

Cassava Peel Tracker (CPT) App for Peel-to-Feed

Value Chain Management

O. Iheanacho^{1,2*}, B. Ogunya¹, P. Kulakow¹, <u>P. Lava Kumar^{1*}</u> 1) International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria; 2) International Livestock Research Institute (ILRI), Ibadan, Nigeria

*i.okike@cgiar.org; P.kulakow@cgiar.org; L.kumar@cgiar.org;

Peels to feed value chain

Cassava root peel emerging as an important raw material for animal feed manufacturing industry. Cassava root peel constitutes 5% to 15% of the tuber weight and is a rich source of energy and nutritional elements.

Peels are converted into cake after a series of mechanical process and sold as different products for (fish, poultry, large and small ruminants) (Fig 1). Nigerian generates ~10 to 14 million t of peels annually as a by-product of the household and industrial processing of roots for gray and starch.

The new innovation in peel processing reduced drying of cassava peels from 3 to 1 day making peel manufacturing attractive income generation option for farmers and processors.

ICT tool to bridge peel-to-feed value chain

- Efficient peel to feed conversion requires mobilization of fresh peels for processing in a day to avoid fermentation and spoilage. Information about the availability and quality of peels almost on daily basis is an important attribute for aggregators and buyers of processing industry.
- The word-of-mouth model is being used through formal and informal groups to relay information about peel availability status.
- To improve the communication along the peel-to-feed value chain, we developed Cassava Peel Tracker (CPT) web-app. The CPT is build on

Seed Tracker[™] platform.

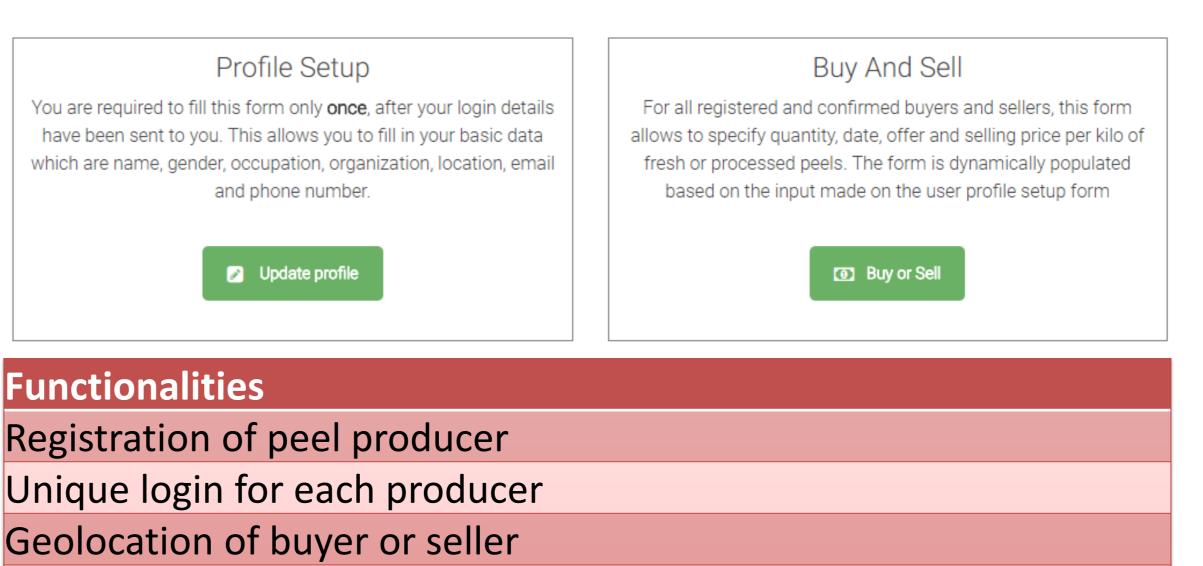


CPT App Development and Features

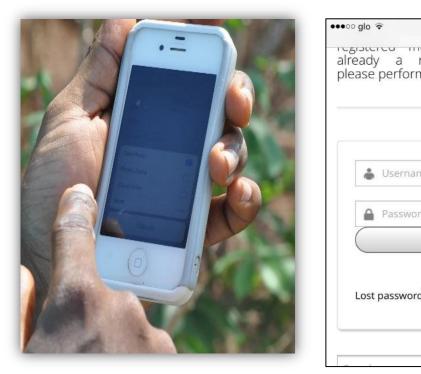
- Developed using ODK and Enketo web Data collection forms
- MySQL database with SMS and e-mail alerts
- CPT is usable on Android phones and any Internet-enabled device for real-time communication of availability and quality of peels for sale.
- CPT aggregates information readily displays the quantity of product at ulletvarious stage of value chain from fresh feel to dehydrated mash and compressed cake with geolocations.
- This app is simple to use and requires minimum data processing and data lacksquaretransfer cost. C
- PT enables real time communication and data necessary for burgeoning peel-to-feed manufacturing industry in Nigeria. The tool will be pilot tested in August

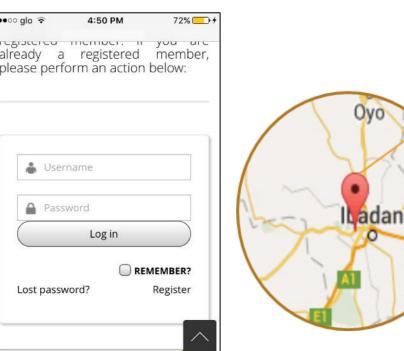
www.seedtracker.org/peeltracker (available in August-2018)

Welcome to on-line Cassava Peels Marketplace Interactive platform for sellers and buyers of Cassava Peels



Acknowledgments This work is support by the CGIAR **Program on Roots**, **Tubers and Bananas** (CRP-RTB)





User ID# Location and address • Quantity of peel available • Date available Contact

Auto login based on the unique ID

Quantities available to sell or buy

Auto analytics

Expression of interest to buy or seel

Geolocation based information on WebApp for ready identification and traceability

Database for quantities of peels producer and pee-flow along the value chain

GCP21, Cotonou **Republic of Benin** 11 – 15 July 2018