



## UPS 9: Mobile integrated Market Access System (m-IMAS)

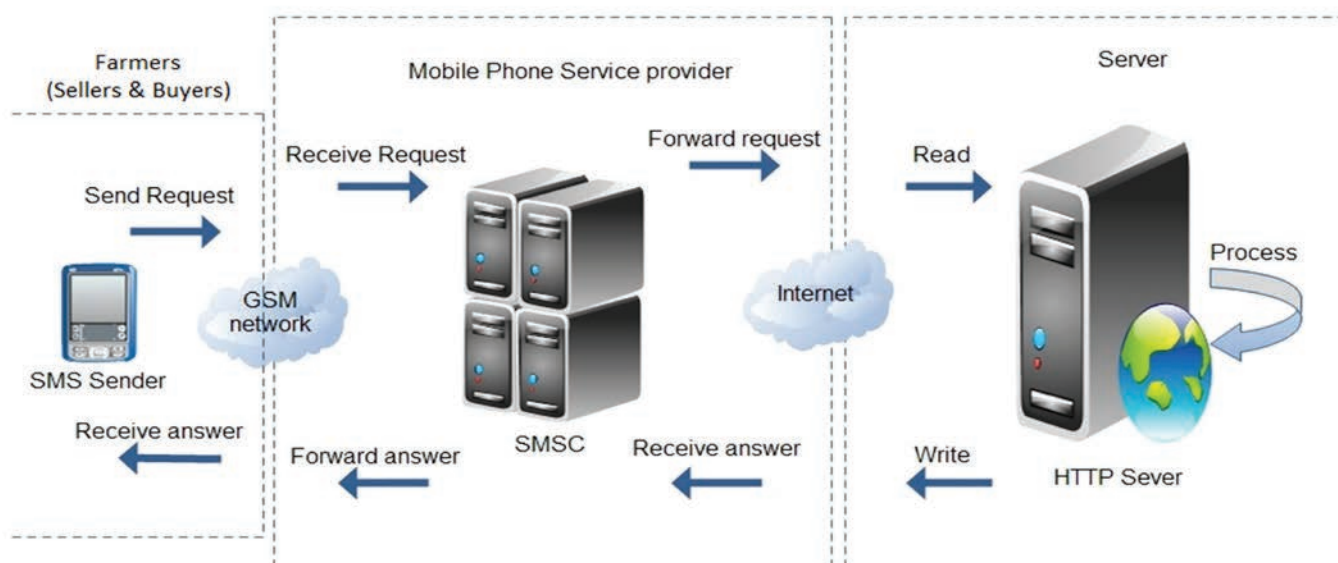
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### KEY CONSTRAINT AND OBJECTIVE ADDRESSED

**MARKETS:** Farmers fail to market their produce due to a lack of market information. **CONSUMPTION:** Lack of consumer linkages with the producers and marketers. The main objective is to improve the market access of smallholder farmers through increased access to market information.

### DESCRIPTION

The system is designed to link smallholder farmers to food markets both among themselves and with external food traders. Building capacities to increase market access by linking buyers and sellers of commodities in the villages with traders outside the village through the m-IMAS system. Increase marketing of agro-products through m-IMAS whereby farmers market their produce and buyers bid for the same via mobile phones. The system registers and provide full information of the seller and buyer, including the location, contacts, quantity offered, and prices. After the system matches the requests of buyers and sellers, it notifies them by sending text messages.





## PROVEN SUCCESS IN TZ AND BEYOND

There has been use of IT in Tanzania to access information regarding agriculture by MVIWATA, Tigo-Technoserve Agriculture Information System and through the e-Ng'ombe initiatives (Kadigi et al. 2013). However, Trans-SEC m-IMAS will be unique by design as it strongly integrates food market access for farmers, right in their villages. The few farmers who have used ICT to access markets are those who produce large quantities of in-demand crops, selling more and receiving better prices, thus helping to alleviate poverty (Mwakaje 2010).



## TRANS-SEC FINDINGS

Preliminary observation shows that the system works in villages with a strong network signal, a large number of traders, and for farmers knowledgeable about mobile texting. Operating the database using free mobile services alerts, the mobile phone network companies deliberately slow the system response time (robotic response control).

## TYPE OF FOOD CROPS APPLICABLE

It is not limited to specific crops and livestock products

## TECHNICAL SPECIFICS, DIMENSIONS

The right hand side of the figure (page 3) shows how sellers and buyers interact with the system using their mobile phones. Farmers who want to sell crops are connected to their matched buyers (fellow villagers and traders) through the mobile phones. Also distant traders may learn the volume they can get from certain village farmers within their geographical locations and the sales details like price and volumes offered for sale though interaction using their phones. Once a certain deal has been matched against the deals conditions and concluded, the system will automatically notify those in the network.



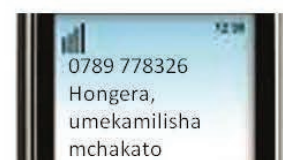
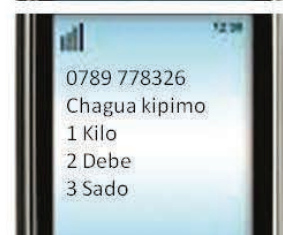
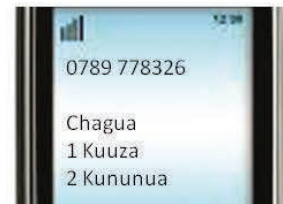
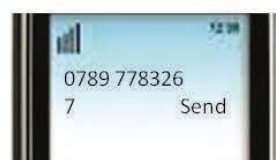
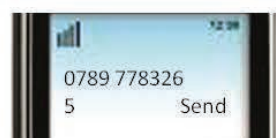
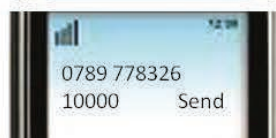
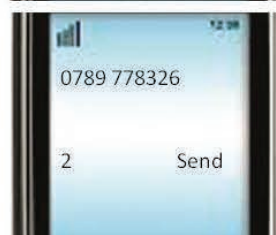
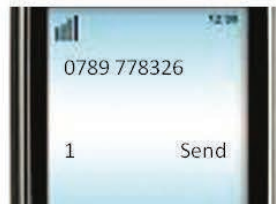
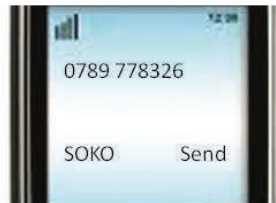




## Fuata mfano huu katika simu yako

### Wewe

### Mtandao wa Simu





## IMPLEMENTATION CONSTRAINTS

This UPS depends on mobile phone functionality and network operations. While some farmers do not own mobile phones, the majority of farmers who own a mobile phone are not familiar with mobile texting. Furthermore, there is limited power reliability and access to network signals. Although it is not used for market purposes, users are required to have an airtime bundle in order to access the system. Last, but not least, during testing with farmers, it was noted that mobile network providers were actively slowing text message response times, thus extending waiting time for replies.

## LINKAGE TO OTHER FVC COMPONENTS

Stimulate production based on the price and volume traded under the system. It also strengthens market linkages between farmers/producers and buyers, creating smooth transactions. Furthermore, at its optimum, consumption will increase through the availability of crops and livestock to be traded online, especially for industrial consumers.

## CONSIDERATIONS & CRITERIA FOR UPS OUTSCALING

- Strength of network signals
- Mobile phone ownership
- Establishment of a pooled phone resource center for farmers who cannot access or use mobile phones
- Source of power/electricity for charging phones
- Familiarization of farmers with text messages on using mobile phone
- Size of the village and the number of people participating in the market
- Purchasing power and willingness of farmers to pay for airtime bundles
- Awareness among traders of nearby markets within the system

## REFERENCES

- Kadigi, R., Kadigi, I., Laswai, G. and J. Kashaigili (2013). Value chain of indigenous cattle and beef products in Mwanza region, Tanzania: Market access, linkages and opportunities for upgrading. *J. of Agric Res.* Vol 1 (8): 145-155
- Mwakaje, A. (2010). Information and Communication Technology for Rural Farmers Market Access in Tanzania. *J. of Info Tech Impact*, Vol. 10 (2): 111-128

