

ICT and AG Profile

INPUT TRACKING SYSTEM: ARMAJARO

Area of Focus: Input management and traceability

How it Works: In Ghana, Armajaro Trading is utilizing barcodes and SMS—linked to their customized GIS—to more effectively track and manage input distribution and usage amongst its 3,000 cotton outgrowers. The company is leveraging the barcode traceability technology Armajaro regularly employs to trace its cocoa buying from origin in Ghana. When inputs are distributed to farmers on credit at the beginning of the season, the receipt now includes a barcode, scanned using a handheld device, which includes information such as the individual farmer code and the volume of inputs taken. This is linked to Armajaro's overall database management system and eases the information burden of tracking and calculating farmer credit. In addition, when Armajaro's field extension agents visit farms, they SMS the farmer code along with an input-specific usage code (that indicates, for example, that 'seeds have been planted' or 'NPK does not seem to be applied yet'). The SMS codes are automatically processed into updates of that farmer's unique information in the GIS.

Technology used: Handled scanner, barcodes, SMS, customized GIS

Implementer/Funder: GeoTraceability, a private technology company, created the software and manages the GIS. Armajaro agents implement the scanning and SMS.

Fees: Armajaro pays a fee to GeoTraceability to manage the GIS, to which the barcode scanning and SMS are linked. The SMS costs are incurred by Armajaro. There are no fees to farmers for this service.

Primary Markets: Ghana

Users: Armajaro extention agents and cotton farmers

Business Model: As outlined below Armajaro has realized significant cost efficiencies since automating its input tracking. GeoTraceability, a private company with a small full-time staff, charges for its GIS customization.

Impact: Although the initiative is fairly new, it is expected to significantly increase efficiencies in input management and tracking, improve transparency (amongst farmers as well as amongst company agents at remote outposts), and reduce misuse. Using the SMS feedback from extension agents, at any given time a production manager can now know how many farmers have not applied a key fertilizer and are likely to have reduced yields during harvest season, for example. In the future, Armajaro plans to release 'farmer supplier cards' that would give farmers more direct access to the data about their farms, production, and input credit/repayment history. Farmers can then use this data to support collateral claims and to help establish credit histories and commercial viability with more formal financial institutions.

For more information contact: http://www.armajarotrading.com/

Sources: Interviews with Armajaro and GeoTracebility staff, August 2012

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