

Mobile apps for agriculture

By SENIORL ANZU

THE use of Mobile Applications (apps) as a conduit for data collection and information sharing offers enormous benefits in commerce, education and development.

Mobile apps have been central to handsets such as smartphones and tablets in the face of mobile evolution.

Its capability to allow instant usage when on-the-go has enhanced greater interaction and access to information among millions of users globally. This is supported by the added advantages in affordability, wide ownership, voice communications, and convenience in service delivery; compounded by the convenience of mobile networks.

Social networking sites have become the leading apps due to their increased use, such as Facebook, YouTube and a number of Google related apps (Google Search, Google Play, Google Maps, Gmail).

There is now a growing trend in the use of mobile apps in the agriculture fields with specific objectives. The technological innovation offers yet another opportunity for agricultural development in this information age, particularly in relation to the need for generation and access to updated information and knowledge at the right time and in the right place.

World Bank reported in 2011 that mobile apps hold huge potential in advancing agricultural development in developing countries given the rapid emergence of the mobile technology. Relevant apps have been developed and used in Africa, Asia, Latin America and the Caribbean in the agricultural and rural development domain.

The use of mobile apps as a tool for improving PNG agriculture services has been well captured in the national e-agriculture strategy which is being developed through the Department of Agriculture and Livestock and the Food and Agriculture Organisation of the United Nations.

Nari is tapping into the technology with a view to improve its research and development efforts in the country, especially in collecting field research data and sharing information with stakeholders. An intensive app development program (training) has been initiated last month through the support of the Australian Centre for International Agricultural Research (ACIAR).

ACIAR has been supporting agricultural research in PNG and elsewhere for many years, and some of those research were undertaken in challenging environments. Its perspective is to shift from paper-based data collection to app-based for its research projects in the different countries. This is so to improve accuracy, timeliness, and efficiency.

The process began with a desktop study of 17 mobile app development softwares from which CommCare was selected as the best suited for agricultural research. CommCare has certain advantages over others in the agricul-



The mobile app technology being demonstrated during the CommCare training in Lae last month. - Naripic



tural research context and fits well for ACIAR projects. Notable features are its ability to function offline where there is no mobile connectivity and can synchronise surveys locally in the mobile device.

The mobile app training has been undertaken with staff involved with some of the ACIAR-DFAT projects under the Transformative Agriculture and Enterprise Development Programme (Tadep) over the past few months.

A key objective is for PNG to adopt the mobile acquired data (MAD) technology to transition from paper-based to app based surveys.

Dimagi (CommCare developers) has provided licenses to the projects and ACIAR has commissioned AgImpact (a research and development support company) to provide CommCare planning, training and adoption support to the Tadep projects.

During the scoping interviews to determine the level of support required for each Tadep project to adopt CommCare, the project leaders emphasised the importance of building the capacity of partner organisations in MAD technology within the Tadep network.

As three of the five Tadep projects have Nari as a key partner, ACIAR engaged AgImpact to facilitate capacity building of Nari both at individual staff level and also at a higher institutional level.

After a competitive selection process, five

Nari staff were selected to undertake four days of intensive face-to-face training with AgImpact CommCare Support team as part of Dimagi's CommCare Certification Programme. Each of the Nari staff identified an idea for an app relevant to a Nari research project and transformed this idea into an app ready to be deployed in the field.

Nari director general Dr Sergie Bang said with the mobile app technology, the Institute will improve its ability to conduct research, analyse data, publish and make new information available actively for stakeholders use.

"The enthusiasm and skill that the five Nari staff displayed in their participation in the CommCare training was exceptional - they had some great ideas on how to use this MAD technology in their everyday work at Nari", said Amber Gregory, AgImpact CommCare support manager.

Aside from the intensive face-to-face CommCare training, the five Nari staff will continue to be supported in their learning by the AgImpact CommCare Support team over the next six months to achieve CommCare Application Building Certification.

"Nari has shown great leadership in embracing this MAD technology and the opportunities that it offers for the institute. We hope that this MAD-4-Tadep initiative will catalyse a sustainable legacy that transforms the way agricultural research in Papua New Guinea is conducted", said Elizabeth Brennan, Tadep programme coordinator.

The impacts of CommCare adoption both within Nari and the five Tadep projects will be presented at the Tadep Annual Meeting in April 2017. - Nari