Not for profit organisation, established and funded by Syngenta International AG, an agro chemical and seeds company that works in over 90 countries and has 26,000 employees

Strategic and operational independence from the company

Mandate to support smallholder farmers:
– increasing productivity through improved technology
– improving access to markets
– mitigating farming risks

SFSA is engaged in developing outgrower management schemes in Ghana, Burkina Faso, Ivory Coast, Kenya, Peru

Development of Farmforce is co-funded by the Swiss State Secretariat for Economic Affairs SECO
What is Farmforce?

Farmforce is a cloud-based software platform.

With Farmforce, users can:

- manage the activities of a group of many smallholder farms and farmers
- ensure compliance
- establish traceability
Farmforce Today – Scaling Up Globally

- Began a commercial rollout in April 2013 after piloting in Kenya


- Total of approx 100,000 farmers managed in Farmforce

- Client facing offices in Nairobi, Guatemala City and Bangkok

- USAID Funding Guatemala, PIP/COLEACP Service Provider

- Partnership with GlobalGAP
Smallholder Contract Farming Schemes

Formal Business (Exporter, Coop, Buyer or Factory)

Field Officers

Auditors / Certifier

Agronomist

Small Holder Farmers
Difficulties Linking Farmers to International Markets: Contract Farming

- Quality Requirements
- Operational Transparency
- Records Management and Reliability
- Harvest Traceability
- Sourcing Ag produce
Shifting to Mobile Technology

- Paper Records to Digital Data (Images, GPS)
  - Agricultural Production and Control
  - Yield Forecasting
  - Harvest Management
- Command (and control?) to Real time Staff Management
- Manual to Automated Reporting
- Measure and Manage
The Farmforce Server is a cloud-based web application. It is used by cooperatives, farmer business organizations, and other aggregators to organize and monitor farming activities.

The mobile client runs on Android phones and is used by field staff to enter data. It runs offline.
What Does Digital Management Look Like?

- **Weekly Production Forecasts** across an entire scheme
- **Mobile Entry of**: Pesticide Records, Yield Forecast, Crop Scouting, Harvests & More
- **Geo-Referencing for Security**
- **GlobalG.A.P compliant record management** for 1000’s of outgrowers
- **Field Staff** can be monitored and managed via the web.
- **Internal Control System** for Pesticide Usage Rules and Harvest Intervals

What Does Digital Management Look Like?
What Data Does Farmforce Digitize

• Growing Cycle: Planting, Spraying, Fertilizer Applications
• Input Loan Disbursement, Repayment
• Crop Inspection and GAP Surveys with Images and GPS
• Field Level Yield Forecasts
• Harvest Traceability—Receipts, Barcodes
• M&E Surveys, Impact Assessments
Typical Setup Process

- Operational Business Analysis – 1 Day
- Integration Analysis – 2 Days
- Project Management – 1 Days
- Instance Configuration – 2 Days
- Data Migration – 2 Days
- Training of Office and Field Staff - 5 Days
- Testing and Support – 1 Days
- Approximately 14 Man Days Effort
Common Issues and Strategies

- Resistance to Change – Management Engagement
  - Learning New Technology
  - Increased Oversight
  - Fraud and Theft
- Infrastructure Deficiencies – Solution Design
- Adoption Levels – Usage Monitoring
- Staff Turnover – Usability
Deployment Example:

- Maize Intensification Scheme in Northern Nigeria
  - High Quality Maize
  - Yields Up To 5 Times the National Average
  - Selling to MNCs

- From 1020 Farmers in 2012 to 12,600 in 2014

- Management of Growing and Field Staff in Northern Nigeria
Deployment Example: KHE Kenya

• In business since 1965
• Annual exports Fresh Fruit and Veg - 6000mt
• Primary Crops - beans, broccoli, asian veg
• Among the largest exporters to the EU in Kenya
• GlobalGAP Certified
• Working with approx 2000 small holders
KHE Farmforce Experience

• Deployed for all Outgrowers in March 2013 after Piloting
• Currently being used by approx 20 Field Staff
• Used for all Small Holder Groups (7 Regions of Kenya)
• Capacity building with Field Staff and Office based users
KHE Farmforce Results since Deployment

• Not a single MRL Failure since Farmforce was deployed which is a significant improvement

• Delay in small holder data availability went from one week to hours

• Best Horticultural Crops Directorate (Kenyan Regulator) Systems Verification Score in Kenya due to Farmforce

• Real time Management of Field Staff Performance

• Piloting GlobalGAP Internal Inspections and Audits on Farmforce. Initial results of greatly improved efficiency.
Deployment Example: NGO Extension

• NGO Agricultural Extension in Southern Africa
  • Field Crops
  • Farmer Training, Demo Plots, Extension, Impact Assessment
  • Very little infrastructure
• 10,000+ Farmers
• Management Farmer Data, Extension and Field Staff
After Farmforce – Digital Real-time Management

- Confirmable Records & Real-time Information
- Field Staff can be monitored and managed
- Fraud and Theft Reduction
- Simpler to Scale up
- Faster auditing
- Simpler Standards Compliance
- Traceability Verification in Seconds
Organization Wide Change

- Increased Manageability of Outgrowers (previous slide)
- Increased Investment in Smallholders
- Greater Efficiency: Time, Money & Expertise
- Profitability & Scalability of Outgrower Schemes
Faith Kamenchu
Faith.kamenchu@farmforce.com

+254 (0) 722 933916
www.farmforce.com
The Farmforce suite of tools

The combination of core Farmforce functionality and add-on apps leads to complete business solutions.