Agricultural extension and advisory is one of the most researched and proven techniques of improving yields and incomes for farmers. Trained agents visit communities to ensure the dissemination of current best practice, helping organize cooperatives or implement secondary programs.

Developing countries continue to spend large sums of resources promoting agriculturally led development through agricultural extension work. However, these agricultural workers are expected to travel extensively across their countries while ensuring they maintain consistent and high quality work – a nearly impossible task. Furthermore, agents receive limited training, resulting in short, infrequent visits where the complexities of agricultural issues are not easily addressed and key steps in farmer advising process are skipped.

Dimagi technology helps alleviate spatial and consistency issues for agricultural extension agents.

Benefits of Dimagi's Technology for Agriculture Extension Workers

Mobile technology can support farmer trainings, ensuring a consistency in curriculum that reduces the burden on extension workers, while at the same time, monitoring the data necessary to ensure that programs are achieving end-line goals in yields and income increases.

- Mobile applications support **on and offline data collection**, facilitating record-keeping and enabling reports to be quickly shared with farming supervisors while preventing information loss.
- Registration and case sharing in mobile applications enables farmers to be easily tracked across visits, facilitating a **continuum of personalized training** according to specific crop, farm size, and techniques.
- Multimedia can **reinforce worker trainings** so that they are more engaging and ensure correct information is disseminated, while increasing worker's credibility.
- Interaction with servers ensures market and technical **information is accurate** and up to date
- Decision support and checklists increase **adherence to protocols**, improving extension agent's performance and efficiency.
- Mobile applications and SMS can **remind extension agents** to follow up on low-performing farmers.
- Collected data can be validated by the applications and used by monitoring and evaluation teams for **tracking key program indicators**, such as adoption of best farming practices and agricultural output.

Highlighted Projects

CARE Pathways, India, Tanzania

Since 2013, Dimagi has been working on the CARE Pathways project, which is focused on helping female self-help agricultural groups improve their productivity and increase incomes. Dimagi has set up a custom, tablet based scheduling and activity tracking system for CARE's extension workers, providing a "Knowledge Base" for on-site refresher training, as well as a complex data collection system to track group and individual performance on yield, income, and empowerment indicators. All content is locally contextualized and summarized in easily parsed custom reporting.

Catholic Relief Services, India
Catholic Relief Services is using CommCare to support an agriculture project in India through the Gates Foundation's initiative: Improved Rice-based Rainfed Agricultural Systems. This tests the extension agents and supervisors to track the progress of farms growing these various varieties of rice. Each rice variety's effectiveness is tracked and evaluated, leading to better livelihood outcomes in this agriculturally dependent region.

Vaagdhara, India
Vaagdhara has developed an application using CommCare to monitor fruit orchards. The application includes functionalities to select a village for the project, register the farmer, plan, plantation counseling, and conducts harvest monitoring for fruits, forestry trees, and intercrops.

Technoserve: AgriPlus, South Africa
Technoserve supports agriculture extension workers and supervisors to track crop status, financials, and payroll information. The CommCare application records farmer information for easy access by extension workers and contains multimedia counseling materials such as the safe use of pesticides and seedling growing techniques.