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 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

1. CASU Program
   Online Database

2. Registered Mechanization Service Provider

3. Registered Small scale farmer
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