

Facilitating small scale farmer's access to Conservation Agriculture mechanization services

Lessons learnt from EU Funded Conservation
Agriculture Scaling Up (CASU) Project in
Zambia

Background

Some Common Challenges with Mechanization for Small Scale farmers

Limited technology for all CA husbandry practices

- Land preparation (most common)
- Planting
- Weeding
- Harvest
- Post harvest handling

Limited financing opportunities

- Low value ADP equipment not economic for financing institutions
- Limited collateral availability for high end equipment (tractors)
- High interests rates for economic viability at small scale farmer level

How do we promote Conservation Agriculture mechanization?

Harnessing potential within existing Mechanization Service Providers (MSP)

- Over 450 MSP registered in Zambia
 - 22 MSP participating under 2016/2017 season

Linking CA mechanization to on-going social protection programs

- E-vouchers under various programs

Public-Private partnerships in financing and CA mechanization service provision

Mechanizing several CA husbandry practices

- Land preparation
- Weeding (spraying services)
 - Harvesting

Integrating the CA mechanization services in in FIVMS E-voucher System

Integrated Data base

- Web based
- Mobile, web and POS functionality
- Encrypted traffic

Smart Cards

- Encrypted beneficiary information
- Customized programing

Agricultural Input Catalogue

- Customized for touch screen POS
 - User friendly graphics
- Management of mechanization services

Electronic vouchers

- Real time validation
- Convenient voucher management
 - Various voucher types (input, credit, mechanization)

Robust Back end functionalities

- User management
- Core data management
 - Audit

CA Mechanization E-voucher Model

Conservation Agriculture scaling up Project (CASU) | Food and Agriculture Organization of the United Nations | European Union | Farmer Input Voucher Management System (FIMS) | Welcome: mtendere

DASHBOARD | FARMERS | VOUCHERS | MECH SERVICES | INVOICES | CREDIT MGNT | REPORTS | MONITORING | E-EXTENSION

Select District: [select one] | Select Camp: [select one] | Search

Farmers Geodata

Update Farmers Geodata

Approve Geodata

Approved Geodata

Geo referenced Farmer List

Farm Size Variance Report

Farmer Field report

Farmers Coordinates Exception Report

Approved Farmers Geodata

Farmer No: [Search] [Clear]

Farmer no	Name	NRC no	District	Block	Camp	Enumerator Name	Homestead X	Homestead Y
0905030113	SIAMAPA AMOS	215188/71/1	Kazungula	Nyawa	Kauwe	Silumbwe Caleb	17° 6' 18.2"	26° 9' 7.6"
View Details								
Field	Area Size	Estimated area Size(Ha)	Variance(%)	View Field				
Field 1	0.32	0.31	3%	View Field				
Field 2	0.43	0.42	2%	View Field				
View Details								
0905030124	SIAMBELELE GEORGE	153315/76/1	Kazungula	Nyawa	Kauwe	Silungwe Caleb	16° 57' 26.1"	26° 12' 28"

1. CASU Program Online Database

2. Registered Mechanization Service Provider



3. Registered Small scale farmer

FARMERS | VOUCHERS | MECH SERVICES | INVOICES | CREDIT MGNT | REPORTS

Farmer

are required.

Information: Farm Size | Conservation | Crops | Livestock | Household | Miscellaneous | Farmers Program

Province * Central | District * C

Constituency Chisamba | Ward * L

Chief Liteta | Village Name C

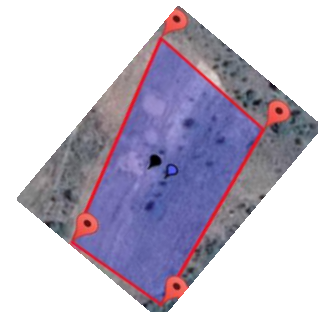
Agriculture Block * Chankumba | Agricultural Camp * C

Lead Farmer Code 1 | Date Of Registration * :

Extension Officer MUSYANYI MOSES

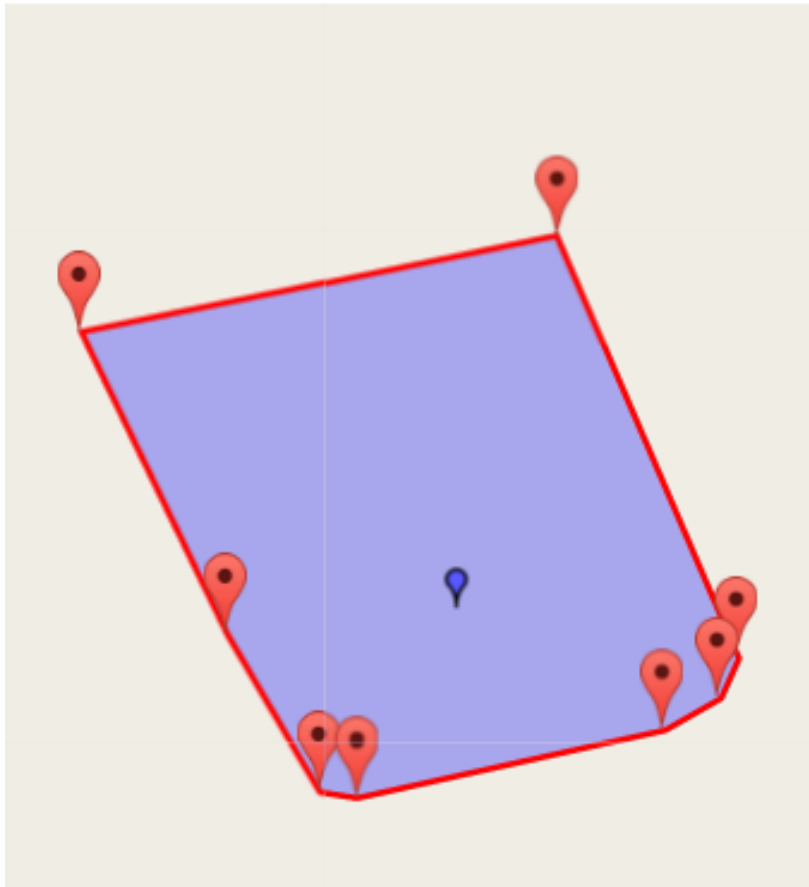
Surname * CHIKONKOTO | First Name * F

Middle Name | Farmer No * C



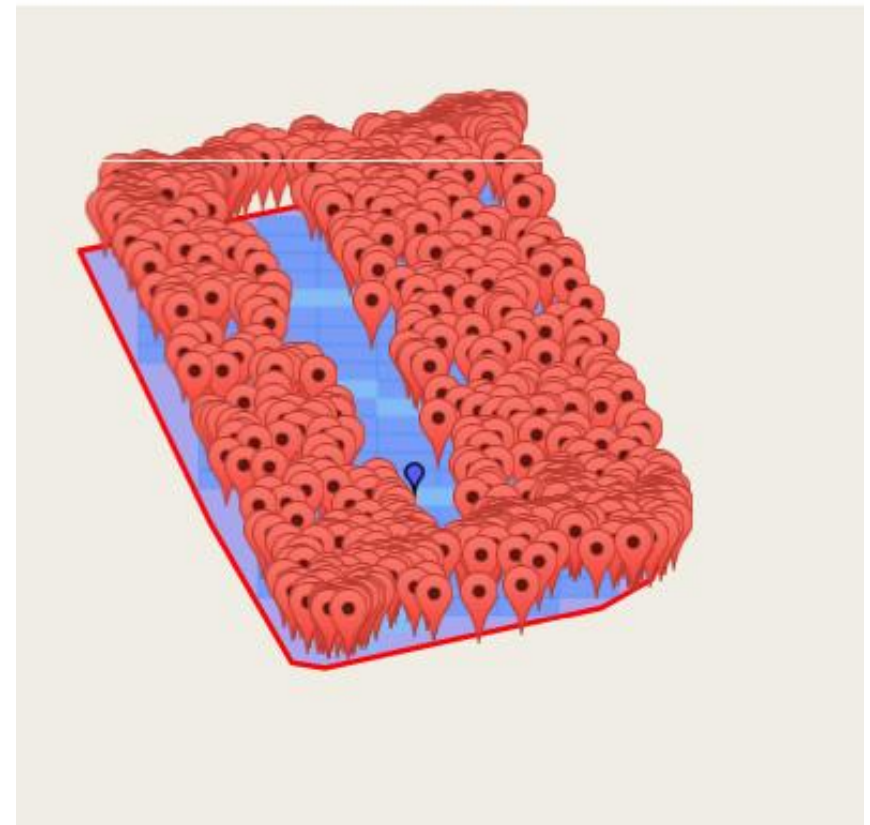
Real time monitoring of mechanization e-voucher redeeming

Estimated Area size **0.53 Ha**



The area quadrants 3.00x10.00 m covered **122 out of 139**

Redeemed Estimated area (Ha) **0.47 Hectares**



Advantages and opportunities of the CA

Mechanization e-voucher model applied under CASU

Enhanced Due diligence in beneficiary identification

- Traceability and identification of beneficiaries
- Documentation/registration of beneficiaries
- Appropriate targeting for voucher programs

Robust Record Keeping and monitoring of redeeming processes

- Real time monitoring
- Traceability of transactions
- Availability of supporting documentation

Clear Accountability and transparency

- Management of beneficiaries
- Financial and voucher handling
- Contracting and management of vendors

Flexible for various social protection programs

- Farmer Input support programs
- Credit facilities
- Cash transfers

Cost effectiveness

- Cost/pricing efficiency
- Transferable for money value or input quantity