millennium Development Goals, governments, civil society and the private sector will build public digital data bases to provide people with the kinds of information and communication services that may help us meet the goals. Already, the English language shows movement in this direction with new words like "eGovernment", "eHealth", "eEducation", "eCommerce", "eDevelopment." A major challenge for many nations, however, will be to help people gain access to appropriate and relevant ICT resources, and it is widely agreed that one strategy is the development of telecenters. That access, according to FAO communication expert Van Crowder, will help people like those in the south of Chinese Taipei to --

- reduce the isolation and marginalization of rural communities;
- facilitate dialogue between rural communities and those who influence them, such as government planners, development agencies, researchers, technical experts, educators, and others;
- encourage participation of rural communities in decision making which impacts their lives;
- coordinate development efforts in local regions for increased efficiency and effectiveness;
- share experience, knowledge, and 'lessons learned' with other rural people;

- gain information, training resources and programs when needed in a responsive, flexible manner; including, for example, resources related to agriculture, health, nutrition, and small business entrepreneurship.

In addition to these development-oriented roles, telecenters can provide contact with distant friends and relatives, and recreational opportunities through videotapes and other entertainment media. Also, a common function of telecenters has been to familiarize people with ICTs and train them in their use, helping more people become part of the Information Society.

To be fully effective, telecenters need to become information and communication institutions in their communities. To do this -- besides the digital and broadband connections -- telecenters need at least the following:

- Research — Telecenters need to find out what kinds of information and communication resources their communities want and need. This is what helps telecenters become demand-driven – a vital issue in their sustainability. Telecenters need research also to evaluate continuously how well they are serving the needs of their communities.

- Local and relevant content — Too much content on the web is not relevant to farmers and other rural people. It is a common problem around the world, where external information dominates locally-tailored material. This is where credible, useful and user-friendly information needs to be crafted. The UNDP has suggested that the most important reason for the failure of telecenters is their lack of suitable content.

- Training — People in telecenters need to be trained in how information can contribute to development. We have found telecenter managers who know a lot about computers but don't know how to link telecenter potential to health clinics, schools, agricultural extension, or local government.

- Community awareness — Telecenters need to make their communities aware of the value of information, such as peanut marketing information and technology transfer in silkworm enterprises, or the chances for more education through distance learning. Awareness of the value of information will help the communities realize the value of the telecenter.

- Human resources — Telecenters need volunteers who can help make telecenters good places to visit – volunteers who can help people search and understand the basic rewards of a digital experience. And who can welcome special groups such as women and the elderly who are frequently shutout by culture

Now, let me continue my Memo to Telecenter Planners with a list, which for many of you may be simply reminders of things to put on your “to do” list.

A memo to telecenter planners

1. Translate national policy into action.

And this brings us to the first practical point in our memo: the importance of national, and even international policy. Chinese Taipei, as we know, was very much on the frontier of ICT policy development with its National Information Infrastructure initiative more than a decade ago. This led to the creation of its telecenters which were also in the early stage of a world wide

movement. And with the political backing implicit in its policy, Chinese Taipei is poised to improve and expand its telecenter program.

It is important to note how a regional grouping of nations such as the European Union has had an influence. In order to join the European Union, Poland is shaping a national ICT policy. Why? Because the EU requires all its members to have a national ICT policy. Similarly, the African Information Society Initiative has influenced African nations to establish national ICT policies and many of them have done so. The AISI vision included these expectations:

- Every man and woman, school-age child, village, government office, and business can access information and knowledge resources through computers and telecommunications.
- Access to international, regional, and national 'information highways' is provided by providing 'off-ramps' in the villages and in the information channels catering specifically to grassroots society.
- African information resources are reflect the needs of government, business, culture, education, and other aspects of every day community welfare.

Most African countries have started on their "national information and communication infrastructure" (NICI), Last year (2003) 17 had completed their strategies.² High on their list of priorities is improvement of access to ICTs in rural areas through the use of telecenters.

In its domestic Community Access Program, the Canadian Government went beyond the rhetoric of an Information Society and committed people and funding to make the Internet affordable in rural and urban communities across the nation through community access. It made a six-year commitment, providing start-up money and an infrastructure to help local organizations participate in the initiative. While the resources offered by the central government were not enough for a complete comprehensive multi-purpose telecenter, the brand of the Canadian government combined with some serious money significantly motivated a nation-wide community-based effort that commanded provincial, regional and local participation. Canada now has more than 8,000 CAP sites.

Besides the direct funding available and the administrative push, a national policy can also be instrumental in providing a favorable regulatory and tariff climate, and in producing the human resources that are vital to a telecenter movement. Some telecenters in Uganda and Senegal, for example, had to go through considerable bureaucratic hurdles simply to have imported IT equipment released to projects or simply repaired.

To support its policy goal of becoming an Information Society superpower, the Indian government doubled the number of persons it would graduate from its technology training institutes. The Egyptian Government's plan for incorporating ICTs in its business and socio-economic development includes – besides Technology Access Community Centres in rural areas – creation of facilities in all its 27 provinces that can train 30,000 people annually in computer uses.

² In 2003, these included: Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, Egypt, Gambia, Mauritania, Mauritius, Morocco, Mozambique, Rwanda, Senegal, Seychelles, South Africa, Sudan, and Tunisia.

You can participate in policy issues. A few days ago, an Internet working group concerned with telecentres began discussing a variety of issues. One item deals with informing policymakers of successful strategies to use telecenters as a tool in reaching the UN Millennium Development Goals. You can join the group on the Internet. You can contribute to and learn from this event by writing the word "subscribe" in an email addressed to: telecentres-request@wsis-cs.org.

2. Build groups of telecenters.

Recently the World Bank sponsored a world-wide video conference about telecenters. In the discussion, communication expert Eduardo Contreras said: "The mindset of an isolated telecenter must be overcome."

The Canadian venture into building community access to digital resources has resulted in the creation of more than 9000 CAP sites. 98% are organized into networks or groupings that share a common interest or purpose and are committed to working together. When we visited CAP sites in eastern Canada, we found some struggling individually to deliver material in the French language. Some were laying plans to organize for joint action.

The Western Australia Telecenter Network Support Unit illustrates well what can be done when telecentres are combined in some way so that they share a support system. The Support Unit lobbies, seeks funding, develops initiatives, and carries out a variety of other management functions for the 80 members of the Network. From Hungary to Brazil we find persuasive arguments for building clusters of cooperating telecenters to expand content-related services such as Tele-agriculture, Tele-business, and Tele-culture which are more affordable when serving multiple members.

Creating appropriate localized content is very labour intensive, and without volunteer resources can be quite costly. The clustering of telecentres in some fashion can help support a localized information service. In the Pondicherry Project in South India, the Swaminathan Research Foundation has made this arrangement, and the cost of producing local information is being spread over a number of telecenters in a relatively small area.

Latin America's Somos@Telecentros Network (S@T) was one of the earliest significant regional community-based telecenters networks. After it had been in existence for two years, S@T published a study in which it listed the lessons it had learned. The very first on the list was: "No telecentre is an island". The study asserted: "If telecentres are to make their mission more effective, they need to organize themselves into overlapping national, regional and international networks."

One of the major recommendations to the Government of India (GOI) that came out of a 2001 national ICT workshop in Chennai was that the government foster the establishment of an NGO National Association of Telecentres. The recommendation included the following list of tasks for such an association.

- (1) Promote and coordinate the supply of content with developers and suppliers.
- (2) Negotiate with resource suppliers.
- (3) Arrange public relations advocacy and awareness campaigns for ICT and telecenters.

- (4) Provide liaison with government departments and NGOs.
- (5) Train telecenter personnel and organizational users of telecenter facilities.
- (6) Promote and arrange telecenter research.
- (7) Provide leadership and enforcement of minimum standards of service and professional codes of conduct

We suggest an addition to this list: collecting, archiving and diffusing information on best practices regarding telecenter planning (possibly in collaboration with a Country Gateway) so that learning about telecenters can be incremental and cumulative.

3. Support continuous research.

Roger Harris is a telecenter consultant based in Hong Kong. He describes an activity in East Malaysia that is essential to creating a demand-driven telecenter. Prior to the establishment of a telecenter in the small settlement of Bario in Sarawak (Borneo), the project collected data on the information needs of the community. The data reflected the type and amount of information members of the settlement would like to receive, what they were currently receiving, the type and amount of information they were sending, and the sources and channels used. The survey revealed that the community placed most importance on information relating to agricultural, and medical and religious practices -- with job opportunities, government policies and family matters rated slightly less important. In addition, using Participatory Action Research (PAR) methods, project leaders and the community were able to agree on priorities. This resulted in one person's action in assembling and documenting best practices for the production and treatment of Bario rice for which demand outstripped supply.

The Tamil Nadu University of Veterinary and Animal Sciences (TANUVAS), in cooperation with Cornell University, has created a small network of rural telecentres in the state of Tamil Nadu, India. During the summer of 2001, our team conducted an information and communication needs assessment. The research collected qualitative and quantitative data through a survey questionnaire and focus groups of local women and men in the three villages where telecentres had been established. Approximately 750 persons were interviewed.

The analysis of the focus group exercises shows differences in information uses and patterns depending on gender, age and occupation. Agriculture is the main economic activity of the villages studied. Farmers – men and women – require information on new seeds and products, fertilizers, market prices, and other agriculture-related issues. However, women especially demand information about their children's education and health, while the younger people are mainly interested in employment opportunities.

The research shows that there are cyclical changes in information needs during the annual calendar because village economic and social life revolves around agricultural seasons and local religious and cultural traditions. This situation has implications for the content decisions of the telecenters. For example, men and women express an interest in employment opportunities during the months when there is not much activity in the fields. The high rates of illiteracy and low levels of formal education in the villages studied confirmed that content should be provided in Tamil.

However there is another role that research should play in a demand-driven telecentre approach. Although there is a lot written and said about the potential of ICT for rural development, to this date there is only a meager inventory of documented development outcomes resulting from telecenter initiatives. Research evidence on impact is at best sparse and anecdotal. Evaluation research is necessary if for no other reason than to guide future telecenter policy and decisions.

You may ask: Who can do research at a rural telecenter? I'll try to provide at least one answer to that question a little later.

4. Concentrate on relevance.

Here my Memo concentrates particularly on content issues. A demand-driven telecenter translates, among various factors, into the need to provide people in host communities with access to relevant and useful content. Some organizations – such as the Country Gateways promoted by the World Bank – are working on the content issues but much of the information available via electronic networks may not meet communities' needs for *local* and *localized* information on agriculture, health, entrepreneurship and jobs, and nearby markets. A telecenter may also have low relevance if information is in unfamiliar or inappropriate language or dialects.

Even where the mainstream language is English, there is evidence that this is not sufficient to attract people to ICT information resources. A study by the Children's Partnership in the United States looked at the extent to which currently available content met the needs of diverse communities. The study reported that the greatest barrier keeping low income people away from information portals was a lack of locally relevant information. Low income persons needed such practical content as adult literacy programs, information on public benefits, easy-to-understand health encyclopedias, consumer and credit information, and information related to employment and training.

A 2002 multi-nation study by the International Institute for Communication and Development (IICD) in The Hague suggests that “easier access to *globalised* knowledge is fast turning us into ‘consumers’ of distant and potentially irrelevant information”. Local content, the report says, faces intense competition because big external content initiatives tend to push their external content onto local communities. In the same vein, another IICD report suggests that “More worrying, perhaps, is that developing countries are being ‘invaded’ by foreign ideas and values that may undermine or overwhelm local cultural heritage and economic livelihoods.” It is interesting to note that Chinese Taipei authorities helped some 6000 villages build their own web sites with local information.

A case in India shows how the staff of a “village knowledge centre” dealt with the issues of local, relevance and language. In one case, coastal villages were highly dependent on weather and tides information. Because many fishermen there were not literate, digital network information such as weather reports was downloaded and converted to *audio* by the village knowledge center. The audio versions were then played on loudspeakers in the open air. In addition, project volunteers in the villages built their own information resources in the center to complement the external databases thereby providing local and *localized* information on agricultural, health and government programs for low-income people. With the project staff, many locally useful databases were designed and developed, including, for example, a directory of general and crop insurance schemes; a list of about 130 schemes available as entitlements to rural families; a directory of hospitals and medical practitioners in Pondicherry – grouped

according to their specializations; bus and train schedules covering Pondicherry and two nearby towns; and pest management information for the sugarcane crop.

In China, a village telecenter in Shanghe converts important content found on the web into meaningful localized information and presents it in more understandable local terms on a bulletin board in the telecenter, or on a community blackboard in the village center.

The importance of local content is illustrated by a new award recently introduced to the international community. The "Yeomans Award for Local Content" aims to encourage and bring to international recognition projects and experiences that demonstrate how local content can change lives. The award is given jointly by the Global Knowledge Partnership (www.globalknowledge.org) and the Open Knowledge Network.

5. Train stakeholders

For the Telecenter Planner, training has several important dimensions. There is the obvious: the training of telecenter staffs. We had an opportunity recently to visit several telecenters in rural areas, and, through an interpreter, we explored the perspectives of the telecenter manager. We asked the young man what contacts he had with local businesses. He said there were no businesses in the community. Yet, we saw many sellers of goods within a kilometer of the telecenter. We asked what contact he had with the local schools, and the community's health center. He had none. The telecenter manager had good computer skills and, we suspect, experience with basic computer programs. But clearly, to be a success in that community he needed substantial additional training. In our *Telecenter Handbook* (which you can access free on a Cornell University web page) we provide some simple training materials that include chapters on marketing, strategic communication planning, building community participation, training techniques, along with basic computer and searching skills.

Another dimension of training is training of the community. Training community members draws people into the telecenter and helps it become part of the fabric of the community much like schools and clinics are. A study conducted by the Acacia Project of IDRC-- a study of 36 telecenters in five African countries indicates that only a small percentage of the population uses the telecenter facilities, and most of them are youth and young adults. Also, fewer women than men use telecenter services in practically all the rural African centers surveyed by the Acacia researchers. Evidently, the differences in access to the telecenters has various causes (including literacy level, education, age, gender, and service cost), but community awareness about the value of information and communication services available at telecenters (and even awareness about the location and existence of telecenters) appears as one of the key reasons for the lack of users.

Malaysia's National Information Technology Council recognizes the challenge in establishing a community's awareness of the benefits of information. Its vision is "to evolve a value-based knowledge society in the Malaysian mould where the society is rich in information, empowered by knowledge, infused with a distinctive value-system, and is self-governing." So, high on its strategic agenda is an effort to develop a national *mindset* that includes making Malaysians aware of the emerging E-world and to enable the diffusion and acculturation of ICT at the grassroots level.

Government or private sector initiatives targeting popular participation in the Information Society will need to consider carrying out vigorous campaigns to illustrate the benefits of

information as an important resource for daily living. As the Malaysians suggest, the target includes producing “ICT-fluent” professionals, including leaders in education and government.

Because training is a key component in telecenter sustainability, it is important that it is done effectively. The Canadian Government's recent evaluation of its decade old Community Access Program includes a list of recommendations — and the first two were: include coaching of the community, and promote the program to government agencies and to the "hard-to-reach."

We cannot overlook the role of intermediary community groups in promoting the awareness and use of telecenters. Various community organizations and institutions have the opportunity to build demand in their constituents for telecenter services. Schools, health centers, agricultural extension agents and input suppliers, community leaders, and cooperatives should be partners with telecenters in identifying what information and education related services can bind people to telecentres.

The stage has been set for doing this with the Millennium Development Goals. In planning the World Summit on the Information Society in Geneva (2003) and Tunis (2005), one of the principal objectives was the identification of strategies and actions that would mainstream ICT into the work aimed at achieving the Millennium Development Goals. This presents an opportunity for enterprising telecenter managers to tie telecenter visibility to important international and community priorities.

In my Memo to Telecenter Planners, I would urge that they argue against the idea that "If you build it, they will come." They will not, unless the planner builds staff and community training into the priorities.

6. Have a participation plan and design a strategy for using volunteers

With widespread interest in the “digital divide” issue, broad-based community participation may become part of a telecenter’s mandate. This may present a challenge in reaching out to ethnic minorities, women, children and the elderly who are often on the minus side of the divide. Sometimes the “learning” label on a center, or the technology, or its location in a library or school intimidates those who might benefit from the services.

Building an atmosphere of community participation and a feeling of ownership is an important consideration in the demand-driven formula. Yet, one of the most under-appreciated aspects of the participation issue is that participation is *not* a spontaneous phenomenon. Once we get beyond the rhetoric of participation, we discover that participation has very practical value for telecenters. It is generally accepted that conscientious attention to participation can yield benefits in such activities as assessment of information needs, planning, and operations. Participation comes in various forms including participants as telecenter users, participants as telecenter staff volunteers, and participants as telecenter advisory groups.

From a telecenter planner’s perspective, part of the challenge results from the ambiguity of the participation concept, and the need to translate the idea of participation into concrete action terms. At a minimum this might involve answering the following questions:

1. *Why* is participation important to this project? Among the answers might be: because it conveys a sense of community ownership; it provides indigenous wisdom; it helps reflect community values and will help us identify information needs; it provides important resources,

such as volunteers or technical expertise, at a favorable cost; and some people need the telecenter's services.

2. *Who* should participate? The answers may flow out of the first question, but they should be made explicit; it is not enough to say "the community." What groups of people should receive specific attention because of the possibility they will be marginalized – like women, poor people, minorities, the elderly? In Africa, the elderly are the least represented group among telecenter users. And this probably reflects the situation in many places.

3. *How* might people participate? The easy answer is to say that all can participate through their use of the ICT facilities and services. But there are other ways community members can participate in telecenters: volunteers who oversee daily operations; tutors who give lessons; advisory groups for policy making and management of the telecenter; people who provide links to other community organizations; and people who build and manage particular data bases and add value to information resources.

4. *When* should participation take place? This depends on what kind of participation (the *how*) is being considered. It probably should begin no later than the time in the planning when participation itself is being considered. By making participation an issue in the planning process, it sets the climate for implementation in various aspects of telecenter life – and being specific about the timing avoids the "we know it's important but haven't got to that yet" excuse.

5. *What incentives* can be offered? How people participate is related to what incentives should be offered for their participation. Benefits they receive from the telecenter's services may satisfy most. Money and public recognition are important, but so too are special privileges regarding use of telecenter facilities or discounts from shops in the community.

Let me say in my Memo a bit more about volunteers. The volunteer is an important aspect of participation in telecenter operations. Yet, there are problems. I mentioned the Canadian evaluation of its domestic Community Access Program. In that report, the authors said that volunteer burnout was widely regarded as the key challenge for CAP sites

In most communities, volunteers offer a variety of benefits for telecenters. They contribute to the day-in, day-out supervision of the facilities – a potential personnel expense that many telecenters could not otherwise afford. But the volunteer has deeper significance: the variety of volunteers provides telecenter clientele with personal models with whom they can identify and feel comfortable. In telecenters throughout the world, one can find high school and college students, retired business people, active and retired school teachers, and others providing one-on-one and group training and assistance. In some places, women do not feel welcome in a telecenter because of the "maleness" of the environment and the accompanying intimidation. The presence of self-confident women volunteers helps overcome some of these obstacles. For example, as part of a strategy to attract women to participate in telecenter activities in Pondicherry, the Swaminathan Foundation requires that at least one woman is engaged in the management of each center (for instance, the telecenter in the village of Embalm is ruled by four female volunteers).

Volunteers can also contribute to enlightened decision-making in the telecenter because they reflect a variety of community constituencies. One of the most important results of our needs assessment activities in India as part of the veterinary university project mentioned earlier was the creation of a local steering committee for each telecenter site. These committees, formed by a diverse group of villagers (including people of both sexes, youth and elders) are in

charge of monitoring the economic and social sustainability of the telecenters – in close contact with people at the university. For example, these committees decide about new services by taking the pulse of village needs, and they administer existing resources and look for new ones (including looking for volunteers in the community interested in telecenter activities). The steering committees act as local telecenter champions.

The challenge for telecenters is to move from largely spontaneous use and management of volunteers toward developing an explicit strategic plan for recruiting, training, and rewarding volunteers. Trish Barron, a telecenter authority in Western Australia, summarizes the issue in three words: Gain, Train, Retain.” The important issue is to find incentives to fit the kinds of volunteers available. For some it is the recognition they receive; for others it is free time on the computers; and for others it may be college credits in the local university; or discounts contributed by local merchants.

The Acacia survey of African telecenter reports that telecenter staffs and volunteers are usually poorly trained to carry out their daily tasks. Additionally, telecenter personnel often lack incentives to remain in their jobs. Hence the "burnout" mentioned in the Canadian report. Deficient or nonexistent economic rewards, together with a lack of professional training on how to properly administer telecenters, constitute serious obstacles to the effective management of volunteers.

Again, for the Memo, plan for participation and volunteers and especially the “retain” part.

7. Find and support champions.

I mentioned local steering committees as champions. My research colleague Raul Roman went to South Africa to study the telecenters that had been created there by the Government. He reports that, in his judgement, the main reason for the extraordinary reputation of the Gasaleka Telecenter as one of the most active and vibrant in South Africa is Masilo Mokobane, the director of the project. In spite of nagging infrastructure and economic problems, Raul discovered him to be a telecenter visionary. Mokobane personifies what we call a “champion.” The obscurity and abstractness of the “Information Society” requires the missionary zeal of individuals who can translate and demonstrate the relevance and application of these kinds of concepts to the realities of the community. And for the innovator to be from the community itself increases the credibility and potential spreading of the telecenter initiative. As we interviewed participants in the Canadian program, it was clear that champions were vital to a community’s decision to establish a CAP site, and to helping it mature.

8. Make a business plan.

You can find many details on telecenter business plans on the web. Ours is largely UNESCO’s Telecenter Cookbook. In my Memo I would like to suggest a couple of points that you probably will not find mentioned in business plans. Those in a moment.

Factors influencing long-term financial sustainability of telecenters are diverse. Telecenter sustainability is closely dependent on some of the factors I’ve already mentioned, like content relevance, community awareness, participation, and a well-trained staff. Most telecenters face the dilemma of being sustainable while providing "public goods" for poor people whom they are expected to serve. Some telecenters use the income from user fees and other income services to make public goods more affordable or free. Are people willing to pay for the information

services they can get at a telecenter? The evidence we have from focus groups among a range of economic and educational levels in South India suggest that people are willing to pay if they are convinced that what they get is valuable.

Other than urban cybercafés, most telecentres operate in a not-for-profit mode, but that does not mean not-for-income. Typically donor agencies and governments reduce or discontinue financial support for telecenters after an initial incubation period. Alfonso Gumucio, a development communication expert with the Rockefeller Foundation argues that telecenters that have a mandate to contribute to a community's welfare should not be responsible for their own full financial support any more than a community library is. The FAO's Francisco Proenza offers a contrasting view in suggesting that telecenters should be more rigorous about adopting business models. Proenza says that telecenters can learn from their cousins the cybercafés – which are generally a commercial success. Perhaps the compromise answer is that telecenters need to have a financial plan for whatever the sources of support will be. Perhaps a visit to Hungary will illustrate some of what Proenza is saying. Telecenters need to be innovative in exploiting income-producing activities to support their operations. Among the telehouses in Hungary, there are more than 50 different services offered to the community. A major source of support for telehouses are the contracts that they obtain from government agencies, thus becoming (for a fee) extensions of government services. In Australia, the Queensland Learning Centres offer training courses which are paid for by trainees' employers or by the individuals themselves. Businesses and industry groups pay for use of the teleconferencing facilities, and institutions in the community pay membership fees to the Centres. I believe we need to explore more the idea of *individual* memberships. Perhaps we also need to be more aggressive in exploring alliances with eCommerce. And, our friend Scott Robertson in Mexico suggests the need to get involved in remittance transfers which could help telecenters and the people who use them.

When I say "business plan" in this Memo most of us think first of money and financing. Let me suggest that there are two important aspects of a business plan that need to be considered in Telecenter Planning. In a variety of places, I have mentioned issues that relate to a telecenter being demand driven. So identifying demand and meeting demand are essential to a business approach.

The second may seem like a very obvious point (though frequently ignored or overlooked) is the importance of making a telecentre a nice place to be. Francisco Proenza suggests that telecentres can learn about this from some of the better cybercafés. In another Canadian situation, we were told that just changing the name from "Community Access Program Site" to "Cybercafé" increased the visibility and use of the facility. We studied one of Canada's community access facilities and found that separate times had to be scheduled for adults and young people because each was intimidated by the other.

The BusyInternet telecentre in Accra (Ghana) takes the issue of atmosphere seriously. To attract people to the centre who might not otherwise be interested in information technology, movies are shown at the centre on weekends. Another magnet is Liquid, the BI Accra restaurant and bar with its cool-blue bubble design. This is where the local cyber crowd hangs out to network and dream up ideas. The BusyInternet philosophy is that creating a social scene around technology will help spark an innovative technology culture, and it places equal importance on both social and financial returns. For example, to raise awareness about national ICT policy, the telecentre hosts monthly debates and organizes lectures by experts. Low or no-cost Internet access is offered to those attending HIV/AIDS workshops and other socially

oriented programs. Those who cannot afford the normal daytime prices of fee-based services can pay half-price at night.

9. Build partnerships.

Community organizations and institutions can create demand for telecenter services. Schools, health centres, agricultural extension agents and input suppliers, community leaders, and cooperatives should be partners with telecentres in identifying what communities need in order to be able to act on information. Telecenter managers must reach out to community groups and demonstrate how telecentre resources apply to business, government and development activities. Agricultural extension, community health workers, schoolteachers and government officials need to re-examine how information technology can contribute to their efforts. China has 150,000 farmers associations that could be linked to telecenters – if telecenters were there.

Hungary has demonstrated that a former socialist country steeped in centralized planning could develop a “telecottage” system built on local non-governmental organizations (NGOs) with community ownership and management. It is called a “civic initiative” with its emphasis on local NGOs applying for government telecottage grants and showing that they have the support and partnerships and local governments or private organizations.

One of the oddest characteristics of the telecenter movement is the absence of universities as telecenter partners, or as telecenter incubators. The social role of the university historically has been to create, store and diffuse knowledge, a collection of activities that partially parallels some telecenter operations. Yet, few major programs link universities to telecenters as an institutionalized support system.

Let’s go back to some of the points in our Memo that particularly apply to university capabilities:

- **Research.** Many universities have research capabilities that could be applied to the telecenter research needs we mentioned. And universities could use telecenters as social research labs for their faculty and students.

- **Content.** Universities such as agricultural universities have access to science-based information that could be tailored to regional, provincial and local social, linguistic, and cultural characteristics, and could be matched with many of the Millennium Development Goals.

- **Training and Learning resources.** Naturally, universities have the capacity to teach and train, but equally important, they have the cultural credentials to give credibility to their knowledge resources.

- **Human resources.** And universities have human resources such as students who could serve as telecenter interns, and faculty members who could serve as content and development advisors. We are working on a plan to incorporate telecenter internships as part of one African nation's post graduation service requirement. For some places – perhaps Chinese

Taipei -- service in a telecenter for young men and women could become an alternative to military service.

What makes an institutionalized partnership so logical is that the universities can gain a learning and research laboratory via a telecenter, while a telecenter can fill some of its important operational needs via the university.

In my concluding comment in this Memo to Telecenter Planners, I would urge them to recognize that many places like Chinese Taipei, Mainland China, India and many nations in Africa have a rich resource in their universities. Yes, I have heard that colleges and universities are irrelevant to the world around them. Yet, many of these are stable institutions that can be productive partners with telecenters. The invasion and the potential of information and communication technologies within higher education could be the force that helps them reach beyond their walls and become more relevant. A story from a major newspaper in India recently provided testimony about a university as a telecenter incubator. [CLIPPING] My Chinese Taipei tennis partners back at Cornell tell me that there are many colleges and universities spread throughout Chinese Taipei that with some incentives from government. Could be productive partners in a telecenter movement.

CONCLUSION

Much of the attention in the past 10 years has been on the *connectivity* side of making ICTs accessible to individuals and communities. While these issues have not yet been completely solved,³ we recognize that there are other challenges that need addressing if telecenters are to be significant forces in reaching the Millennium Development Goals -- as well as opportunities associated with eGovernance, eCommerce, distance learning and other digitally-related programs

In the next stage of telecenter development initiatives will need to concentrate on how to use ICTs and telecenters more effectively for development. This question of telecenter effectiveness merges into discussions of content, demand, sustainability and viability -- significant subjects that are woven throughout telecenter planning. And we should remember that colleges and universities should be part of the plan.

And that is my Memo to Telecenter Planners.