Connected Farmer Alliance: Vodafone, USAID and TechnoServe
My name is William Ndirangu
The Connected Farmer Alliance
What is it?

A Public-Private Partnership between Vodafone, USAID and TechnoServe to promote commercially sustainable mobile agriculture solutions and reduce poverty / increase resilience for smallholder farmers across Kenya, Tanzania, and Mozambique
Why?

~75%-80% of pop. employed in ag in Kenya, Mozambique, & Tanzania

< 1 Hectare

Only 20% or less of proceeds reach farmers
Goals and approach reflect a need for both developmental and commercial impact

<table>
<thead>
<tr>
<th>Goals</th>
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<tr>
<td>• Increase productivity and revenues for 500k smallholder farmers</td>
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<tr>
<td>• Increase revenues for agribusinesses</td>
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<thead>
<tr>
<th>Technical approach</th>
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<tbody>
<tr>
<td><strong>Pillar I</strong></td>
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<tr>
<td>Develop commercially viable B2B supply chain solutions to increase agribusiness transparency and lower costs of doing business with smallholder farmers</td>
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<td><strong>Pillar II</strong></td>
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<td>Develop mobile financial services beyond payments and transfers that enable rural farmers to accumulate assets, invest in productivity and lower financial risks</td>
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CFA will leverage expertise across all three partners
Sample process

Registration Stage

Input Provision Stage

Growing Season

Training Process

Field Report Process

Farm Input Request Process

Farm Equipment Hire Process
## CFA modules and pilot summary

### Common supply chain challenges addressable by mobile

- **Farmer Data**: Generating and maintaining accurate farmer data
- **Loan admin**: Timely and accurate settlement of loans
- **Payments**: Timely payment of farmers
- **Communications**: Low-cost and fast communications to farmers (including agronomy reinforcement)
- **Logistics**: Scheduling and tracking pickup and delivery of product
- **Farmer feedback**: Low-cost and fast querying of farmers throughout season

### Prelim CFA system

1. Grower Registration System
2. Loan Repayment System
3. Payments / Receipts System
4. Farmer Notification System
5. Loading / Tracking System
6. Status Report System
THANK YOU
What are the benefits of participating for agribusiness?
Custom mobile solution to enable easier sourcing from smallholder farmers

<table>
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<tr>
<th>Illustrative supply chain pain points in working with smallholder farmers</th>
<th>Potential benefits from a mobile supply chain solution</th>
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<tbody>
<tr>
<td>• Frequent cash transactions across a dispersed geography</td>
<td>• Easier payments through m-Pesa / other mobile financial solution</td>
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<tr>
<td>• Farmers side-selling in contract schemes</td>
<td>• Increased farmer loyalty from sharing of information and agricultural advice</td>
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<tr>
<td>• Lack of internal transparency across supply chain</td>
<td>• Better visibility into firm supply chain to e.g: manage yield, volumes, forecast supply, &amp; improve pesticide practices</td>
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<td>• Sourcing delays caused by fragmented supply chain</td>
<td>• Streamlined transport due to real-time logistics data</td>
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## Proposed mobile solutions & functionalities

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
<th>Functionality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Disintegrated farmer data</td>
<td>Grower Registration</td>
</tr>
</tbody>
</table>
| 2 | Transparency, Traceability, Time & Cost | Payments / Receipts | • Allowing Agribusiness to make mobile money transfers to farmers without bank accounts.  
• Receipting system that captures farmers delivery data (bio & quantities) on real-time basis and communicates to HQ and farmer |
| 3 | Access to credit | Loan Request/Disbursement | • Allows farmer order credit advance through mobile  
• Allow farmers order input via phone and embed payment to produce (check-off)  
• Aids calculation of approved advance amounts – based on past deliveries and advance/payment history  
• Allows mobile dispersal of advances and receipts  
• Allows store clerks to input credit details via mobile |
| 4 | Communication | Notifications (SMS/IVR) | • One way communication  
• Feedback to farmers on quality analysis report to help improve the consequent deliveries  
• Communicate prices, collection dates and training dates etc. to farmers |
Proposed mobile solutions & functionalities

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<tr>
<td>5 Extension &amp; Data</td>
<td>5 Data Collection (SMS/IVR)</td>
<td>• Two way communication&lt;br&gt;• Enable targeted reminders to farmers on farm management calendar and tips while allowing farmers to query the agribusiness&lt;br&gt;• Data collection module such as yield forecast &amp; other queries requiring feedback from farmers and receive analytics on the same</td>
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<tr>
<td>6 Coordination &amp;</td>
<td>6 Tracking &amp; Loading</td>
<td>• Allow mapping of available quantities from the various buying centers and plan collection routes&lt;br&gt;• Allow the Manager at HQ to assess the stocks collected at the buying centers and dispatch trucks for collection&lt;br&gt;• Allow the Manager to track the movement of the bags till warehouse</td>
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<tr>
<td>Logistics</td>
<td></td>
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## Baseline criteria

- Currently source goods from target geographic markets (Kenya, Tanzania, Mozambique)
- Committed to increasing procurement from smallholder farmers in these markets
- Facing challenges in the supply chain where mobile can play a role
- Senior level sponsorship for programme, including:
  - Senior point of contact to provide information and help manage the project
  - Potential co-investment pending on scope
- Commitment and signature to Memorandum Of Understanding to scale mobile service with Vodafone commercially if key success indicators are met

## Expectations for engagement

- Attend preliminary workshop with TechnoServe, Vodafone and key stakeholders to scope out pilot remit
- Identify success criteria for the business
- Provide timely information on supply chain processes, market intel, and financial data
- Attend regular project meetings (bi-weekly during start-up phase)
- Assist in identifying sites / farmers for pilots
- Participate in the launch of the pilot and in regular interim reviews
- Approve of external communications on the programme
Going Forwards

There are still opportunities for agribusiness or finance organisations to partner under the Connected Farmer Alliance

Next steps:
• Potential focus areas: Maize, rice, horticulture, oilseeds, sorghum, nuts, chilli, cotton - potentially tea, coffee, cocoa – depending on smallholder component
• Register interest with Vodafone or TechnoServe
• If fit with established criteria, we would start to map the value chain and assess the applicable mobile modules