NO. 10

**JULY** 2018







Supporting Smallholder
Farmers in Asia and Pacific
Islands Region through
Strengthened Agricultural
Advisory Services
(SAAS Project)

# BEST PRACTICE NOTES



# **MOBILE APPLICATION FOR FARMERS IN CENTRAL ASIA**

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### **5 Key Points**

#### 1. Challenges and constraints

- > Available in Android only
- ➤ Promotion difficulties
- ➤ Need to cater the expanding reach

#### 2. Objective

The mobile application was developed to provide agricultural stakeholders living in rural areas with immediate, correct, and free information.

#### 3. Methodology

- i. Collecting of information from organizations and experts
- ii. Programming of mobile applications that can work offline and with varying languages
- iii. Implementation
- iv. Evaluation through surveys

#### 4. Highlight of result

- > 70,000 mobile application downloads
- ➤ Increase in production, quality, and profits.

#### 5. Highlight recommendation

- > Should work offline
- ➤ Has a clear and simple userinterface
- ➤ Varying languages
- > Financial assistance

## Introduction

- Despite the important role of agricultural services in innovation and consultation, the field is still underdeveloped in the region of Central Asia.
   This is due to the lack of reliable access to the Internet and other sources of information.
- As such, it affected the quality of agricultural services that suggested the common way of communicating agricultural information in Central Asia is insufficient.
- To solve this, there was a need to shift to Information Communication Technology-based services. Specifically, through mobile applications that would provide immediate and correct information to stakeholders
- or assistance through a phone call with a specialist.
- The stakeholders included farmers, veterinarians, agricultural input suppliers, processors, small exporters, agronomists, and students.
- These mobile applications were implemented in Tajikistan, Kyrgyzstan, Uzbekistan, Kazakhstan and other Commonwealth of Independent States (CIS). They can be used offline and are available in Russian, Tajik, Kyrgyz and English.
- The promotion of the mobile applications proved to be challenging but with the help of the partners, they were able to diffuse the innovation using newspapers in Tajikistan, farmer's magazines in Kyrgyzstan, and other media platforms.
- Although the mobile applications are only available for Android users, surveys showed that there have been a significant reduce in production costs, improvement in product quality and increase in harvest of farmers.

## Methodology

- 1. The mobile application was a pioneer project in Central Asia as there were no existing applications that aimed to help agricultural stakeholders.
- Instead, they relied on direct consultations and training with agricultural experts which were very expensive.
- 3. The partners collected information from various organizations and from experiences of agricultural producers to develop the mobile applications.
- 4. It was then implemented in Tajikistan, Kyrgyzstan, Uzbekistan, Kazakhstan and other CIS.
- 5. Surveys were used to evaluate the impact and effectiveness of the mobile applications.
- 6. The mobile applications work offline so the beneficiaries with no access to the Internet can utilize agricultural information anytime.
- 7. It can also be downloaded free of charge from the Google Play market, the Agroinformasia's Platform (http://www.agro-asia.com/56), and from Neksigol Mushovir's website (https://apps.agroinform.tj).

## **Key Findings**

- The were 12 mobile applications developed to help farmers in crop protection and for their production of tomato, cucumber, cabbage, onion, corn, greenhouse vegetables, grape, blackcurrant, livestock and forage, and greenhouse construction.
- The mobile applications are currently available for Android users only but will be available on iOS in the future. They are also developing a module on production technology card for existing mobile application users.
- As of September 2017, there has been an estimate of 70,000 mobile application downloads. This resulted to a significant reduction in production costs, improvement in product quality, and boost in harvest.
- It further reduced the cost of access to information to USD 0.12 and has been decreasing continuously as more farmers are accessing the mobile application.
- The demand for the mobile applications has also been spreading in Russia, Ukraine, and Kazakhstan.

## **Recommendations and Conclusions**

- Mobile applications proved to be very useful in disseminating information especially for marginalized communities in far-flung areas such as those in Central Asia. This was proven by the 12 different mobile applications implemented in Tajikistan, Kyrgyzstan, Uzbekistan, Kazakhstan and other CIS.
- Thus, it is important that the mobile applications have a simple and clear instruction on how to use it. Only 30% of farmers have access to mobile phones which means that majority are unfamiliar with it.
- Since majority of the stakeholders do not have access to reliable internet, it is also important that the mobile application can work offline with minimal need for memory space. This will be helpful to those with basic mobile phones.
- The mobile applications should also be available in more languages as the demand is spreading in different countries with varying languages.
- In order to sustain the mobile applications, there is also a need for financial assistance from donors or the government. They can also require its users with a minimal annual subscription fees paid by the agricultural input suppliers.

#### **CONTACT DETAILS**