

## ICTs, Livelihoods and Small-Scale Producers

'Thinkpiece' prepared by Andrew Scott, Policy and Programmes Director, ITDG, for **IT4D? Conference**, 18 July 2003, Oxford.

### Introduction

ITDG is an international NGO whose mission is to help eradicate poverty in developing countries by developing and using technology, and by demonstrating results, sharing knowledge and influencing others. The organisation has over thirty years experience in supporting poor women and men to access, use and adapt technologies that meet their needs. The organisation is in the process of establishing a new programme on New Technologies which, amongst other things, will aim to enable poor people to respond to the challenges of ICTs and develop and adapt ICT applications that will improve their lives and livelihoods.

ITDG, however, has been actively engaged in the application of modern ICTs in support of small-scale producers in developing countries since 1994. Since then ITDG has addressed a number of themes, including: capacity building in ICTs, strengthening of information intermediaries, linking to more traditional media, methods of knowledge distillation, regulatory issues, and ICT infrastructure. In all of this work ITDG has so far concentrated on the application of ICTs for livelihood purposes (production and marketing). There has also been a substantial effort to learn about and understand the existing information systems used by small-scale producers, in both urban and rural areas.

Note that for ITDG, ICTs are not confined to the Internet. A working definition can be 'instruments, processes, tools and methodologies that enable people to communicate, meet and share experiences, lessons and knowledge by electronic means'. We also recognise that traditional ICTs continue to be essential means of exchanging information.

The focus in this paper will be on ITDG's projects that have been exploring different models for the use of ICTs in the provision of information services, including the Internet, to assist small-scale producers (farmers as well as micro-enterprises). A brief outline of projects in four countries is followed by a summary of key lessons learnt.

### InfoDes (Peru)

The Information Systems for Rural Development (InfoDes) demonstration project in Cajamarca, Peru, established a number of 'telecentres' to provide access in remote communities to traditional sources (books, bulletins, newspapers) as well as local and remote digital content. Most materials are available in Spanish, and cover areas such as indigenous knowledge, appropriate technologies for agricultural production, sustainable development practices, nutrition, health care, small business practices, food processing, renewable energy, crops diversification, local/regional/national yellow pages, catalogues, educational materials (audiovisual and digital multimedia), and TV/VCR/recording/conferencing facilities.

Currently the 'telecentres' are being managed by local rural co-operatives, and although the revenues are still modest, they are growing slowly. More importantly, the number of users keeps growing steadily and people have started to demand additional ICT services from them. One of their key strengths is the immediate availability of relevant information systems. A recent survey shows that users are willing to pay modest fees for services such as printing, scanning, and digitalization of materials.

“At the beginning the project faced a lot of difficulties, mostly owing to poor infrastructure, but the participatory approach involving key community leaders and early enthusiasts, and a need-driven design were key to the implementation.” (InfoDev) Current challenges are of different nature and are related with the growing need for project expansion due to increasing demand in other kinds of service. The project received support from FITEL, the National Telecommunications Development Fund, including a license and a grant, which will allow them to deploy rural telephones (and faxes) in all the locations. An associated Rural Radio project is demonstrating alternative business models for community radio.

### **InfoBu\$ (Zimbabwe)**

The ICT facility at Gazaland, Harare, known as the Infobus, provides a comprehensive array of modern ICT facilities including email, internet, telephones (land lines and cell), photocopying services, fax facilities, video facilities and a library. The main objective of the Infobus was to prevent the further marginalisation of the small-scale enterprises and allow them to access to markets and other business information for viable economic activities.

The information that can be obtained and accessed at the centre includes: where to get business support services; markets for selling products/services; prices to charge for goods/services; where to get inputs/ supplies; information about the laws and regulations of the business environment. Marketing information is the most sought after information, followed by information on prices and supplies respectively. The clients are willing to pay competitive charges for the services they use.

The majority of the respondents use the facilities for business purposes as compared to social and other uses. Amongst individual users, the response was 54% business to 46% social, as compared to the 68% business to 32% social amongst business users. It is interesting to note that 68% of users use the facility as a business centre, which has important contribution to their businesses. 60% businesses surveyed use the Infobus almost daily. The telephone is the most popular facility used at the Infobus by both business and individual clients.

In general business users of the Infobus believed it had helped to improve their business. The small manufacturers and traders no longer had to waste time and money to go into the city for these services. Another general feeling was that at least they had become exposed to some of the modern ICTs that they had previously thought to be a preserve of the big businesses.

### **Oasis (Kenya)**

The main aim of the project in Kenya is to develop easily accessible and relevant content available on the Internet and provide information channels to deliver this information to those who lack it. This entails an Internet-based, financially self-supporting, marketplace for business information that is needed by small scale manufacturing enterprises.

Information is provided on sources and prices of raw materials, procedures for accessing utilities such as water, electricity etc. licensing procedures and regulations governing siting and operations of small manufacturing enterprises, sources and terms for business credit and markets for products of small manufacturing enterprises. The site is available throughout in Kiswahili, and there are also audio files that can be downloaded and copied to cassette for those unable to read.

The project is working with the existing network of public email/internet access points (bureaux). After systematic gathering of information needs from small enterprises in peri-urban areas in Kenya, a website has been developed for SME's called **Oasis**. Information is continually been collected, formatted and added to the website, by a dedicated website development manager located in Nairobi.

Although the information is accessible from the website, it is acknowledged that small enterprises do not visit such places. Interest in the activities at several pilot sites has succeeded in identifying several intermediaries who will be able to access the site and print

off pages of interest. They will then sell this to small enterprises for a small charge to cover internet access charges, printing costs, and the intermediary's profit.

### **ICT Centres (Bangladesh)**

In 2002, ITDG collaborating with two existing NGO partners, established two ICT centres (telecentres) in peri-urban areas, at Sadarpur and Dinajpur, to introduce business development services that are relevant to improved communication and enterprise development. ITDG arranged computer training for the ICT centre staff, provided support for the installation of the equipment and communications tools, and support for troubleshooting.

The ICT centres provide a variety of services which include phone, fax, drafting, composition and printing of letters, documents, etc. by computer, scanning, e-mail, internet browsing, design, profiles of income generating activities, and a bulletin board. ITDG scanned 100 booklets of IGA profiles, and 500 images of product designs, to be printed as needed. Other products such as audio programmes for illiterate entrepreneurs are also being rolled out as the centres become more established in the communities.

The centres now have around 300 clients per month. Though the project targeted micro- and small business, in the early stages of operation the main users were from other groups in the community, such as day labourers, teachers, students, and government officials.

Despite the variety of services available at the centres, those most frequently used are phone, composition by computer and scanning. The use of e-mail and Internet browsing facilities is low, and so far these services have not been used by the business community.

Amongst the benefits cited by users are educational value, economic benefit, safe and secure communication, saving money, saving time, and availability of services not found locally elsewhere.

During the first seven months of operation the centre at Saradpur was able to recover 87% of costs through revenue (excluding investment costs). The financial sustainability of the ICT centres depends on revenue from a range of services.

### **Lessons**

In each of the four projects described, as with many ICT initiatives, the period of time that the services have been in operation has been quite short. Thorough assessment of these models for providing information services to small scale producers is therefore premature, particularly with regard to financial and institutional sustainability. However, there continues to be a lack of good comparative analysis of ICT experiences, and a summary of the preliminary lessons from ITDG's projects is still useful. It might be noted that many of the conclusions from one of ITDG's earlier studies in this field still apply (O'Farrell, Norrish and Scott, 1999).

First, it is essential to understand the information systems that people living in poverty currently use, and the real reasons for their lack of access to information. The majority of people living in poor communities rely on their social networks to provide them with information. This information tends to be provided orally (hence the extensive use of phones and radio).

There is also a direct relationship between belonging to an extensive social network and the amount of information that a person has access to. There are particular groups within communities (women, elderly, disabled) that need special attention because they face greater barriers to social networks and/or access to ICTs. Some on the other hand have the potential to be information catalysts (e.g. youth).

People tend to look for a means of communication rather than for specific information. But by focusing on their information and communications needs, we can recognise that small-scale producers want local not global information and content. They are, however, willing to pay for information that they believe is important to them.

Although ICT centres or telecentres can provide a package of ICT services to their clients, there are demands from communities for better and new services. It is important to consider how combinations of different ICTs, new and old, can deliver these services.

Given that most small-scale producers tend not use the Internet or email, even when the service is available to them, it is important to consider where in the information chain ICTs can be used. The role of information intermediaries is significant in most existing information systems used by resource poor people, and there is scope for investment in capacity building 'infomediaries' to enable them to improve their capabilities to manage and transform information. The demand for improved ICT services depend to a large extent on improving the quality of staff providing such services in ICT centres. Similarly, efforts are required to raise the awareness of the community so that they can come to know what services are provided by ICT centres and how these can help improve their livelihoods.

## **References**

*'Information and Communication Technologies (ICTs) for Sustainable Livelihoods: Preliminary Study'*, by Clare O'Farrell, Patricia Norrish and Andrew Scott, 1999.

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*Sistemas de Información para el Desarrollo Urbano Rural Tecnologías de Información y Comunicación en zonas de pobreza*, Edilberto Portugal, Lima, July 2001.

*Enterprise Development and ICTs - Research on Innovation and Best Practice: A Desk Study*, report prepared for the Enterprise Development Department, Department for International Development (DFID). Intermediate Technology Consultants, April 2001.

## **Websites**

ITDG (English): [www.itdg.org](http://www.itdg.org)

InfoDes (Spanish): [www.infodes.org.pe](http://www.infodes.org.pe)

Oasis (English, Swahili): [www.oasis-info.org](http://www.oasis-info.org)