Introduction

To supplement the lessons learned during the site visits to Africa and South Asia, additional data were gathered through focused interviews held with individual farmers within rural villages in India, Sri Lanka, Mali, and Zambia. Local agricultural university students, using an interview protocol designed by project members, conducted 530 interviews in approximately 80 different villages throughout these four countries. After a short introduction to the interview protocol, the students were provided with a digital recorder with which they were to record each of the interviews that were undertaken. These interviews were transcribed locally, and each university student compiled a report on his/her findings.

The interviews with farmers typically covered daily activities; number of household members; formal education; what type of inputs were used and where they were obtained; crops produced; where these were sold; land ownership status; cooperative membership status; where/how agricultural information was obtained; information sources; local NGO activity; electricity/water/other infrastructural problems; cell phone usage, if any; and radio usage. It is important to note that the sampling for these interviews was not done scientifically, and, as such, cannot be said to be representative even of the farmers in these villages.

Keeping with the philosophy of formative evaluation, the data from the interviews was analyzed quickly to attempt to triangulate findings from the site visits and to raise any obvious additional points that may have been missed during those visits.
### Results

During these interviews, the smallholder farmers discussed several concerns. In addition to those areas of need that would be expected from such a discussion (e.g. consistent and trustworthy extension support, transportation, water, and labor to name just a few), three main information delivery methods/needs were consistent throughout the interviews. Each of these areas of need would benefit from more widespread and rigorous data collection and analysis.

First, farmers, even those who own and regularly use cell phones, do not necessarily appreciate their agricultural applications. Access to cell phone network infrastructure is a major limiting factor that isolates many of the poorest farmers. However, even when good cell phone coverage is available, often there is a lack of meaningful agricultural information that could be delivered via the available cell phones.

Second, many farmers appear to get a good amount of their agricultural information from magazines and newspapers. These traditional media retain their dominant popularity; even in areas where more sophisticated radio, TV, and telephone systems exist. A good plan may be to frame these higher tech media within the constructs of more traditional media. For instance, find out what people like about magazines' information, format, etc., and tailor electronic systems to those preferences.

Third, there is a desire for information on new agricultural crops, particularly specialized export crops. Many farmers desire to diversify to flowers, organics, and other non-traditional agricultural products. They are a profitable source of additional income for both men and women. Likewise, women within these groups seem to have more equitable situations than in more traditional settings. It is unclear whether or not strategies like these are viable options in more isolated areas of India and Africa. Demand for this type of product may not exist in these rural, isolated areas, however, when looking for pathways out of poverty, this would be an area that would warrant further research.

### Conclusions

More cell phone use was found than expected. However, agricultural information was not often available or sought via cell phone. Though many areas are constrained by access, building data bases which make real time agricultural information available to farmers by cell phone is a promising area to pursue.

Traditional print media area still an important source of information for many (literate) smallholders. Perhaps technology-delivered alternatives can be developed to more closely parallel those traditional delivery systems.

Smallholders seem open to new ideas – new crops and new sources of income, but in general they lack the infrastructure support that would give them confidence to try, since they lack good safety nets and have little margin for failure. Exploring alternatives would seem to be a good investment.