

AGRICULTURAL INTEGRATED MANAGEMENT SYSTEM

An information management system to monitor agricultural development and sustainability

Wow day

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Brief description of Innovation/Technology

Agricultural Integrated Management System

- Work Flow System: Process/actions are automated and moves from node/user to node/user electronically. The workflow consists of different levels of verification and authentication.
- Utilizes the digital pen and direct capture as input and upload methods.
- Spatial data from the fly over project/s forms the baseline agricultural data.
- Reporting in database and spatial formats enables a comprehensive overview of all activities and interventions.



Why was this innovation/technology needed/developed?

There are several disparate methods and numerous repositories for Agricultural information.
These systems and repositories contain some of the same information, however due to the number of collection methods, number of agencies involved and the differing times this information was collected over, WCDOA realised that serious inconsistencies between the repositories and accuracy of the data contained within, may exist.
The lack of empirical accuracy and single managerial control of information, results in inaccurate reporting and the risk of projects receiving duplicate financing from multiple agencies.
The WCDOA needed to accurately determine the state of food security, measure the demographics of land ownership, assessing the levels of permanent and seasonal workforce in the industry and measure the total land area dedicated to agriculture and how that area was utilised.
A business solution needed to be found to ensure that the WCDOA has accurate, up to date information on which to base its' decisions.

Western Cape Government

New and novel aspects to the innovation/technology

Bulk messaging: Bulk SMS messages can be sent to farmers, this can be filtered based on their demographic location or commodity specific or related to the communication. Future developments include SMTP(email) functionality to perform the same function.

Task Tracker: A module is being designed where all incoming communications can be logged and tracked. This includes internal and external instances. Voice recognition via mobile devices is also being explored.

The creation of a database of all smallholder farmers in the Western Cape through a Producer Farmer Register census: Currently there is no accurate or recent data on the number of smallholder farmers in the province or country. In collaboration with DALRRD the WCDOA has embarked on a drive to register all smallholder farmers in the province. This data will prove invaluable in aligning the departments strategies and initiatives with the needs and prospects of this category of farmer.



Significant wins/impact

Users:

The entire WCDOA user registry is in the system. Currently FSD and SRM are the only 2 programmes active on the system with other programmes coming on board or integrated in the future.

Major Impacts:

- AIMS is a cross functional work flow based system that incorporates the above with workflow notifications (e-mail and SMS).
- Enhanced GIS capabilities provides better spatial planning and plotting of agricultural activities.
- The system provides a coordinated approach as activities are against land parcels and not project based.
- The different data sets (database/spatial) provides a holistic view of the agricultural/farming activity.
- Provides enhanced business intelligence for better decision making.
- Improvement of performance information for the annual performance plan (APP) because it contains all the elements that are needed for proof of evidence.



Links to website/reading/references etc.

Access:

The system was designed and can integrate with any other system and allow external stakeholders but is currently only accessible to WCDOA users.

Future development will look at making certain interfaces available to the public/farmers. One of them we foresee is a portal where farmers can register on the databases administered by the department and/or that integrates with the national databases. The Producer Farmer Register is definitely a database we'll make available for online registration as government is working towards only allowing farmers/beneficiaries that are registered on the relevant databases.

The Agricultural Integrated Management System has been earmarked by the Department of Agriculture Land Reform and Rural Development as the preferred information management system for all provinces.



Thank you

Contact Us



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