Project ABC (*Alphabétisation de Base par Cellulaire*):

Using Cell Phones as a Platform for Literacy and Market Information in Niger

Jenny C. Aker

Despite decades of experience with primary education and adult literacy programs, to date, there is limited empirical evidence that primary education and literacy programs have improved the functional literacy of adult populations. One of the potential reasons for this is the availability of reading materials in local languages. Once an adult learns how to read or write in his or her local language, there are limited opportunities to use this newly acquired skill, especially in countries with a relatively high number of local languages. In addition, even if reading material is available, it might not provide the information that adults want or need in their daily lives.

Mobile phones provide a unique opportunity to address these constraints to adult literacy in sub-Saharan Africa. SMS allows adults to practice their reading and writing skills in local languages, either by contacting family or friends. In addition, while rural radios provide an opportunity to share information, mobile phones allow rural communities to become active participants in the information process. And finally, the natural pricing scheme of mobile phone services in sub-Saharan Africa – in most cases, SMS is 1/7 the price of calling – provides a financial incentive to use mobile phones as a platform for literacy.

Project ABC, implemented in collaboration with Catholic Relief Services in Niger and Christopher Ksoll (Oxford University) and Travis Lybbert (University of California-Davis), is an innovative, three-year pilot program to use cell phones as a platform for literacy in Niger. The purpose of the pilot program is to use information technology (mobile phones) as a complement to traditional literacy training, providing households with the opportunity to practice their literacy skills via SMS. This addresses an important constraint to previous functional literacy programs in Niger, illiteracy rates are 80 percent. This pilot project is innovative for three primary reasons:

- Building upon the functional literacy approach and materials used in Niger, the project will use cell phones as a learning tool to allow participants to practice reading and writing in local languages via SMS.
- The project will reinforce the importance of functional literacy (and numeracy) by targeting groups with a common economic "function" (producers' organizations and women's groups). A key aspect of the project will therefore be facilitating farmers' associations with access to market information via cell phones or radio (in non-cell phone villages) and training them in using such information
- In order to assess the impact of the cell-phone based literacy activities and compare its impact with "traditional" literacy programs, the project will use a rigorous program evaluation approach. This involves randomly assigning participants to cell-phone-based literacy programs ("treated" group) or non-cell phone literacy programs (comparison group).

The baseline was conducted in January 2009, with follow-up literacy tests in of each year. The final evaluation will be conducted in January 2011, with potential rollout in Mali and Ghana as well.

C-SCAP: Cell Phones and Early Warning in West Africa
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In an area affected by natural disasters (drought and floods) on an annual basis, local, national and regional early warning systems have played an important role in preparing for and responding to food crises in the Sahel. Since the 1990s, a variety of governmental and non-governmental organizations have also worked with community-based structures to develop local early warning systems. The purpose of these early warning systems is to collect community-level data on rainfall, agriculture and food security, in order to better inform national-level decision-makers of potential problems.

While these community-based early warning systems (CEWS) have been successful in many countries, one of the major constraints to their sustainability is cost and the flow of information. Information collected at the community level must be shared with local, regional and national-level decision-makers in a timely manner, which can be difficult in remote areas. Sharing such information in monthly or bi-monthly meetings can require substantial costs in terms of time and transport.

This pilot project proposes to use cell phones as a means of reinforcing community-based early warning systems. As compared with traditional early warning systems, cell phones will be used as a primary means of sharing data on community early warning indicators, receiving information on agricultural, health and other indicators from the government, and ensuring a coordinated response. . In order to assess the impact of the cell-phone based early warning systems with traditional early warning systems, the project will implement a multi-arm randomized experiment, with the comparison group using traditional methods of sharing information.