

Communication technologies support trade in Africa

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Trading agricultural commodities on rural markets in Africa is usually a personal affair. Small scale farmers generally know their clients very well, but they produce limited quantities, and have few alternative trading opportunities. In this traditional and static setting it is difficult to generate extra profits or to handle the fluctuation of prices. Smallholder markets in remote rural areas are neither competitive nor transparent. This generally unfavourable situation is often accompanied by other factors, such as limited transport and communication, incomplete education or the lack of capital to invest, so it hardly stimulates agricultural innovation and development.

The recent and widespread diffusion of mobile phones in Africa has enormous potential to change this. How the spreading of mobile telephones will affect African rural areas has been the object of many discussions. The latest Information Economy Report by the United Nations Conference on Trade and Development (UNCTAD), for example, sees a positive economic impact for all those involved in trade, including remote smallholder farmers. According to the report, the use of information and communication technologies (ICTs) contributes greatly to economic growth: "ICTs generate numerous innovations, thus increasing productivity through the creation of new products, services, and processes". What we are already observing is that mobile phones, in combination with other ICT devices, are in a good position to change trading patterns at local agricultural commodity markets.

The involvement of the private sector in telecommunications and similar activities in many countries has led to new FM radio stations, television, print media, internet providers and telecommunications companies. As the private sector is interested in investing in new technologies which could improve business volume, there are more and more initiatives being developed, and a broader spectrum of information and services is now emerging. Some of these initiatives are especially relevant for the agricultural sector. The most interesting case seems to be the internet supported market information systems, already operating in different regions in Africa. Although all of them provide agricultural market information, they are all structured differently. Some of these agricultural market information systems are currently in use in, for example, Benin (through ONASA - the National Food Security Support Office) and in Senegal (through the Manobi Development Foundation). Other initiatives work across countries, as is the case of "Trade at Hand", a project funded by the UN's International Trade Centre in Geneva, which operates in Burkina Faso, Mali, Mozambique and Senegal. What follows presents some of these structures, showing how well organised and systematically utilised ICTs can work for the benefit of farmers, particularly in the process of collecting market information and distributing it.



Photo: TradeNet

By registering information, a "trade point" helps people without internet access get this information easily via mobile phones.

Collecting and providing information

TradeNet, operating since 2004, offers online data on about 600 markets in 17 African countries, seeing itself as a platform for doing business. All information –including offers and inquiries– can be passed on by SMS on mobile phones, and is also stored on TradeNet's website. On request, the website sends specific information back to the mobile phone – so far free of charge. Through the website, it is very easy to identify local market prices and sellers. Local correspondents upload market information with the intention to attract buyers. TradeNet additionally placed market representation "trade points", making it possible for people without internet to register. In this way, TradeNet collects a wide range of market information, which is then available to everyone online or to registered users via SMS. Requesting market information may be a bit more complicated, as the SMS must be written in a specific way so that the computer system can read it. Of course, the website makes all the information available quite rapidly; and sellers can also be contacted easily through the SMS service. In general, TradeNet seems to be more appropriate for wholesalers who tend to buy larger amounts. So far, TradeNet reports approximately 6000 registered business users, all of whom have to pay a fee for every completed business deal.

The Kenya Agricultural Commodity Exchange (KACE) collects and provides regional market information, but in contrast to TradeNet, it focuses explicitly on the pro-poor effects of these processes. Back in 1997, KACE started working by setting up a Market Information and Linkage System (MILS), which reports market prices on a daily basis. At the moment, this system is formed by 12 different market dependencies, of which four are franchised entities. Depending on the size of the market, these dependencies become a Market Resource Centre (MRC), additionally providing a broad range of extra services. Among these, transport brokerage, warehouse and storage services, weighting service, quality control (testing for grain moisture), commodity grading, provision of farm inputs (fertilizers, seed), of financial services (micro-finance) or of short term trade credit (e.g. for hiring transport to markets). Additionally, the MRCs help in the preparation of documents, and provide mobile phone and e-mail services to their clients.

While KACE is collecting this information, interested parties are able to obtain it through various channels. First of all, by being an active KACE member, it is possible to find it on its website. A second option is through its SMS service, which sends specific information on request. Another form is to exchange information and establish business linkages through an FM radio show called *Soko Hekawi* (referred to as the “supermarket on the air”), broadcast to listeners in western Kenya. Although *Soko Hekawi* is transmitted only once a week for one hour, it provides a genuine service to the rural population, reaching an estimated total of 5 million listeners. During the show, approved offers by the MRCs are promoted, and interested traders can phone in to bid. By doing so, transparent market prices are publicly available, helping farmers in their business calculations. At the same time, the show attracts advertisements from other enterprises.

Capacity building

Private activities seem to be the right way to foster regional small scale agricultural business. As the interest will most likely remain high, ICTs will further spread into rural areas, facilitating the development of new agricultural market information systems. The main problem, however, seems not to lie in the development of technologies. According to Adrian Mukhebi, KACE’s chairman, its main difficulty is that there are not enough local entrepreneurs with the knowledge and capacity to develop and deliver the services in the remote areas where most farmers live. As a result, scaling up is a slow process, even though capacity building receives far more attention than the development of infrastructure.

Providing information in a targeted manner to a large group of persons, leads to positive results. But at the same time it has become clear that such a task has not only to build on infrastructure and techniques, but capacities. Capacity is needed to handle ICTs as communication devices, and not just as top-down instruments. As the case of agricultural market information systems in different countries show, it is of crucial importance that farmers contribute to such a project with their knowledge. Without the input from farmers in the form of local market information, the whole system would not work. KACE perhaps anticipated this and, from the very beginning, established local representatives at the marketplaces. They carry out key functions without necessarily being online. Its outreach to rural people takes place on different communication channels.

The Busoga Rural Open Source and Development Initiative, or BROSDI, underpins the social dimensions of rural productivity. This Ugandan organisation is helping to raise rural communities’ standards of living in a sustainable manner through information and knowledge exchange. It is a not-for-profit initiative with regional roots. In addition to sending out consultants on assignments, organising public events and producing radio programmes, it is providing an extensive online service, disseminating the same information via several channels. BROSDI uses many different internet-based formats such as blogs, wikis, podcasts and RSS feeds (as part of what is now known as Web 2.0 appliances) to spread information on topics such as agriculture, health and education. BROSDI reaches a large share of its rural clientele through SMS on mobile phones. But more traditional communication means are also used to disseminate information, such as radio, publications, music, dance and drama. An important stake in their work remains the personal interaction with rural clients.

BROSDI’s agricultural extension branch, CELAC, undertakes an extensive workshop programme in the field. The results of these workshops, or “knowledge sharing forums”, are

numerous. One of the most important results is the identification of a village representative, who henceforth becomes the “Village Knowledge Broker”. Such a person needs to be sociable and willing to share knowledge, must be living in the rural area, should be a farmer, and should preferably be a woman. There are, of course, many city dwellers (like traders or consumers) who matter quite a bit to rural development. For any future development, such a Village Knowledge Broker can ideally play a very positive role. BROSDI is banking on Uganda’s phone network spreading similarly quickly into rural areas in the future as it did in urban settings in the recent past. This would stimulate local communication in general and local agricultural markets would gain greater trade opportunities.

In conclusion, these examples indicate that even if a communication infrastructure and useful agricultural market information are available, some mediation is still necessary to support rural people in adapting this information. That is, finding and using locally appropriate channels through which to communicate, and supporting personal capacity building processes. Ideally, everything grows together: the infrastructure, the available information and the capacity of people. With the help of some training, farmers are in a good position to start the market transition on their own. ■

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Additional information:

- **ONASA, Office National d’Appui à la Sécurité Alimentaire.** 06 B.P. 2544, Cotonou, Benin, <http://www.onasa.org>
- **Manobi Development Foundation.** Amitié II, BP 25026, Dakar Fann, Senegal, <http://www.manobi.sn>
- **Trade at Hand.** c/o International Trade Centre (ITC), Palais des Nations, 1211 Geneva 10 – Switzerland, <http://www.intracen.org/trade-at-hand>
- **Kenya Agricultural Commodity Exchange, KACE.** Brick Court 2nd Floor, Mpaka Road, Westlands, Nairobi, Kenya, <http://www.kacekenya.com>
- **Busoga Rural Open Source and Development Initiative, BROSDI.** Plot 22, Bukoto Street, Kampala, Uganda, <http://www.brosdi.or.ug>
- **TradeNet.** <http://www.tradenet.biz>

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